APPENDIX I

Capacity Analysis

Intersections

Existing Year - Unimproved

AM Peak Hour

Intersection Level Of Service Report
Intersection 1: 100 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	7.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name	South 400 East			South 400 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			100 South			100 South		
Base Volume Input [veh/h]	2	58	2	0	84	2	3	7	6	0	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	18	6	3	27	0	0	0	0	2	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	76	8	3	111	2	3	7	6	2	33	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	21	2	1	30	1	1	2	2	1	9	2
Total Analysis Volume [veh/h]	2	83	9	3	121	2	3	8	7	2	36	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	863	859	840	828
Degree of Utilization, x	0.11	0.15	0.02	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.37	0.51	0.07	0.18
95th-Percentile Queue Length [ft]	9.14	12.82	1.64	4.51
Approach Delay [s/veh]	7.68	7.91	7.38	7.61
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.75			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 2: 100 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	500 East			500 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	500 East			500 East			100 South			100 South		
Base Volume Input [veh/h]	10	29	1	0	85	3	0	4	3	1	28	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	9	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	29	1	0	85	3	0	13	3	1	37	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	8	0	0	23	1	0	4	1	0	10	0
Total Analysis Volume [veh/h]	11	32	1	0	92	3	0	14	3	1	40	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.91	9.58	8.64	9.66	9.89	9.05	7.30	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.17	0.17	0.17	0.38	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.25	4.25	4.25	9.59	9.59	9.59	0.00	0.00	0.00	0.04	0.04	0.04
d_A, Approach Delay [s/veh]	9.64			9.87			0.00			0.18		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.95											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 3: 100 S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	650 East				650 East				100 South				100 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	650 East				650 East				100 South				100 South			
Base Volume Input [veh/h]	0	11	74	0	0	0	38	1	0	0	4	4	0	2	10	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	6	0	0	0	13	2	0	6	0	3	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	18	80	0	0	0	51	3	0	6	4	7	0	2	10	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	5	22	0	0	0	14	1	0	2	1	2	0	1	3	0
Total Analysis Volume [veh/h]	0	20	87	0	0	0	55	3	0	7	4	8	0	2	11	0
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	8.43	7.36	0.00	0.00	8.53	7.40	0.00	0.00	9.88	9.92	10.25	8.68	9.87	9.91	10.25	8.81
Movement LOS	A	A	A	A	A	A	A	A	A	A	B	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
95th-Percentile Queue Length [ft/ln]	0.84	0.84	0.84	0.84	0.00	0.00	0.00	0.00	1.77	1.77	1.77	1.77	1.41	1.41	1.41	1.41
d_A, Approach Delay [s/veh]	1.38				0.00				9.47				10.20			
Approach LOS	A				A				A				B			
d_I, Intersection Delay [s/veh]	2.33															
Intersection LOS	B															

Intersection Level Of Service Report
Intersection 4: 200 S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	575 East						East 200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East						East 200 South			200 South		
Base Volume Input [veh/h]	0	0	2	1	0	0	0	9	0	0	30	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	5	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	2	1	0	0	0	9	0	5	30	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	0	0	0	0	2	0	1	8	0
Total Analysis Volume [veh/h]	0	0	2	1	0	0	0	10	0	5	33	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.84	9.33	8.38	8.85	9.33	8.48	7.29	0.00	0.00	7.25	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.14	0.14	0.14	0.08	0.08	0.08	0.00	0.00	0.00	0.21	0.21	0.21
d_A, Approach Delay [s/veh]	8.38			8.85			0.00			0.93		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.19											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: 650 E & 200 S

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.034

Intersection Setup

Name	650 East			650 East			200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			200 South			200 South		
Base Volume Input [veh/h]	4	72	8	8	35	0	3	3	1	4	22	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	0	11	5	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	85	8	8	46	5	3	3	1	4	22	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	23	2	2	13	1	1	1	0	1	6	2
Total Analysis Volume [veh/h]	4	92	9	9	50	5	3	3	1	4	24	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.01
d_M, Delay for Movement [s/veh]	7.34	0.00	0.00	7.43	0.00	0.00	9.99	10.14	8.60	9.90	10.32	9.00
Movement LOS	A	A	A	A	A	A	A	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.15	0.15	0.15
95th-Percentile Queue Length [ft/ln]	0.17	0.17	0.17	0.38	0.38	0.38	0.71	0.71	0.71	3.73	3.73	3.73
d_A, Approach Delay [s/veh]	0.28			1.05			9.86			9.98		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	2.47											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: 200 S & 700 E

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

Intersection Setup

Name	700 East				700 East				200 South				200 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	700 East				700 East				200 South				200 South			
Base Volume Input [veh/h]	0	11	16	17	0	1	20	0	0	4	34	8	0	10	17	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	11	16	17	0	1	20	0	0	4	34	8	0	10	17	1
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	3	4	5	0	0	5	0	0	1	9	2	0	3	5	0
Total Analysis Volume [veh/h]	0	12	17	18	0	1	22	0	0	4	37	9	0	11	18	1
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	908	862	891	857
Degree of Utilization, x	0.05	0.03	0.06	0.04

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.16	0.08	0.18	0.11
95th-Percentile Queue Length [ft]	4.09	2.06	4.45	2.72
Approach Delay [s/veh]	7.19	7.29	7.28	7.35
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.27			
Intersection LOS	A			

Intersections 7 & 8 included in 10-year scenario

Intersection Level Of Service Report
Intersection 9: 650 E/Main St & Madera Drive

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	North Main Street			650 East			Madera Drive	
Approach	Northbound			Southbound			Eastbound	
Lane Configuration								
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			No			Yes	

Volumes

Name	North Main Street			650 East			Madera Drive	
Base Volume Input [veh/h]	0	17	55	0	45	4	12	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	20	0	34	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	17	75	0	79	4	12	77
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	20	0	21	1	3	21
Total Analysis Volume [veh/h]	0	18	82	0	86	4	13	84
Pedestrian Volume [ped/h]	0			0			0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.09
d_M, Delay for Movement [s/veh]	8.89	7.43	0.00	8.50	0.00	0.00	9.74	9.06
Movement LOS	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00	0.05	0.28
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.00	0.00	0.00	0.00	1.28	7.09
d_A, Approach Delay [s/veh]	1.34			0.00			9.15	
Approach LOS	A			A			A	
d_I, Intersection Delay [s/veh]	3.56							
Intersection LOS	A							

Intersection 10 included in 10-year scenario

Intersection Level Of Service Report
Intersection 11: Pierce Street/300 S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	575 East			575 East			300 South			West Pierce Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East			575 East			300 South			West Pierce Street		
Base Volume Input [veh/h]	3	0	4	2	1	8	6	41	5	4	50	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	5	0	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	0	4	2	1	13	6	46	5	4	55	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	1	0	4	2	13	1	1	15	0
Total Analysis Volume [veh/h]	3	0	4	2	1	14	7	50	5	4	60	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.50	9.84	8.59	9.45	9.89	8.66	7.35	0.00	0.00	7.34	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.58	0.58	0.58	1.35	1.35	1.35	0.30	0.30	0.30	0.17	0.17	0.17
d_A, Approach Delay [s/veh]	8.98			8.83			0.83			0.45		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.94											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 12: Main & Pierce

Control Type:	All-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.252

Intersection Setup

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				25.00				20.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Base Volume Input [veh/h]	0	12	76	14	0	9	127	19	0	18	22	17	0	25	14	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	16	0	0	3	35	0	0	4	0	0	0	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	12	92	14	0	12	162	19	0	22	22	17	0	25	14	3
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	3	25	4	0	3	44	5	0	6	6	5	0	7	4	1
Total Analysis Volume [veh/h]	0	13	100	15	0	13	176	21	0	24	24	18	0	27	15	3
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	817	833	768	738
Degree of Utilization, x	0.16	0.25	0.09	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.55	1.00	0.28	0.19
95th-Percentile Queue Length [ft]	13.84	24.97	7.03	4.87
Approach Delay [s/veh]	8.22	8.77	8.13	8.20
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.46			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 13: Pierce Street & 700 E

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.210

Intersection Setup

Name	700 East		East Pierce Street		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	700 East		East Pierce Street		East 300 South	
Base Volume Input [veh/h]	147	15	8	70	53	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	3	1	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	153	15	8	73	54	63
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	4	2	20	15	17
Total Analysis Volume [veh/h]	166	16	9	79	59	68
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.02	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.85	10.05	7.49	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.87	0.87	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	21.70	21.70	0.38	0.38	0.00	0.00
d_A, Approach Delay [s/veh]	10.78		0.77		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.11					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 14: Pierce Street & 300 S & Albert South White Drive

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.255

Intersection Setup

Name	East 300 South			Albert S. White Drive			East 300 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 300 South			Albert S. White Drive			East 300 South		
Base Volume Input [veh/h]	0	105	107	0	44	134	0	156	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	6	0	1	64	0	82	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	108	113	0	45	198	0	238	43
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	29	31	0	12	54	0	65	12
Total Analysis Volume [veh/h]	0	117	123	0	49	215	0	259	47
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free		
Flared Lane	No								
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance	No								
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.26	0.16	0.00	0.04	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.07	17.15	13.93	10.48	7.94	0.00	9.27	0.00	0.00
Movement LOS	C	C	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.02	2.02	2.02	0.08	0.08	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	50.46	50.46	50.46	2.10	2.10	2.10	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.50			1.47			0.00		
Approach LOS	C			A			A		
d_I, Intersection Delay [s/veh]	5.07								
Intersection LOS	C								

Intersections 15 & 16 included in 10-year scenario

Intersection Level Of Service Report
Intersection 17: 400 E & Perry Worth Road

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	South 400 East			South 400 East			Perry Worth Road		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	South 400 East			South 400 East			Perry Worth Road		
Base Volume Input [veh/h]	0	6	76	0	112	0	0	1	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	24	0	29	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	100	0	141	0	0	1	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	27	0	38	0	0	0	2
Total Analysis Volume [veh/h]	0	7	109	0	153	0	0	1	7
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	8.93	7.54	0.00	8.65	0.00	0.00	10.08	10.13	9.08
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.29	0.29	0.29	0.00	0.00	0.00	0.70	0.70	0.70
d_A, Approach Delay [s/veh]	0.46			0.00			9.21		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	0.46								
Intersection LOS	B								

Intersections 18 & 19 removed intentionally

Intersection Level Of Service Report
Intersection 20: Albert S. White Dr. (400 S) & 400 E

Control Type:	Signalized	Delay (sec / veh):	11.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.364

Intersection Setup

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Base Volume Input [veh/h]	0	0	0	16	0	91	53	724	0	1	449	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	33	3	8	0	7	22	21	43	71	19	142	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	3	8	16	7	113	74	767	71	20	591	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	1	2	4	2	31	20	208	19	5	161	3
Total Analysis Volume [veh/h]	36	3	9	17	8	123	80	834	77	22	642	11
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	10	0	10	10	10	10	10	10	10	10	10
Maximum Green [s]	0	30	0	30	30	30	30	30	30	30	30	30
Amber [s]	0.0	4.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	0	17	0	17	17	17	88	88	88	88	88	88
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	10	0	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	C	C
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	11	11	11	11	82	82	82	82	82
g / C, Green / Cycle	0.10	0.10	0.10	0.10	0.78	0.78	0.78	0.78	0.78
(v / s)_i Volume / Saturation Flow Rate	0.03	0.01	0.02	0.09	0.11	0.28	0.28	0.22	0.22
s, saturation flow rate [veh/h]	1133	1486	1161	1419	696	1669	1620	1539	1510
c, Capacity [veh/h]	129	156	179	149	556	1304	1265	1239	1180
d1, Uniform Delay [s]	48.60	42.42	43.32	46.07	5.34	3.48	3.48	3.17	3.23
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.32	0.96	1.62	38.73	0.54	0.76	0.78	0.55	0.60
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.08	0.14	0.83	0.14	0.35	0.35	0.28	0.28
d, Delay for Lane Group [s/veh]	53.91	43.38	44.94	84.80	5.88	4.24	4.26	3.72	3.83
Lane Group LOS	D	D	D	F	A	A	A	A	A
Critical Lane Group	No	No	No	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.11	0.32	0.68	4.73	0.57	2.22	2.17	1.50	1.50
50th-Percentile Queue Length [ft/ln]	27.75	8.07	17.09	118.18	14.33	55.62	54.18	37.59	37.47
95th-Percentile Queue Length [veh/ln]	2.00	0.58	1.23	8.29	1.03	4.00	3.90	2.71	2.70
95th-Percentile Queue Length [ft/ln]	49.95	14.52	30.76	207.32	25.80	100.11	97.53	67.65	67.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.91	43.38	43.38	44.94	44.94	84.80	5.88	4.25	4.26	3.72	3.78	3.83
Movement LOS	D	D	D	D	D	F	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	51.28			78.06			4.38			3.78		
Approach LOS	D			E			A			A		
d_I, Intersection Delay [s/veh]	11.23											
Intersection LOS	B											
Intersection V/C	0.364											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	42.08	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.140	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	210	210	1562	1562
d_b, Bicycle Delay [s]	42.08	42.08	2.52	2.52
l_b,int, Bicycle LOS Score for Intersection	1.639	1.804	2.377	2.116
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: Albert S. White Dr. (400 S) & 450 E/Anson Blvd

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.310

Intersection Setup

Name	Anson Boulevard			450 East			Albert S. White Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Anson Boulevard			450 East			Albert S. White Drive					
Base Volume Input [veh/h]	69	2	23	8	4	5	22	586	115	26	397	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	0	5	41	4	0	161	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	70	2	23	8	4	5	27	627	119	26	558	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	1	6	2	1	1	7	170	32	7	152	1
Total Analysis Volume [veh/h]	76	2	25	9	4	5	29	682	129	28	607	2
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	6	6	6	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	23	23	23	23	23	23	82	82	82	82	82	82
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	14	14	14	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	C	C
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	17	17	17	17	76	76	76	76	76
g / C, Green / Cycle	0.16	0.16	0.16	0.16	0.72	0.72	0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.06	0.02	0.01	0.01	0.04	0.25	0.25	0.21	0.21
s, saturation flow rate [veh/h]	1255	1435	1235	1520	725	1669	1578	1504	1518
c, Capacity [veh/h]	242	232	225	246	526	1208	1142	1126	1098
d1, Uniform Delay [s]	41.54	37.58	40.33	37.10	7.42	5.34	5.34	4.95	5.06
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.38	1.02	0.33	0.28	0.20	0.78	0.83	0.63	0.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.12	0.04	0.04	0.06	0.34	0.35	0.28	0.29
d, Delay for Lane Group [s/veh]	44.92	38.60	40.66	37.37	7.62	6.12	6.17	5.58	5.73
Lane Group LOS	D	D	D	D	A	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.03	0.66	0.22	0.21	0.25	2.88	2.74	2.06	2.10
50th-Percentile Queue Length [ft/ln]	50.70	16.47	5.54	5.25	6.32	72.05	68.57	51.51	52.46
95th-Percentile Queue Length [veh/ln]	3.65	1.19	0.40	0.38	0.46	5.19	4.94	3.71	3.78
95th-Percentile Queue Length [ft/ln]	91.26	29.65	9.97	9.45	11.38	129.69	123.43	92.72	94.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.92	38.60	38.60	40.66	37.37	37.37	7.62	6.14	6.17	5.58	5.66	5.73
Movement LOS	D	D	D	D	D	D	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	43.26			39.02			6.19			5.66		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	8.74											
Intersection LOS	A											
Intersection V/C	0.310											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	42.08	42.08	0.00	42.08
l_p,int, Pedestrian LOS Score for Intersectio	2.073	2.011	0.000	2.591
Crosswalk LOS	B	B	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	324	324	1448	1448
d_b, Bicycle Delay [s]	36.88	36.88	4.00	4.00
l_b,int, Bicycle LOS Score for Intersection	1.730	1.589	2.253	2.085
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 22: Albert S. White Dr. (400 S) & 500 E

Control Type:	All-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.490

Intersection Setup

Name	500 East			500 East								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			Yes		

Volumes

Name	500 East			500 East								
Base Volume Input [veh/h]	15	3	3	10	30	130	137	136	45	20	336	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	1	0	0	10	0	36	2	1	147	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	3	4	10	30	140	137	172	47	21	483	9
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	1	3	8	38	37	47	13	6	131	2
Total Analysis Volume [veh/h]	17	3	4	11	33	152	149	187	51	23	525	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	484	496	558	504	542	568	570	575
Degree of Utilization, x	0.05	0.09	0.27	0.30	0.22	0.21	0.49	0.48

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.16	0.29	1.10	1.23	0.83	0.78	2.68	2.64
95th-Percentile Queue Length [ft]	3.90	7.28	27.52	30.66	20.78	19.61	67.08	65.88
Approach Delay [s/veh]	10.82	11.36		11.68			14.82	
Approach LOS	B	B		B			B	
Intersection Delay [s/veh]	13.11							
Intersection LOS	B							

Intersection Level Of Service Report
Intersection 23: Albert S. White Dr. (400 S) & 575 E

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.346

Intersection Setup

Name	575 East			575 East						400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	1300.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1300.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	575 East			575 East						400 S		
Base Volume Input [veh/h]	10	8	6	10	8	12	18	94	11	28	305	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	1	0	0	0	0	36	0	3	149	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	8	7	10	8	12	18	130	11	31	454	16
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	2	2	3	2	3	5	35	3	8	123	4
Total Analysis Volume [veh/h]	11	9	8	11	9	13	20	141	12	34	493	17
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	615	624	633	693	708	669	737	744
Degree of Utilization, x	0.05	0.05	0.03	0.11	0.11	0.05	0.35	0.34

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.17	0.10	0.37	0.36	0.16	1.55	1.53
95th-Percentile Queue Length [ft]	3.57	4.18	2.45	9.26	9.05	4.01	38.67	38.14
Approach Delay [s/veh]	9.13	9.09	8.48			9.98		
Approach LOS	A	A	A			A		
Intersection Delay [s/veh]	9.58							
Intersection LOS	A							

Intersection Level Of Service Report
Intersection 24: 400 S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	5.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street			South Main Street			400 S			400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Main Street			South Main Street			400 S			400 S		
Base Volume Input [veh/h]	54	103	82	37	178	43	29	98	67	125	166	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	26	2	0	69	73	19	15	1	17	67	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	129	84	37	247	116	48	113	68	142	233	17
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	35	23	10	67	32	13	31	18	39	63	5
Total Analysis Volume [veh/h]	60	140	91	40	268	126	52	123	74	154	253	18
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	221			481			476			260		
Exiting Flow Rate [veh/h]	511			216			452			262		
Demand Flow Rate [veh/h]	55	129	84	37	247	116	48	113	68	142	233	17
Adjusted Demand Flow Rate [veh/h]	60	140	91	40	268	126	52	123	74	154	253	18

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	141	159	211	237	121	136	206	233
Capacity of Entry and Bypass Lanes [veh/h]	1102	1177	868	944	872	948	1064	1139
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1070	1143	842	916	846	920	1033	1106
X, volume / capacity	0.13	0.14	0.24	0.25	0.14	0.14	0.19	0.20

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.44	0.47	0.95	0.99	0.48	0.50	0.71	0.76
95th-Percentile Queue Length [ft]	10.96	11.67	23.70	24.86	11.98	12.50	17.87	19.06
Approach Delay [s/veh]	4.40		6.66		5.45		5.19	
Approach LOS	A		A		A		A	
Intersection Delay [s/veh]	5.53							
Intersection LOS	A							

Intersection Level Of Service Report
Intersection 25: 400 S/Albert S. White Drive & 400 S/Ginger Way

Control Type:	Two-way stop	Delay (sec / veh):	18.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.233

Intersection Setup

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Base Volume Input [veh/h]	3	162	60	34	205	2	12	7	8	74	2	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	0	16	84	0	0	0	0	0	0	37
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	179	60	50	289	2	12	7	8	74	2	57
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	49	16	14	79	1	3	2	2	20	1	15
Total Analysis Volume [veh/h]	3	195	65	54	314	2	13	8	9	80	2	62
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.00	0.00	0.04	0.02	0.01	0.23	0.01	0.08
d_M, Delay for Movement [s/veh]	7.91	0.00	0.00	7.89	0.00	0.00	16.91	15.52	10.25	18.62	15.24	9.86
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	A
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	0.13	0.00	0.00	0.13	0.11	0.11	0.89	0.27	0.27
95th-Percentile Queue Length [ft/ln]	0.18	0.00	0.00	3.25	0.00	0.00	3.22	2.73	2.73	22.16	6.69	6.69
d_A, Approach Delay [s/veh]	0.09			1.15			14.54			14.80		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	3.74											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 26: 700 E & 425 S

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.091

Intersection Setup

Name	South 700 East		South 700 East		East 425 South	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Left	Thru	Left	Right	Thru	Right
Lane Width [ft]	11.48	11.48	12.00	12.00	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	South 700 East		South 700 East		East 425 South	
Base Volume Input [veh/h]	32	7	63	46	9	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	37	0	0	16	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	7	63	62	9	55
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	2	17	17	2	15
Total Analysis Volume [veh/h]	75	8	68	67	10	60
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane		No	
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.09	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	7.46	0.00	10.57	9.27	0.00	0.00
Movement LOS	A	A	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.55	0.55	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.50	3.50	13.77	13.77	0.00	0.00
d_A, Approach Delay [s/veh]	6.74		9.92		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.59					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 27: SR 267 & Indianapolis Road

Control Type:	Signalized	Delay (sec / veh):	21.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.363

Intersection Setup

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Base Volume Input [veh/h]	0	26	260	33	0	142	284	79	0	72	34	26	0	12	28	146
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	55	0	0	0	65	3	0	2	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	27	315	33	0	142	349	82	0	74	34	26	0	12	28	146
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	7	86	9	0	39	95	22	0	20	9	7	0	3	8	40
Total Analysis Volume [veh/h]	0	29	342	36	0	154	379	89	0	80	37	28	0	13	30	159
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	8	3	8	8	4	7	4	4	2	5	2	2	6	1	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lead	-	-	Lag	Lead	-	-	Lag	Lead	-	-	Lag	Lead	-	-
Minimum Green [s]	10	5	10	10	10	5	10	10	10	5	10	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0
All red [s]	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Split [s]	56	9	56	56	56	9	56	56	30	9	30	30	31	10	31	31
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	59	50	50	59	50	50	34	24	24	34	25	25
g / C, Green / Cycle	0.56	0.48	0.48	0.56	0.48	0.48	0.32	0.23	0.23	0.32	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.03	0.18	0.02	0.14	0.20	0.06	0.06	0.02	0.02	0.01	0.02	0.10
s, saturation flow rate [veh/h]	1018	1855	1577	1088	1855	1577	1304	1855	1577	1429	1855	1577
c, Capacity [veh/h]	551	883	751	596	883	751	510	424	360	544	442	375
d1, Uniform Delay [s]	11.23	17.66	14.74	11.91	18.10	15.27	25.15	31.88	31.81	24.20	30.98	33.89
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.18	1.28	0.12	1.05	1.52	0.32	0.66	0.41	0.42	0.08	0.30	3.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.05	0.39	0.05	0.26	0.43	0.12	0.16	0.09	0.08	0.02	0.07	0.42
d, Delay for Lane Group [s/veh]	11.41	18.94	14.86	12.96	19.63	15.59	25.81	32.28	32.23	24.28	31.27	37.37
Lane Group LOS	B	B	B	B	B	B	C	C	C	C	C	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.28	4.94	0.43	1.77	6.06	1.19	1.47	0.77	0.59	0.23	0.61	3.70
50th-Percentile Queue Length [ft/ln]	6.98	123.47	10.79	44.16	151.52	29.84	36.65	19.28	14.71	5.67	15.31	92.55
95th-Percentile Queue Length [veh/ln]	0.50	8.58	0.78	3.18	10.10	2.15	2.64	1.39	1.06	0.41	1.10	6.66
95th-Percentile Queue Length [ft/ln]	12.57	214.59	19.42	79.49	252.46	53.70	65.96	34.70	26.47	10.21	27.55	166.58

Movement, Approach, & Intersection Results

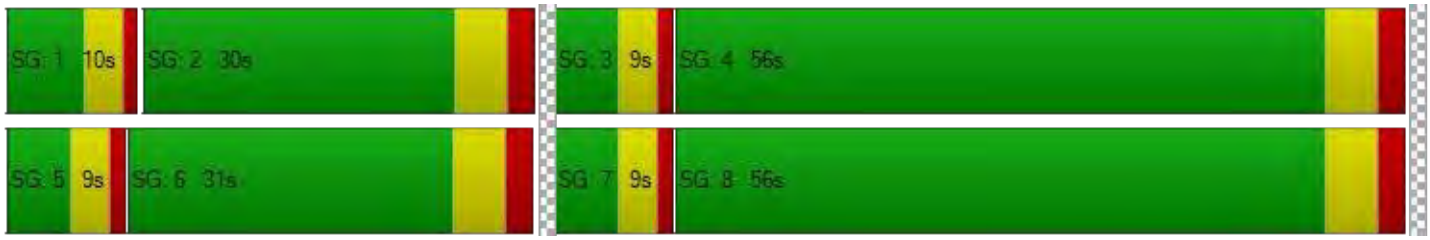
d_M, Delay for Movement [s/veh]	11.41	11.41	18.94	14.86	12.96	12.96	19.63	15.59	25.81	25.81	32.28	32.23	24.28	24.28	31.27	37.37
Movement LOS	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	D
d_A, Approach Delay [s/veh]	18.04				17.40				28.70				35.62			
Approach LOS	B				B				C				D			
d_I, Intersection Delay [s/veh]	21.46															
Intersection LOS	C															
Intersection V/C	0.363															

Other Modes

g_Walk,mi, Effective Walk Time [s]	24.0	25.0	50.0	50.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.24	30.48	14.40	14.40
l_p,int, Pedestrian LOS Score for Intersectio	2.555	2.745	2.240	2.348
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	952	952	457	476
d_b, Bicycle Delay [s]	14.40	14.40	31.24	30.48
l_b,int, Bicycle LOS Score for Intersection	2.231	2.332	1.667	1.871
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: Perry Worth Road & 450 S

Control Type:	All-way stop	Delay (sec / veh):	7.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.047

Intersection Setup

Name	Perry Worth Road						E 450 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road						E 450 South		
Base Volume Input [veh/h]	0	1	39	0	1	0	0	37	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	39	0	1	2	0	37	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	11	0	0	1	0	10	0
Total Analysis Volume [veh/h]	0	3	42	0	1	2	0	40	0
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	1033	868	849
Degree of Utilization, x	0.04	0.00	0.05

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.01	0.15
95th-Percentile Queue Length [ft]	3.41	0.26	3.70
Approach Delay [s/veh]	6.64	7.16	7.45
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.03		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 29: Anson Blvd & 450 S

Control Type:	Signalized	Delay (sec / veh):	16.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.064

Intersection Setup

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	No				No				No				Yes			

Volumes

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Base Volume Input [veh/h]	0	2	28	7	0	18	41	12	0	16	34	0	0	17	11	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	28	7	0	20	41	12	0	16	34	0	0	17	11	8
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	8	2	0	5	11	3	0	4	9	0	0	5	3	2
Total Analysis Volume [veh/h]	0	2	30	8	0	22	45	13	0	17	37	0	0	18	12	9
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	66	66	66	66	66	66	66	66	39	39	39	39	39	39	39	39
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	10	10	10	10	6	6	6	6	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	60	60	60	60	33	33	33
g / C, Green / Cycle	0.57	0.57	0.57	0.57	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00	0.02	0.02	0.03	0.03	0.02	0.01
s, saturation flow rate [veh/h]	1334	1789	1358	1784	1697	1560	1577
c, Capacity [veh/h]	786	1022	806	1020	579	545	496
d1, Uniform Delay [s]	11.22	9.85	11.14	9.97	25.43	25.09	24.83
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.07	0.06	0.11	0.32	0.19	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.04	0.03	0.06	0.09	0.06	0.02
d, Delay for Lane Group [s/veh]	11.23	9.92	11.20	10.07	25.75	25.28	24.89
Lane Group LOS	B	A	B	B	C	C	C
Critical Lane Group	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.02	0.39	0.25	0.61	1.00	0.55	0.16
50th-Percentile Queue Length [ft/ln]	0.56	9.82	6.19	15.17	25.09	13.78	4.10
95th-Percentile Queue Length [veh/ln]	0.04	0.71	0.45	1.09	1.81	0.99	0.30
95th-Percentile Queue Length [ft/ln]	1.01	17.67	11.14	27.30	45.15	24.80	7.39

Movement, Approach, & Intersection Results

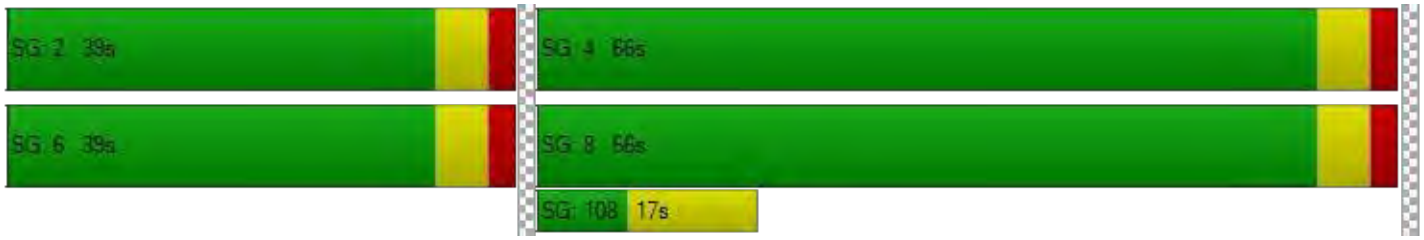
d_M, Delay for Movement [s/veh]	11.23	11.23	9.92	9.92	11.20	11.20	10.07	10.07	25.75	25.75	25.75	25.75	25.28	25.28	25.28	24.89
Movement LOS	B	B	A	A	B	B	B	B	C	C	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	9.99				10.38				25.75				25.19			
Approach LOS	A				B				C				C			
d_I, Intersection Delay [s/veh]	16.92															
Intersection LOS	B															
Intersection V/C	0.064															

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	42.08
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	2.039
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1143	1143	629	629
d_b, Bicycle Delay [s]	9.64	9.64	24.69	24.69
l_b,int, Bicycle LOS Score for Intersection	1.736	1.766	1.732	1.705
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 30: 450 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	500 East			E 450 South			E 450 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	500 East			E 450 South			E 450 South		
Base Volume Input [veh/h]	0	4	16	0	33	8	0	23	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	2	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	16	0	34	10	0	25	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	4	0	9	3	0	7	2
Total Analysis Volume [veh/h]	0	4	17	0	37	11	0	27	9
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free		
Flared Lane	No								
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance	No								
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.28	9.28	8.54	8.40	7.34	0.00	8.18	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.06	0.06	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.61	1.61	1.61	1.57	1.57	1.57	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.68			5.66			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	4.32								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 31: 450S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	575 East		575 East		E 450 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	575 East		575 East		E 450 South	
Base Volume Input [veh/h]	9	21	24	18	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	21	24	20	5	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	6	7	5	1	1
Total Analysis Volume [veh/h]	10	23	26	22	5	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	7.33	0.00	0.00	0.00	8.97	8.52
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.42	0.42	0.00	0.00	0.56	0.56
d_A, Approach Delay [s/veh]	2.22		0.00		8.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.54					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 32: Anson Blvd & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	East 500 South			Anson Boulevard			East 500 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	31.07			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 500 South			Anson Boulevard			East 500 South		
Base Volume Input [veh/h]	0	82	25	0	22	15	0	20	116
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	0	0	0	1	0	3	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	85	25	0	22	16	0	23	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	23	7	0	6	4	0	6	32
Total Analysis Volume [veh/h]	0	92	27	0	24	17	0	25	129
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.04	0.12
d_M, Delay for Movement [s/veh]	8.81	7.45	0.00	8.23	0.00	0.00	10.24	10.28	8.91
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.19	0.19	0.00	0.00	0.00	0.00	0.11	0.11	0.42
95th-Percentile Queue Length [ft/ln]	4.69	4.69	0.00	0.00	0.00	0.00	2.75	2.75	10.47
d_A, Approach Delay [s/veh]	5.76			0.00			9.13		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	6.66								
Intersection LOS	B								

Intersection 33 removed intentionally

Intersection Level Of Service Report
Intersection 34: 500 S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	575 East			575 East			East 500 South			East 500 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			31.07		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East			575 East			East 500 South			East 500 South		
Base Volume Input [veh/h]	0	0	0	10	0	6	8	13	0	0	93	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	10	0	6	8	15	0	0	95	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	3	0	2	2	4	0	0	26	6
Total Analysis Volume [veh/h]	0	0	0	11	0	7	9	16	0	0	103	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.50	9.97	8.40	9.53	9.98	8.94	7.49	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.06	0.06	0.06	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1.61	1.61	1.61	0.38	0.38	0.38	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.29			9.30			2.70			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.37											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 35: 500S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	22.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.061

Intersection Setup

Name	Main Street		Main Street		East 500 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		East 500 South	
Base Volume Input [veh/h]	61	234	441	17	13	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	91	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	262	532	17	14	77
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	71	145	5	4	21
Total Analysis Volume [veh/h]	66	285	578	18	15	84
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.01	0.00	0.06	0.17
d_M, Delay for Movement [s/veh]	8.77	0.00	0.00	0.00	22.07	14.49
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.00	0.00	0.86	0.86
95th-Percentile Queue Length [ft/ln]	2.85	2.85	0.00	0.00	21.53	21.53
d_A, Approach Delay [s/veh]	1.65		0.00		15.64	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.03					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 36: Perry Worth Road & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.159

Intersection Setup

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Base Volume Input [veh/h]	0	134	133	0	0	22	0	106	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	0	1	1	0	2	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	134	138	0	1	23	0	108	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	36	38	0	0	6	0	29	1
Total Analysis Volume [veh/h]	0	146	150	0	1	25	0	117	2
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
d_M, Delay for Movement [s/veh]	8.22	0.00	0.00	9.84	7.86	0.00	10.75	10.80	9.42
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.56	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.04	0.04	0.04	14.04	14.04	0.18
d_A, Approach Delay [s/veh]	0.00			0.30			10.77		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	2.93								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 37: 550 S & 475 E

Control Type:	Roundabout	Delay (sec / veh):	4.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	475 E				475 E				550 South				550 S			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0	0.00	0.00	0.00	100.0
Speed [mph]	45.00				45.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	475 E				475 E				550 South				550 S			
Base Volume Input [veh/h]	0	0	0	11	0	1	0	0	0	1	131	1	0	10	52	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	64	0	0	0	0	0	0	4	23	0	282	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	0	75	0	1	0	0	0	1	135	24	0	292	56	1
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	0	20	0	0	0	0	0	0	37	7	0	79	15	0
Total Analysis Volume [veh/h]	0	4	0	82	0	1	0	0	0	1	147	26	0	317	61	1
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	153				393				328				5			
Exiting Flow Rate [veh/h]	353				2				67				237			
Demand Flow Rate [veh/h]	0	4	0	75	0	1	0	0	0	1	135	24	0	292	56	1
Adjusted Demand Flow Rate [veh/h]	0	4	0	82	0	1	0	0	0	1	147	26	0	317	61	1

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	5	85	2	85	95	327	64
Capacity of Entry and Bypass Lanes [veh/h]	1235	1235	924	1055	1055	1414	1414
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1199	1199	897	1024	1024	1373	1373
X, volume / capacity	0.00	0.07	0.00	0.08	0.09	0.23	0.05

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.01	0.22	0.00	0.26	0.30	0.90	0.14
95th-Percentile Queue Length [ft]	0.25	5.50	0.08	6.50	7.41	22.38	3.55
Approach Delay [s/veh]	3.54		4.02	4.27		4.30	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	4.19						
Intersection LOS	A						

Intersection Level Of Service Report
Intersection 38: 550 S & Indianapolis Road

Control Type:	All-way stop	Delay (sec / veh):	23.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.870

Intersection Setup

Name	Indianapolis Road				Indianapolis Road				550 S						
Approach	Northbound				Southbound				Eastbound				Westbound		
Lane Configuration															
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				30.00				30.00		
Grade [%]	0.00				0.00				0.00				0.00		
Crosswalk	Yes				Yes				Yes				Yes		

Volumes

Name	Indianapolis Road				Indianapolis Road				550 S						
Base Volume Input [veh/h]	0	6	138	46	0	48	22	1	0	4	118	7	29	52	177
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	1	1	0	0	1	0	0	0	66	2	2	283	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	9	139	47	0	48	23	1	0	4	184	9	31	335	177
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	38	13	0	13	6	0	0	1	50	2	8	91	48
Total Analysis Volume [veh/h]	0	10	151	51	0	52	25	1	0	4	200	10	34	364	192
Pedestrian Volume [ped/h]	0				0				0				0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	482	532	461	495	522	567	565	639
Degree of Utilization, x	0.02	0.38	0.11	0.05	0.01	0.37	0.06	0.87

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.06	1.77	0.38	0.17	0.02	1.70	0.19	10.16
95th-Percentile Queue Length [ft]	1.59	44.14	9.48	4.15	0.58	42.47	4.80	254.07
Approach Delay [s/veh]	13.43		11.14		12.67		33.02	
Approach LOS	B		B		B		D	
Intersection Delay [s/veh]	23.68							
Intersection LOS	C							

Intersections 39 & 40 removed intentionally

Intersection Level Of Service Report
Intersection 41: Perry Worth Road & 550 S

Control Type:	Signalized	Delay (sec / veh):	19.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.342

Intersection Setup

Name	Perry Worth Road				Perry Worth Road				550 S				550 S			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				30.00				0.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	Perry Worth Road				Perry Worth Road				550 S				550 S			
Base Volume Input [veh/h]	0	142	37	0	0	0	11	96	0	265	0	36	0	0	0	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	0	0	0	1	2	0	5	0	11	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	155	37	0	0	0	12	98	0	270	0	47	0	0	0	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	42	10	0	0	0	3	27	0	73	0	13	0	0	0	0
Total Analysis Volume [veh/h]	0	168	40	0	0	0	13	107	0	293	0	51	0	0	0	0
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	85
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	36	36	36	36	36	36	36	36	49	49	49	49	49	49	49	49
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	15	15	15	15	15	15	15	15	9	9	9	9	9	9	9	9
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	30	30	30	30	43	43	43	43	43	43
g / C, Green / Cycle	0.35	0.35	0.35	0.35	0.51	0.51	0.51	0.51	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.13	0.02	0.00	0.07	0.21	0.00	0.03	0.00	0.00	0.00
s, saturation flow rate [veh/h]	1261	1855	1372	1603	1406	3532	1577	1359	3532	1577
c, Capacity [veh/h]	434	655	517	566	763	1787	798	740	1787	798
d1, Uniform Delay [s]	25.63	18.19	0.00	19.23	14.39	0.00	10.72	0.00	0.00	0.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.59	0.18	0.00	0.85	1.46	0.00	0.15	0.00	0.00	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.06	0.00	0.21	0.38	0.00	0.06	0.00	0.00	0.00
d, Delay for Lane Group [s/veh]	28.22	18.37	0.00	20.09	15.85	0.00	10.88	0.00	0.00	0.00
Lane Group LOS	C	B	A	C	B	A	B	A	A	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	No	No
50th-Percentile Queue Length [veh/ln]	2.97	0.52	0.00	1.68	3.77	0.00	0.50	0.00	0.00	0.00
50th-Percentile Queue Length [ft/ln]	74.36	13.02	0.00	42.08	94.17	0.00	12.43	0.00	0.00	0.00
95th-Percentile Queue Length [veh/ln]	5.35	0.94	0.00	3.03	6.78	0.00	0.89	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	133.84	23.43	0.00	75.74	169.50	0.00	22.37	0.00	0.00	0.00

Movement, Approach, & Intersection Results

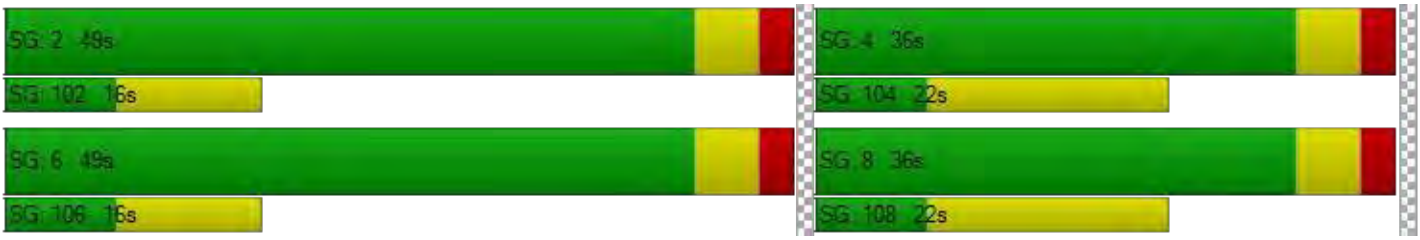
d_M, Delay for Movement [s/veh]	28.22	28.22	18.37	18.37	0.00	0.00	20.09	20.09	15.85	15.85	0.00	10.88	0.00	0.00	0.00	0.00
Movement LOS	C	C	B	B	A	A	C	C	B	B	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	26.33				20.09				15.11				0.00			
Approach LOS	C				C				B				A			
d_I, Intersection Delay [s/veh]	19.47															
Intersection LOS	B															
Intersection V/C	0.342															

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.21	32.21	32.21	32.21
l_p,int, Pedestrian LOS Score for Intersectio	2.294	2.550	3.206	2.449
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	706	706	1012	1012
d_b, Bicycle Delay [s]	17.79	17.79	10.38	10.38
l_b,int, Bicycle LOS Score for Intersection	1.736	1.868	1.602	1.670
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 42: Indianapolis Road & Commerce Drive

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Base Volume Input [veh/h]	0	22	196	0	62	12	0	8	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	3	2	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	22	200	0	65	14	0	9	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	54	0	18	4	0	2	3
Total Analysis Volume [veh/h]	0	24	217	0	71	15	0	10	12
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	8.53	7.43	0.00	9.29	0.00	0.00	10.64	10.69	8.77
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00	0.09	0.09	0.09
95th-Percentile Queue Length [ft/ln]	1.22	1.22	0.00	0.00	0.00	0.00	2.13	2.13	2.13
d_A, Approach Delay [s/veh]	0.74			0.00			9.64		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	1.12								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 43: Perry Worth Road & Juniors Way

Control Type:	Roundabout	Delay (sec / veh):	4.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Base Volume Input [veh/h]	66	24	15	35	93	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	2	5	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	72	24	17	40	93	131
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	7	5	11	25	36
Total Analysis Volume [veh/h]	78	26	18	43	101	142
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	19		104		80	
Exiting Flow Rate [veh/h]	148		227		19	
Demand Flow Rate [veh/h]	72	24	17	40	93	131
Adjusted Demand Flow Rate [veh/h]	78	26	18	43	101	142

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	81	0	63	251
Capacity of Entry and Bypass Lanes [veh/h]	1355	1355	1242	1272
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1315	1315	1205	1235
X, volume / capacity	0.06	0.02	0.05	0.20

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.19	0.06	0.16	0.73
95th-Percentile Queue Length [ft]	4.72	1.51	3.99	18.28
Approach Delay [s/veh]	3.13		3.40	4.61
Approach LOS	A		A	A
Intersection Delay [s/veh]	4.05			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 44: 650 E & Central Blvd

Control Type:	Roundabout	Delay (sec / veh):	6.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	39	394	50	161	720	4	17	0	43	62	19	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	0	4	90	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	39	422	50	165	810	4	17	0	43	62	19	65
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	115	14	45	220	1	5	0	12	17	5	18
Total Analysis Volume [veh/h]	42	459	54	179	880	4	18	0	47	67	21	71
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	203			134			1160			535		
Exiting Flow Rate [veh/h]	1024			564			69			240		
Demand Flow Rate [veh/h]	39	422	50	165	810	4	17	0	43	62	19	65
Adjusted Demand Flow Rate [veh/h]	42	459	54	179	880	4	18	0	47	67	21	71

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	269	303	515	581	19	49	77	87
Capacity of Entry and Bypass Lanes [veh/h]	1121	1196	1194	1268	465	530	826	902
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1088	1161	1159	1231	451	515	802	876
X, volume / capacity	0.24	0.25	0.43	0.46	0.04	0.09	0.09	0.10

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.94	1.01	2.21	2.46	0.12	0.30	0.31	0.32
95th-Percentile Queue Length [ft]	23.45	25.24	55.36	61.54	3.11	7.50	7.69	7.97
Approach Delay [s/veh]	5.48		7.63		8.26		5.21	
Approach LOS	A		A		A		A	
Intersection Delay [s/veh]	6.80							
Intersection LOS	A							

Intersection Level Of Service Report
Intersection 45: Central Blvd & Heartland Drive

Control Type:	All-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.207

Intersection Setup

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Approach	Northbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes		

Volumes

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	0	41	26	0	108	40	0	25	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	3	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	41	26	0	111	40	0	25	103
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	11	7	0	30	11	0	7	28
Total Analysis Volume [veh/h]	0	45	28	0	121	43	0	27	112
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	624	789	791	669	738
Degree of Utilization, x	0.07	0.04	0.21	0.04	0.15

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.23	0.11	0.78	0.13	0.53
95th-Percentile Queue Length [ft]	5.81	2.76	19.44	3.15	13.33
Approach Delay [s/veh]	8.35		8.74	8.42	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.55				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 46: Veterans Drive & Central Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.197

Intersection Setup

Name				South 700 East			Central Boulevard		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			Yes		

Volumes

Name				South 700 East			Central Boulevard		
Base Volume Input [veh/h]	0	34	229	0	217	71	0	75	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	37	0	16	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	34	266	0	233	71	0	75	52
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	72	0	63	19	0	20	14
Total Analysis Volume [veh/h]	0	37	289	0	253	77	0	82	57
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.20	0.08
d_M, Delay for Movement [s/veh]	10.65	8.03	0.00	9.82	0.00	0.00	15.75	15.75	10.23
Movement LOS	B	A	A	A	A	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.00	0.00	0.72	0.72	0.25
95th-Percentile Queue Length [ft/ln]	2.34	2.34	0.00	0.00	0.00	0.00	18.07	18.07	6.19
d_A, Approach Delay [s/veh]	0.91			0.00			13.48		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	2.73								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 47: Perry Worth Road & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	4.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	2000.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.00
Speed [mph]	25.00				25.00				40.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	No				Yes				Yes			

Volumes

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Base Volume Input [veh/h]	82	130	22	135	4	4	2	3	2	49	99	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	3	0	0	1	0	0	0	3	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	82	134	25	135	4	5	2	3	2	52	103	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	36	7	37	1	1	1	1	1	14	28	1
Total Analysis Volume [veh/h]	89	146	27	147	4	5	2	3	2	57	112	3
Pedestrian Volume [ped/h]	0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1			
Circulating Flow Rate [veh/h]	108				465				237			
Exiting Flow Rate [veh/h]	287				42				242			
Demand Flow Rate [veh/h]	82	134	25	135	4	5	2	3	2	52	103	3
Adjusted Demand Flow Rate [veh/h]	89	146	27	147	4	5	2	3	2	57	112	3

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	224	198	15	85	95
Capacity of Entry and Bypass Lanes [veh/h]	1287	1287	860	1145	1145
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1250	1250	835	1112	1112
X, volume / capacity	0.17	0.15	0.02	0.07	0.08

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.63	0.54	0.05	0.24	0.27
95th-Percentile Queue Length [ft]	15.67	13.58	1.28	5.95	6.77
Approach Delay [s/veh]	4.27		4.47	3.91	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	4.46				
Intersection LOS	A				

Intersection Setup

Name	Mills Drive				Chick-fil-A Access			
Approach	Westbound				Northeastbound			
Lane Configuration								
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Mills Drive				Chick-fil-A Access			
Base Volume Input [veh/h]	78	41	70	9	4	1	34	71
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00							
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	5	1	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	78	41	75	10	4	1	34	71
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	11	20	3	1	0	9	19
Total Analysis Volume [veh/h]	85	45	82	11	4	1	37	77
Pedestrian Volume [ped/h]	0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	2				1			
Circulating Flow Rate [veh/h]	277				273			
Exiting Flow Rate [veh/h]	252				143			
Demand Flow Rate [veh/h]	78	41	75	10	4	1	34	71
Adjusted Demand Flow Rate [veh/h]	85	45	82	11	4	1	37	77

Lanes

Overwrite Calculated Critical Headway	No	No
User-Defined Critical Headway [s]	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No
User-Defined Follow-Up Time [s]	3.00	3.00
A (intercept)	1420.00	1380.00
B (coefficient)	0.00085	0.00102
HV Adjustment Factor	0.97	0.97
Entry Flow Rate [veh/h]	230	123
Capacity of Entry and Bypass Lanes [veh/h]	1123	1045
Pedestrian Impedance	1.00	1.00
Capacity per Entry Lane [veh/h]	1090	1015
X, volume / capacity	0.20	0.12

Movement, Approach, & Intersection Results

Lane LOS	A	A
95th-Percentile Queue Length [veh]	0.77	0.40
95th-Percentile Queue Length [ft]	19.17	9.93
Approach Delay [s/veh]	5.18	4.61
Approach LOS	A	A
Intersection Delay [s/veh]	4.46	
Intersection LOS	A	

Intersection Level Of Service Report
Intersection 48: 650 E & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	6.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Mills Drive			Mills Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Mills Drive			Mills Drive		
Base Volume Input [veh/h]	64	325	31	44	608	179	148	31	32	23	3	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	25	3	0	85	5	3	0	0	2	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	350	34	44	693	184	151	31	32	25	3	12
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	95	9	12	188	50	41	8	9	7	1	3
Total Analysis Volume [veh/h]	70	380	37	48	753	200	164	34	35	27	3	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	253			103			853			632		
Exiting Flow Rate [veh/h]	839			574			281			123		
Demand Flow Rate [veh/h]	64	350	34	44	693	184	151	31	32	25	3	12
Adjusted Demand Flow Rate [veh/h]	70	380	37	48	753	200	164	34	35	27	3	13

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	236	266	485	547	240	45
Capacity of Entry and Bypass Lanes [veh/h]	1128	1128	1293	1293	688	830
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1095	1095	1256	1256	668	806
X, volume / capacity	0.21	0.24	0.37	0.42	0.35	0.05

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.79	0.92	1.77	2.15	1.56	0.17
95th-Percentile Queue Length [ft]	19.68	22.94	44.16	53.63	39.07	4.22
Approach Delay [s/veh]	5.35		6.78		10.00	4.99
Approach LOS	A		A		A	A
Intersection Delay [s/veh]	6.76					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 49: Whitestown Parkway & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Base Volume Input [veh/h]	0	6	358	0	3	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	61	0	0	26
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	419	0	3	114
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	114	0	1	31
Total Analysis Volume [veh/h]	0	7	455	0	3	124
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.72	11.04	0.00	0.00	8.27	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.88	0.88	0.00	0.00	0.13	0.13
d_A, Approach Delay [s/veh]	11.04		0.00		0.20	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.17					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	Two-way stop	Delay (sec / veh):	26.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.027

Intersection Setup

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	3	9	48	2	4	1	1	357	3	13	144	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	20	98	3	22	8	52	9	0	1	18	84
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	29	146	5	26	9	53	366	3	14	162	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	8	40	1	7	2	14	99	1	4	44	24
Total Analysis Volume [veh/h]	3	32	159	5	28	10	58	398	3	15	176	95
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.11	0.25	0.03	0.09	0.01	0.05	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	22.79	21.43	14.48	25.98	17.52	10.64	7.86	0.00	0.00	8.14	0.00	0.00
Movement LOS	C	C	B	D	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.68	1.68	1.68	0.42	0.42	0.42	0.10	0.10	0.10	0.03	0.03	0.00
95th-Percentile Queue Length [ft/ln]	41.98	41.98	41.98	10.55	10.55	10.55	2.50	2.50	2.50	0.63	0.63	0.00
d_A, Approach Delay [s/veh]	15.75			16.90			0.99			0.43		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	4.44											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Two-way stop	Delay (sec / veh):	25.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	2	0	33	6	1	0	4	402	4	65	156	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	1	2	108	0	0	102	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	33	7	1	1	6	510	4	65	258	28
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	9	2	0	0	2	139	1	18	70	8
Total Analysis Volume [veh/h]	2	0	36	8	1	1	7	554	4	71	280	30
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.07	0.04	0.00	0.00	0.01	0.01	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	23.18	21.80	12.31	25.20	21.93	9.77	7.90	0.00	0.00	8.84	0.00	0.00
Movement LOS	C	C	B	D	C	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.22	0.15	0.15	0.00	0.01	0.01	0.01	0.23	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.76	0.76	5.46	3.70	3.70	0.10	0.29	0.29	0.29	5.67	0.00	0.00
d_A, Approach Delay [s/veh]	12.88			23.33			0.10			1.65		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	1.41											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 52: Whitestown Parkway & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	38	76	453	87	12	11	11	387	38	291	264	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	37	4	101	0	3	0	0	96	13	82	67	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	80	554	87	15	11	11	483	51	373	331	84
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	22	151	24	4	3	3	131	14	101	90	23
Total Analysis Volume [veh/h]	82	87	602	95	16	12	12	525	55	405	360	91
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	651			872			531			186		
Exiting Flow Rate [veh/h]	490			196			468			639		
Demand Flow Rate [veh/h]	75	80	554	87	15	11	11	483	51	373	331	84
Adjusted Demand Flow Rate [veh/h]	82	87	602	95	16	12	12	525	55	405	360	91

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	175	0	68	60	287	324	418	465
Capacity of Entry and Bypass Lanes [veh/h]	817	826	606	677	828	904	1199	1199
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	793	802	588	657	804	878	1164	1164
X, volume / capacity	0.21	0.75	0.11	0.09	0.35	0.36	0.35	0.39

Movement, Approach, & Intersection Results

Lane LOS	A	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.80	7.06	0.37	0.29	1.55	1.63	1.58	1.86
95th-Percentile Queue Length [ft]	20.11	176.60	9.31	7.21	38.79	40.80	39.39	46.50
Approach Delay [s/veh]	17.50		6.98		8.35		6.74	
Approach LOS	C		A		A		A	
Intersection Delay [s/veh]	10.70							
Intersection LOS	B							

Intersections 53 & 54 removed intentionally

Intersection Level Of Service Report
Intersection 55: Whitestown Parkway & Perry Worth Road

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.612

Intersection Setup

Name				Perry Worth Road			Whitestown Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Perry Worth Road			Whitestown Parkway					
Base Volume Input [veh/h]	49	7	15	58	17	211	252	700	14	26	1031	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	2	0	3	5	107	4	0	172	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	7	15	60	17	214	257	807	18	26	1203	36
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	2	4	16	5	58	70	219	5	7	327	10
Total Analysis Volume [veh/h]	55	8	16	65	18	233	279	877	20	28	1308	39
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	37	37	9	37	37	14	35	35	9	30	30
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	24	24	0	21	21	0	14	14	0	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	Yes
Maximum Recall	No	No		No	No		No	No		No	No	No
Pedestrian Recall	No	No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	4.00	6.00	6.00	5.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	18	10	18	10	10	62	53	53	62	51	70
g / C, Green / Cycle	0.20	0.11	0.20	0.12	0.12	0.69	0.59	0.59	0.69	0.56	0.78
(v / s)_i Volume / Saturation Flow Rate	0.05	0.02	0.05	0.09	0.09	0.61	0.27	0.27	0.04	0.41	0.03
s, saturation flow rate [veh/h]	1191	1494	1356	1450	1419	461	1669	1656	730	3179	1419
c, Capacity [veh/h]	272	168	373	168	164	354	989	981	449	1792	1102
d1, Uniform Delay [s]	30.02	36.04	29.90	38.55	38.56	24.76	10.24	10.24	11.35	14.56	2.31
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.36	0.39	0.22	6.71	6.90	16.18	1.51	1.52	0.27	2.66	0.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.14	0.17	0.75	0.76	0.79	0.46	0.46	0.06	0.73	0.04
d, Delay for Lane Group [s/veh]	30.38	36.43	30.12	45.25	45.46	40.95	11.75	11.76	11.61	17.22	2.37
Lane Group LOS	C	D	C	D	D	D	B	B	B	B	A
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.01	0.49	1.20	3.01	2.96	6.19	4.50	4.47	0.15	8.80	0.10
50th-Percentile Queue Length [ft/ln]	25.32	12.37	29.88	75.33	74.11	154.79	112.42	111.67	3.86	220.05	2.48
95th-Percentile Queue Length [veh/ln]	1.82	0.89	2.15	5.42	5.34	10.27	7.97	7.93	0.28	13.67	0.18
95th-Percentile Queue Length [ft/ln]	45.58	22.26	53.78	135.59	133.41	256.80	199.36	198.32	6.95	341.69	4.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.38	36.43	36.43	30.12	45.25	45.36	40.95	11.76	11.76	11.61	17.22	2.37
Movement LOS	C	D	D	C	D	D	D	B	B	B	B	A
d_A, Approach Delay [s/veh]	32.22			42.22			18.68			16.68		
Approach LOS	C			D			B			B		
d_I, Intersection Delay [s/veh]	20.64											
Intersection LOS	C											
Intersection V/C	0.612											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	34.67	34.67	34.67
l_p,int, Pedestrian LOS Score for Intersectio	2.195	2.801	3.121	3.033
Crosswalk LOS	B	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	689	644	533
d_b, Bicycle Delay [s]	19.34	19.34	20.67	24.20
l_b,int, Bicycle LOS Score for Intersection	1.690	2.081	2.530	2.694
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 56: Whitestown Parkway & 650 E

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	650 East			650 East						Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East						Whitestown Parkway		
Base Volume Input [veh/h]	168	39	23	98	47	419	266	506	82	23	526	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	1	0	0	2	85	26	81	2	0	84	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	173	40	23	98	49	504	292	587	84	23	610	58
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	11	6	27	13	137	79	160	23	6	166	16
Total Analysis Volume [veh/h]	188	43	25	107	53	548	317	638	91	25	663	63
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	82.5
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	Protecte	Permiss	Overlap	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	18	18	13	22	22	23	50	50	9	36	36
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	4.00	6.00	6.00	6.00	4.00	6.00	4.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	0.00	4.00	0.00	2.00	4.00	0.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	21	11	19	21	12	38	13	50	61	40	40	67
g / C, Green / Cycle	0.24	0.12	0.21	0.24	0.14	0.42	0.14	0.56	0.68	0.44	0.44	0.75
(v / s)_i Volume / Saturation Flow Rate	0.26	0.03	0.02	0.08	0.03	0.22	0.10	0.20	0.06	0.03	0.21	0.04
s, saturation flow rate [veh/h]	730	1669	1419	1349	1669	2512	3088	3179	1419	751	3179	1419
c, Capacity [veh/h]	278	203	304	413	231	1064	436	1774	965	372	1408	1061
d1, Uniform Delay [s]	34.55	35.66	28.30	28.02	34.52	19.11	36.99	10.99	4.91	14.83	17.65	3.00
k, delay calibration	0.28	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.26	0.52	0.11	0.33	0.50	0.39	2.33	0.57	0.04	0.35	1.13	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.21	0.08	0.26	0.23	0.51	0.73	0.36	0.09	0.07	0.47	0.06
d, Delay for Lane Group [s/veh]	41.82	36.17	28.42	28.35	35.02	19.50	39.32	11.56	4.95	15.18	18.78	3.10
Lane Group LOS	D	D	C	C	D	B	D	B	A	B	B	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.44	0.87	0.44	1.89	1.05	4.09	3.30	3.13	0.44	0.30	4.56	0.21
50th-Percentile Queue Length [ft/ln]	60.99	21.78	10.91	47.29	26.34	102.37	82.60	78.16	11.04	7.48	114.06	5.31
95th-Percentile Queue Length [veh/ln]	4.39	1.57	0.79	3.40	1.90	7.37	5.95	5.63	0.80	0.54	8.07	0.38
95th-Percentile Queue Length [ft/ln]	109.79	39.21	19.64	85.12	47.41	184.26	148.69	140.69	19.88	13.47	201.64	9.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.82	36.17	28.42	28.35	35.02	19.50	39.32	11.56	4.95	15.18	18.78	3.10
Movement LOS	D	D	C	C	D	B	D	B	A	B	B	A
d_A, Approach Delay [s/veh]	39.56			22.00			19.40			17.35		
Approach LOS	D			C			B			B		
d_I, Intersection Delay [s/veh]	21.38											
Intersection LOS	C											
Intersection V/C	0.603											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	267	356	978	667
d_b, Bicycle Delay [s]	33.80	30.42	11.76	20.00
l_b,int, Bicycle LOS Score for Intersection	1.982	2.728	2.423	2.179
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 57: Whitestown Parkway & Heartland Drive

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

Intersection Setup

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	0	23	0	0	68	106	512	6	39	525	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	0.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	81	0	0	85	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	23	0	0	68	106	593	6	39	610	64
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	18	29	161	2	11	166	17
Total Analysis Volume [veh/h]	0	0	25	0	0	74	115	645	7	42	663	70
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.00	0.12	0.13	0.01	0.00	0.05	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	10.58	0.00	0.00	11.50	9.82	0.00	0.00	9.08	0.00	0.00
Movement LOS			B			B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.12	0.00	0.00	0.40	0.46	0.00	0.00	0.14	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.90	0.00	0.00	9.97	11.50	0.00	0.00	3.57	0.00	0.00
d_A, Approach Delay [s/veh]	10.58			11.50			1.47			0.49		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.60											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 58: Whitestown Parkway & Veterans Drive/700 E

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name							Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name							Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	94	58	144	189	46	106	91	370	16	57	367	156
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	19	0	0	32	49	0	0	83	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	96	58	144	208	46	106	123	419	16	57	450	161
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	16	39	57	13	29	33	114	4	15	122	44
Total Analysis Volume [veh/h]	104	63	157	226	50	115	134	455	17	62	489	175
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	45.5
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	33	33	9	33	33	9	39	39	9	39	39
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	17	17	0	10	10	0	10	10	0	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	32	23	32	23	46	38	38	46	37	37
g / C, Green / Cycle	0.35	0.25	0.35	0.25	0.51	0.43	0.43	0.51	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.09	0.15	0.20	0.11	0.16	0.14	0.14	0.07	0.21	0.21
s, saturation flow rate [veh/h]	1200	1483	1159	1487	840	1669	1648	921	1669	1522
c, Capacity [veh/h]	426	373	377	374	449	712	703	519	679	619
d1, Uniform Delay [s]	20.77	29.60	26.24	28.35	12.71	17.24	17.24	11.37	20.00	20.03
k, delay calibration	0.11	0.11	0.12	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.30	1.49	1.70	0.82	0.37	1.26	1.28	0.47	2.73	3.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.59	0.60	0.44	0.30	0.33	0.33	0.12	0.51	0.51
d, Delay for Lane Group [s/veh]	21.06	31.08	27.94	29.17	13.08	18.49	18.52	11.84	22.73	23.05
Lane Group LOS	C	C	C	C	B	B	B	B	C	C
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.52	4.24	3.57	2.94	1.30	3.23	3.20	0.62	5.45	5.05
50th-Percentile Queue Length [ft/ln]	37.93	106.01	89.20	73.42	32.48	80.70	79.93	15.51	136.29	126.30
95th-Percentile Queue Length [veh/ln]	2.73	7.62	6.42	5.29	2.34	5.81	5.75	1.12	9.28	8.74
95th-Percentile Queue Length [ft/ln]	68.27	190.44	160.56	132.16	58.47	145.26	143.87	27.91	232.02	218.46

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.06	31.08	31.08	27.94	29.17	29.17	13.08	18.50	18.52	11.84	22.82	23.05
Movement LOS	C	C	C	C	C	C	B	B	B	B	C	C
d_A, Approach Delay [s/veh]	27.87			28.46			17.30			21.94		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	22.75											
Intersection LOS	C											
Intersection V/C	0.505											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.352	0.000	2.852
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	733	733
d_b, Bicycle Delay [s]	22.05	22.05	18.05	18.05
l_b,int, Bicycle LOS Score for Intersection	2.094	2.205	2.060	2.159
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection 59 included in 10-year scenario

Intersection Level Of Service Report
Intersection 60: 750 S & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	425 East						750 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	425 East						750 South		
Base Volume Input [veh/h]	0	0	2	0	3	43	0	52	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	21	0	58	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	2	0	3	64	0	110	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	0	1	17	0	30	0
Total Analysis Volume [veh/h]	0	0	2	0	3	70	0	120	1
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free		
Flared Lane	No								
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance	No								
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.54	9.58	8.89	8.72	7.47	0.00	8.44	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.16	0.16	0.16	0.13	0.13	0.13	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.89			0.31			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	0.20								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 61: 750 S & 475 E

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.045

Intersection Setup

Name	475 East		750 South		750 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	475 East		750 South		750 South	
Base Volume Input [veh/h]	5	16	30	27	44	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	0	21	58	118
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	16	30	48	102	139
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	4	8	13	28	38
Total Analysis Volume [veh/h]	30	17	33	52	111	151
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.74	9.56	7.81	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.06	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.19	5.19	1.40	1.40	0.00	0.00
d_A, Approach Delay [s/veh]	10.31		3.03		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.88					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 62: County Road 750 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	South 600 East		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	South 600 East		750 South		750 South	
Base Volume Input [veh/h]	5	30	127	2	20	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	7	1	0	24
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	30	134	3	20	79
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	8	36	1	5	21
Total Analysis Volume [veh/h]	8	33	146	3	22	86
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	10.37	9.23	0.00	0.00	7.55	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.04	0.04
95th-Percentile Queue Length [ft/ln]	3.80	3.80	0.00	0.00	0.93	0.93
d_A, Approach Delay [s/veh]	9.45		0.00		1.54	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.86					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 63: Indianapolis Road & 750 S

Control Type:	Two-way stop	Delay (sec / veh):	19.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			750 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			750 South		
Base Volume Input [veh/h]	0	30	300	0	196	60	0	96	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	28	0	18	19	0	1	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	32	328	0	214	79	0	97	119
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	89	0	58	21	0	26	32
Total Analysis Volume [veh/h]	0	35	357	0	233	86	0	105	129
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.27	0.17
d_M, Delay for Movement [s/veh]	11.06	7.95	0.00	10.29	0.00	0.00	19.39	19.49	14.95
Movement LOS	B	A	A	B	A	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.00	0.00	0.00	2.23	2.23	2.23
95th-Percentile Queue Length [ft/ln]	1.49	1.49	1.49	0.00	0.00	0.00	55.64	55.64	55.64
d_A, Approach Delay [s/veh]	0.71			0.00			16.99		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	4.50								
Intersection LOS	C								

Intersections 64, 65, 66, 67, & 68 included in 10-year scenario

Intersection Level Of Service Report
Intersection 69: 100 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	600 E		100 South		100 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	600 E		100 South		100 South	
Base Volume Input [veh/h]	0	0	22	2	0	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	9	0	0	9
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	31	2	0	44
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	8	1	0	12
Total Analysis Volume [veh/h]	0	0	34	2	0	48
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop		Free		Free	
Flared Lane	No					
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance	No					
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.93	8.48	0.00	0.00	7.30	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.70		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 70: 300 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.209

Intersection Setup

Name	South 400 East			South 400 East			300 South			300 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			300 South			300 South		
Base Volume Input [veh/h]	20	109	3	5	73	4	3	20	11	11	37	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	0	0	29	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	133	3	5	102	4	3	20	11	11	37	47
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	36	1	1	28	1	1	5	3	3	10	13
Total Analysis Volume [veh/h]	22	145	3	5	111	4	3	22	12	12	40	51
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	813	808	788	820
Degree of Utilization, x	0.21	0.15	0.05	0.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.52	0.15	0.43
95th-Percentile Queue Length [ft]	19.65	13.01	3.69	10.73
Approach Delay [s/veh]	8.60	8.23	7.79	8.02
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.29			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 71: SR 267 & 550 S

Control Type:	Two-way stop	Delay (sec / veh):	30.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.160

Intersection Setup

Name	State Road 267				State Road 267				550 South				550 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				60.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	State Road 267				State Road 267				550 South				550 South			
Base Volume Input [veh/h]	0	17	279	11	0	9	216	33	0	34	82	15	0	13	31	18
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	57	2	0	13	40	5	0	3	10	1	0	1	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	22	336	13	0	22	256	38	0	37	92	16	0	14	32	18
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	6	91	4	0	6	70	10	0	10	25	4	0	4	9	5
Total Analysis Volume [veh/h]	0	24	365	14	0	24	278	41	0	40	100	17	0	15	35	20
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.16	0.32	0.02	0.00	0.08	0.11	0.03
d_M, Delay for Movement [s/veh]	10.14	7.94	0.00	0.00	10.67	8.09	0.00	0.00	30.32	30.48	27.64	20.99	27.40	27.62	20.04	13.67
Movement LOS	B	A	A	A	B	A	A	A	D	D	D	C	D	D	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	2.67	2.67	2.67	2.67	0.84	0.84	0.84	0.84
95th-Percentile Queue Length [ft/ln]	1.02	1.02	1.02	1.02	1.04	1.04	1.04	1.04	66.70	66.70	66.70	66.70	21.11	21.11	21.11	21.11
d_A, Approach Delay [s/veh]	0.47				0.57				27.64				19.85			
Approach LOS	A				A				D				C			
d_I, Intersection Delay [s/veh]	6.28															
Intersection LOS	D															

Intersection Level Of Service Report
Intersection 72: 750 S & 450 E

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	450 E		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		62.14	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	450 E		750 South		750 South	
Base Volume Input [veh/h]	10	37	60	11	12	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	21	0	0	58
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	37	81	11	12	121
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	10	22	3	3	33
Total Analysis Volume [veh/h]	11	40	88	12	13	132
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.04	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	10.19	8.99	0.00	0.00	7.44	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	4.51	4.51	0.00	0.00	0.55	0.55
d_A, Approach Delay [s/veh]	9.25		0.00		0.67	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.92					
Intersection LOS	B					

PM Peak Hour

Intersection Level Of Service Report
Intersection 1: 100 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	8.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.193

Intersection Setup

Name	South 400 East			South 400 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			100 South			100 South		
Base Volume Input [veh/h]	6	83	3	2	48	1	7	44	7	1	28	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	38	19	7	32	0	0	0	0	14	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	121	22	9	80	1	7	44	7	15	28	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	33	6	2	22	0	2	12	2	4	8	2
Total Analysis Volume [veh/h]	7	132	24	10	87	1	8	48	8	16	30	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	845	814	790	783
Degree of Utilization, x	0.19	0.12	0.08	0.07

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.71	0.41	0.26	0.22
95th-Percentile Queue Length [ft]	17.79	10.22	6.59	5.44
Approach Delay [s/veh]	8.28	8.03	7.96	7.94
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.11			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 2: 100 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.112

Intersection Setup

Name	500 East			500 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	500 East			500 East			100 South			100 South		
Base Volume Input [veh/h]	6	77	3	0	29	2	4	40	8	2	22	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	26	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	77	3	0	29	2	4	66	8	2	41	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	21	1	0	8	1	1	18	2	1	11	0
Total Analysis Volume [veh/h]	7	84	3	0	32	2	4	72	9	2	45	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.11	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.32	10.46	9.34	10.44	10.04	8.75	7.32	0.00	0.00	7.39	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.42	0.42	0.42	0.14	0.14	0.14	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	10.55	10.55	10.55	3.51	3.51	3.51	0.17	0.17	0.17	0.08	0.08	0.08
d_A, Approach Delay [s/veh]	10.41			9.96			0.34			0.31		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	5.22											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 3: 100 S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	650 East				650 East				100 South				100 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	650 East				650 East				100 South				100 South			
Base Volume Input [veh/h]	0	24	71	0	0	4	78	1	0	4	15	20	0	0	4	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	4	0	0	0	4	14	0	19	0	7	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	29	75	0	0	4	82	15	0	23	15	27	0	0	4	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	8	20	0	0	1	22	4	0	6	4	7	0	0	1	0
Total Analysis Volume [veh/h]	0	32	82	0	0	4	89	16	0	25	16	29	0	0	4	0
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.03	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.77	7.47	0.00	0.00	8.51	7.39	0.00	0.00	10.76	10.81	11.16	9.25	10.75	10.81	10.78	8.73
Movement LOS	A	A	A	A	A	A	A	A	B	B	B	A	B	B	B	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.30	0.30	0.30	0.30	0.02	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	1.36	1.36	1.36	1.36	0.17	0.17	0.17	0.17	7.62	7.62	7.62	7.62	0.48	0.48	0.48	0.48
d_A, Approach Delay [s/veh]	2.10				0.27				10.24				10.78			
Approach LOS	A				A				B				B			
d_I, Intersection Delay [s/veh]	3.46															
Intersection LOS	B															

Intersection Level Of Service Report
Intersection 4: 200 S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	575 East						East 200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East						East 200 South			200 South		
Base Volume Input [veh/h]	2	1	0	1	0	2	0	13	0	2	11	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	2	0	0	0	0	0	0	1	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	1	2	1	0	2	0	13	0	3	11	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	1	0	0	1	0	4	0	1	3	1
Total Analysis Volume [veh/h]	2	1	2	1	0	2	0	14	0	3	12	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.74	9.23	8.41	8.74	9.22	8.39	7.25	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.39	0.39	0.39	0.22	0.22	0.22	0.00	0.00	0.00	0.13	0.13	0.13
d_A, Approach Delay [s/veh]	8.71			8.51			0.00			1.28		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	2.33											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: 650 E & 200 S

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	650 East			650 East			200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			200 South			200 South		
Base Volume Input [veh/h]	5	86	14	14	82	1	0	18	3	11	8	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	0	0	11	0	0	2	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	95	14	14	93	1	0	20	3	11	9	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	26	4	4	25	0	0	5	1	3	2	3
Total Analysis Volume [veh/h]	5	103	15	15	101	1	0	22	3	12	10	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.02	0.02	0.01
d_M, Delay for Movement [s/veh]	7.43	0.00	0.00	7.48	0.00	0.00	10.67	10.89	9.00	10.77	10.87	9.07
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.03	0.03	0.03	0.12	0.12	0.12	0.14	0.14	0.14
95th-Percentile Queue Length [ft/ln]	0.21	0.21	0.21	0.63	0.63	0.63	2.95	2.95	2.95	3.59	3.59	3.59
d_A, Approach Delay [s/veh]	0.30			0.96			10.67			10.23		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.53											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: 200 S & 700 E

Control Type:	All-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

Intersection Setup

Name	700 East				700 East				200 South				200 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	700 East				700 East				200 South				200 South			
Base Volume Input [veh/h]	0	6	15	16	0	2	15	0	0	2	28	6	0	18	27	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	15	16	0	2	15	0	0	2	30	6	0	18	28	2
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	2	4	4	0	1	4	0	0	1	8	2	0	5	8	1
Total Analysis Volume [veh/h]	0	7	16	17	0	2	16	0	0	2	33	7	0	20	30	2
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	911	854	892	864
Degree of Utilization, x	0.04	0.02	0.05	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.06	0.15	0.19
95th-Percentile Queue Length [ft]	3.44	1.61	3.70	4.80
Approach Delay [s/veh]	7.13	7.31	7.23	7.44
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.29			
Intersection LOS	A			

Intersections 7 & 8 included in 10-year scenario

Intersection Level Of Service Report
Intersection 9: 650 E/Main St & Madera Drive

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	North Main Street			650 East			Madera Drive	
Approach	Northbound			Southbound			Eastbound	
Lane Configuration								
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			No			Yes	

Volumes

Name	North Main Street			650 East			Madera Drive	
Base Volume Input [veh/h]	0	89	107	0	79	13	6	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	34	0	25	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	91	141	0	104	13	6	55
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	25	38	0	28	4	2	15
Total Analysis Volume [veh/h]	0	99	153	0	113	14	7	60
Pedestrian Volume [ped/h]	0			0			0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.07	0.00	0.00	0.00	0.00	0.01	0.06
d_M, Delay for Movement [s/veh]	9.10	7.66	0.00	8.89	0.00	0.00	12.06	9.10
Movement LOS	A	A	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	0.00	0.00	0.04	0.20
95th-Percentile Queue Length [ft/ln]	5.48	5.48	0.00	0.00	0.00	0.00	1.03	5.12
d_A, Approach Delay [s/veh]	3.01			0.00			9.41	
Approach LOS	A			A			A	
d_I, Intersection Delay [s/veh]	3.11							
Intersection LOS	B							

Intersection 10 included in 10-year scenario

Intersection Level Of Service Report
Intersection 11: Pierce Street/300 S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	575 East			575 East			300 South			West Pierce Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East			575 East			300 South			West Pierce Street		
Base Volume Input [veh/h]	1	0	1	1	3	4	8	70	1	4	47	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	1	0	0	1	2	21	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	2	1	3	5	10	91	1	4	49	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	0	1	1	3	25	0	1	13	0
Total Analysis Volume [veh/h]	1	0	2	1	3	5	11	99	1	4	53	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.77	10.14	8.79	9.75	10.17	8.60	7.34	0.00	0.00	7.43	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.26	0.26	0.26	0.80	0.80	0.80	0.46	0.46	0.46	0.17	0.17	0.17
d_A, Approach Delay [s/veh]	9.12			9.25			0.73			0.52		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.23											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 12: Main & Pierce

Control Type:	All-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.335

Intersection Setup

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				25.00				20.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Base Volume Input [veh/h]	0	19	173	25	0	8	124	17	0	26	22	29	0	53	27	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	20	0	0	2	26	0	0	16	2	0	0	0	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	19	193	25	0	10	150	17	0	42	24	29	0	53	27	5
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	5	52	7	0	3	41	5	0	11	7	8	0	14	7	1
Total Analysis Volume [veh/h]	0	21	210	27	0	11	163	18	0	46	26	32	0	58	29	5
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	770	757	708	681
Degree of Utilization, x	0.33	0.25	0.15	0.14

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.48	1.00	0.51	0.47
95th-Percentile Queue Length [ft]	36.93	25.12	12.82	11.65
Approach Delay [s/veh]	10.01	9.36	8.96	9.11
Approach LOS	B	A	A	A
Intersection Delay [s/veh]	9.52			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 13: Pierce Street & 700 E

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.163

Intersection Setup

Name	700 East		East Pierce Street		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	700 East		East Pierce Street		East 300 South	
Base Volume Input [veh/h]	104	11	13	48	80	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	2	2	3	8
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	109	11	15	50	83	143
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	3	4	14	23	39
Total Analysis Volume [veh/h]	118	12	16	54	90	155
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.02	10.17	7.76	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.64	0.64	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	15.97	15.97	0.67	0.67	0.00	0.00
d_A, Approach Delay [s/veh]	10.94		1.77		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	3.48					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 14: Pierce Street & 300 S & Albert South White Drive

Control Type:	Two-way stop	Delay (sec / veh):	30.1
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.354

Intersection Setup

Name	East 300 South			Albert S. White Drive			East 300 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 300 South			Albert S. White Drive			East 300 South		
Base Volume Input [veh/h]	0	72	85	0	144	176	0	201	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	5	0	8	117	0	100	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	74	90	0	152	293	0	301	138
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	20	24	0	41	80	0	82	38
Total Analysis Volume [veh/h]	0	80	98	0	165	318	0	327	150
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.35	0.14	0.00	0.15	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	29.94	30.14	19.28	11.07	8.54	0.00	9.99	0.00	0.00
Movement LOS	D	D	C	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.60	2.60	2.60	0.30	0.30	0.30	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	65.09	65.09	65.09	7.56	7.56	7.56	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	24.16			2.92			0.00		
Approach LOS	C			A			A		
d_I, Intersection Delay [s/veh]	5.02								
Intersection LOS	D								

Intersections 15 & 16 included in 10-year scenario

Intersection Level Of Service Report
Intersection 17: 400 E & Perry Worth Road

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	South 400 East			South 400 East			Perry Worth Road		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	South 400 East			South 400 East			Perry Worth Road		
Base Volume Input [veh/h]	0	18	104	0	70	0	0	2	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	57	0	46	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	18	161	0	116	0	0	2	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	44	0	32	0	0	1	2
Total Analysis Volume [veh/h]	0	20	175	0	126	0	0	2	9
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	8.80	7.50	0.00	9.02	0.00	0.00	10.60	10.65	8.96
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.00	0.00	0.00	0.04	0.04	0.04
95th-Percentile Queue Length [ft/ln]	0.84	0.84	0.84	0.00	0.00	0.00	0.98	0.98	0.98
d_A, Approach Delay [s/veh]	0.77			0.00			9.27		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	0.76								
Intersection LOS	B								

Intersections 18 & 19 removed intentionally

Intersection Level Of Service Report
Intersection 20: Albert S. White Dr. (400 S) & 400 E

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Base Volume Input [veh/h]	0	0	0	17	0	79	120	461	1	1	672	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	163	14	43	0	13	33	43	135	146	37	124	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	14	43	17	13	112	163	596	147	38	796	28
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	4	12	5	4	30	44	162	40	10	216	8
Total Analysis Volume [veh/h]	177	15	47	18	14	122	177	648	160	41	865	30
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	45
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Split	Split	Split	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	0	10	0	10	10	10	10	10	10	10	10	10
Maximum Green [s]	0	30	0	30	30	30	30	30	30	30	30	30
Amber [s]	0.0	4.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	0	16	0	16	16	16	29	29	29	29	29	29
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	0	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	0	10	0	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	0.0	4.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	C	C
C, Cycle Length [s]	45	45	45	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	10	10	10	10	23	23	23	23	23
g / C, Green / Cycle	0.22	0.22	0.22	0.22	0.51	0.51	0.51	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.16	0.04	0.03	0.09	0.32	0.25	0.25	0.31	0.30
s, saturation flow rate [veh/h]	1128	1484	1140	1419	555	1669	1557	1555	1502
c, Capacity [veh/h]	271	330	378	315	300	853	796	882	768
d1, Uniform Delay [s]	21.11	14.20	13.92	14.89	18.00	7.17	7.17	7.54	7.73
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.65	1.26	0.44	3.56	8.26	2.01	2.15	2.39	3.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.19	0.08	0.39	0.59	0.49	0.49	0.54	0.60
d, Delay for Lane Group [s/veh]	32.76	15.46	14.36	18.45	26.26	9.18	9.33	9.93	11.13
Lane Group LOS	C	B	B	B	C	A	A	A	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	2.60	0.56	0.27	1.22	2.25	2.02	1.92	2.45	2.55
50th-Percentile Queue Length [ft/ln]	64.94	13.94	6.73	30.60	56.23	50.58	47.96	61.14	63.75
95th-Percentile Queue Length [veh/ln]	4.68	1.00	0.48	2.20	4.05	3.64	3.45	4.40	4.59
95th-Percentile Queue Length [ft/ln]	116.89	25.10	12.12	55.09	101.22	91.05	86.33	110.06	114.75

Movement, Approach, & Intersection Results

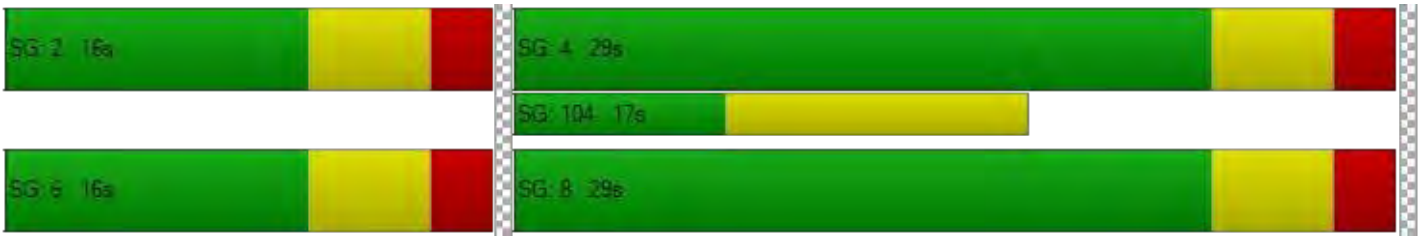
d_M, Delay for Movement [s/veh]	32.76	15.46	15.46	14.36	14.36	18.45	26.26	9.24	9.33	9.93	10.52	11.13
Movement LOS	C	B	B	B	B	B	C	A	A	A	B	B
d_A, Approach Delay [s/veh]	28.27			17.60			12.31			10.52		
Approach LOS	C			B			B			B		
d_I, Intersection Delay [s/veh]	13.59											
Intersection LOS	B											
Intersection V/C	0.476											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	12.84	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.274	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	444	1022	1022
d_b, Bicycle Delay [s]	13.61	13.61	5.38	5.38
l_b,int, Bicycle LOS Score for Intersection	1.954	1.814	2.372	2.332
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Albert S. White Dr. (400 S) & 450 E/Anson Blvd

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.382

Intersection Setup

Name	Anson Boulevard			450 East			Albert S. White Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Anson Boulevard			450 East			Albert S. White Drive					
Base Volume Input [veh/h]	168	1	40	13	7	27	14	437	97	22	404	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	3	22	154	1	0	156	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	1	40	13	7	30	36	591	98	22	560	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	0	11	4	2	8	10	161	27	6	152	1
Total Analysis Volume [veh/h]	185	1	43	14	8	33	39	642	107	24	609	4
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	55
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	6	6	6	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	27	27	27	27	27	27	28	28	28	28	28	28
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	14	14	14	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	C	C
C, Cycle Length [s]	55	55	55	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	21	21	21	21	22	22	22	22	22
g / C, Green / Cycle	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.15	0.03	0.01	0.03	0.05	0.23	0.23	0.21	0.20
s, saturation flow rate [veh/h]	1219	1424	1216	1462	722	1669	1587	1588	1516
c, Capacity [veh/h]	530	544	527	558	283	668	635	706	606
d1, Uniform Delay [s]	14.66	10.84	12.65	10.81	18.14	12.85	12.86	12.32	12.43
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.81	0.29	0.09	0.26	1.02	3.57	3.77	2.20	3.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.08	0.03	0.07	0.14	0.57	0.58	0.46	0.51
d, Delay for Lane Group [s/veh]	16.46	11.14	12.74	11.07	19.16	16.43	16.63	14.52	15.48
Lane Group LOS	B	B	B	B	B	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.88	0.34	0.11	0.30	0.44	3.57	3.43	2.81	2.77
50th-Percentile Queue Length [ft/ln]	46.94	8.55	2.81	7.43	11.00	89.14	85.78	70.26	69.36
95th-Percentile Queue Length [veh/ln]	3.38	0.62	0.20	0.53	0.79	6.42	6.18	5.06	4.99
95th-Percentile Queue Length [ft/ln]	84.49	15.38	5.05	13.37	19.79	160.45	154.41	126.47	124.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	16.46	11.14	11.14	12.74	11.07	11.07	19.16	16.51	16.63	14.52	15.00	15.48
Movement LOS	B	B	B	B	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	15.44			11.49			16.65			14.98		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.70											
Intersection LOS	B											
Intersection V/C	0.382											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	17.60	17.60	0.00	17.60
l_p,int, Pedestrian LOS Score for Intersectio	2.066	2.011	0.000	2.558
Crosswalk LOS	B	B	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	764	764	800	800
d_b, Bicycle Delay [s]	10.51	10.51	9.90	9.90
l_b,int, Bicycle LOS Score for Intersection	1.937	1.650	2.210	2.085
Bicycle LOS	A	A	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 22: Albert S. White Dr. (400 S) & 500 E

Control Type:	All-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.434

Intersection Setup

Name	500 East			500 East								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			Yes		

Volumes

Name	500 East			500 East								
Base Volume Input [veh/h]	99	22	5	13	11	81	91	205	70	6	230	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	2	2	0	0	1	149	2	1	146	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	22	7	15	11	81	92	354	72	7	376	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	6	2	4	3	22	25	96	20	2	102	3
Total Analysis Volume [veh/h]	112	24	8	16	12	88	100	385	78	8	409	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	475	446	508	496	533	553	519	523
Degree of Utilization, x	0.30	0.06	0.17	0.20	0.43	0.42	0.41	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.27	0.20	0.62	0.75	2.18	2.06	2.00	1.98
95th-Percentile Queue Length [ft]	31.65	5.00	15.55	18.66	54.42	51.43	50.07	49.46
Approach Delay [s/veh]	13.84	11.29		13.75			14.36	
Approach LOS	B	B		B			B	
Intersection Delay [s/veh]	13.74							
Intersection LOS	B							

Intersection Level Of Service Report
Intersection 23: Albert S. White Dr. (400 S) & 575 E

Control Type:	All-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.345

Intersection Setup

Name	575 East			575 East						400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	1300.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1300.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			No		

Volumes

Name	575 East			575 East						400 S		
Base Volume Input [veh/h]	46	11	69	9	7	9	14	255	7	8	165	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	3	0	0	0	0	152	0	6	146	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	12	72	9	7	9	14	407	7	14	311	12
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	3	20	2	2	2	4	111	2	4	85	3
Total Analysis Volume [veh/h]	50	13	78	10	8	10	15	442	8	15	338	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	597	567	598	653	655	588	641	646
Degree of Utilization, x	0.24	0.05	0.03	0.34	0.34	0.03	0.27	0.27

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.91	0.16	0.08	1.54	1.53	0.08	1.11	1.10
95th-Percentile Queue Length [ft]	22.78	3.89	1.93	38.38	38.13	1.96	27.78	27.44
Approach Delay [s/veh]	10.87	9.68	11.00			10.32		
Approach LOS	B	A	B			B		
Intersection Delay [s/veh]	10.70							
Intersection LOS	B							

Intersection Level Of Service Report
Intersection 24: 400 S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	7.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street			South Main Street			400 S			400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Main Street			South Main Street			400 S			400 S		
Base Volume Input [veh/h]	101	273	132	21	181	36	28	160	109	143	140	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	56	3	0	10	82	66	80	3	25	64	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	329	135	21	191	118	94	240	112	168	204	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	89	37	6	52	32	26	65	30	46	55	4
Total Analysis Volume [veh/h]	112	358	147	23	208	128	102	261	122	183	222	15
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	398			533			426			589		
Exiting Flow Rate [veh/h]	528			489			476			444		
Demand Flow Rate [veh/h]	103	329	135	21	191	118	94	240	112	168	204	14
Adjusted Demand Flow Rate [veh/h]	112	358	147	23	208	128	102	261	122	183	222	15

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	299	337	174	196	235	265	204	230
Capacity of Entry and Bypass Lanes [veh/h]	937	1013	828	904	912	989	786	861
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	910	984	804	877	886	960	763	836
X, volume / capacity	0.32	0.33	0.21	0.22	0.26	0.27	0.26	0.27

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.38	1.47	0.79	0.82	1.03	1.08	1.03	1.07
95th-Percentile Queue Length [ft]	34.51	36.71	19.75	20.59	25.68	27.11	25.83	26.86
Approach Delay [s/veh]	7.26		6.51		6.60		7.42	
Approach LOS	A		A		A		A	
Intersection Delay [s/veh]	6.98							
Intersection LOS	A							

Intersection Level Of Service Report
Intersection 25: 400 S/Albert S. White Drive & 400 S/Ginger Way

Control Type:	Two-way stop	Delay (sec / veh):	25.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.303

Intersection Setup

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Base Volume Input [veh/h]	14	257	70	40	207	3	8	5	3	69	5	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	82	0	11	89	0	0	0	0	0	0	69
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	339	70	51	296	3	8	5	3	69	5	112
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	92	19	14	80	1	2	1	1	19	1	30
Total Analysis Volume [veh/h]	15	368	76	55	322	3	9	5	3	75	5	122
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.05	0.00	0.00	0.05	0.02	0.00	0.30	0.02	0.19
d_M, Delay for Movement [s/veh]	7.97	0.00	0.00	8.41	0.00	0.00	25.64	19.23	10.29	25.79	19.85	12.15
Movement LOS	A	A	A	A	A	A	D	C	B	D	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.16	0.00	0.00	0.15	0.07	0.07	1.24	0.78	0.78
95th-Percentile Queue Length [ft/ln]	0.93	0.00	0.00	3.90	0.00	0.00	3.84	1.81	1.81	30.90	19.48	19.48
d_A, Approach Delay [s/veh]	0.26			1.22			21.04			17.40		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	4.21											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 26: 700 E & 425 S

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.110

Intersection Setup

Name	South 700 East		South 700 East		East 425 South	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Left	Thru	Left	Right	Thru	Right
Lane Width [ft]	11.48	11.48	12.00	12.00	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	South 700 East		South 700 East		East 425 South	
Base Volume Input [veh/h]	63	11	59	38	8	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	69	0	0	11	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	11	59	49	8	83
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	3	16	13	2	23
Total Analysis Volume [veh/h]	143	12	64	53	9	90
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane		No	
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.00	0.11	0.05	0.00	0.00
d_M, Delay for Movement [s/veh]	7.64	0.00	12.16	9.53	0.00	0.00
Movement LOS	A	A	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.29	0.29	0.58	0.58	0.00	0.00
95th-Percentile Queue Length [ft/ln]	7.34	7.34	14.45	14.45	0.00	0.00
d_A, Approach Delay [s/veh]	7.05		10.97		0.00	
Approach LOS	A		B		A	
d_I, Intersection Delay [s/veh]	6.40					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 27: SR 267 & Indianapolis Road

Control Type:	Signalized	Delay (sec / veh):	21.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.432

Intersection Setup

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Base Volume Input [veh/h]	0	31	265	14	0	139	319	93	0	118	40	40	0	16	27	173
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	96	0	0	3	99	10	0	11	0	2	0	0	1	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	32	361	14	0	142	418	103	0	129	40	42	0	16	28	175
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	9	98	4	0	39	114	28	0	35	11	11	0	4	8	48
Total Analysis Volume [veh/h]	0	35	392	15	0	154	454	112	0	140	43	46	0	17	30	190
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	0	3	8	0	0	7	4	0	0	5	2	0	0	1	6	0
Auxiliary Signal Groups																
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	9	60	0	0	9	60	0	0	9	31	0	0	10	32	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	65	56	56	65	56	56	37	27	27	37	28	28
g / C, Green / Cycle	0.59	0.51	0.51	0.59	0.51	0.51	0.34	0.25	0.25	0.34	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.04	0.21	0.01	0.15	0.24	0.07	0.11	0.02	0.03	0.01	0.02	0.12
s, saturation flow rate [veh/h]	938	1855	1577	1056	1855	1577	1268	1855	1577	1399	1855	1577
c, Capacity [veh/h]	519	944	803	594	944	803	510	455	387	545	472	401
d1, Uniform Delay [s]	10.84	16.81	13.38	11.21	17.55	14.27	26.32	32.06	32.25	24.48	31.07	34.75
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.25	1.35	0.04	1.06	1.75	0.36	1.33	0.41	0.63	0.11	0.26	3.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.42	0.02	0.26	0.48	0.14	0.27	0.09	0.12	0.03	0.06	0.47
d, Delay for Lane Group [s/veh]	11.09	18.15	13.42	12.27	19.30	14.63	27.65	32.47	32.88	24.58	31.32	38.72
Lane Group LOS	B	B	B	B	B	B	C	C	C	C	C	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.33	5.70	0.17	1.72	7.47	1.49	2.76	0.92	1.00	0.31	0.63	4.64
50th-Percentile Queue Length [ft/ln]	8.27	142.42	4.31	43.00	186.75	37.18	69.10	23.00	25.04	7.67	15.67	116.04
95th-Percentile Queue Length [veh/ln]	0.60	9.61	0.31	3.10	11.95	2.68	4.98	1.66	1.80	0.55	1.13	8.18
95th-Percentile Queue Length [ft/ln]	14.89	240.27	7.76	77.41	298.81	66.92	124.39	41.40	45.07	13.81	28.20	204.38

Movement, Approach, & Intersection Results

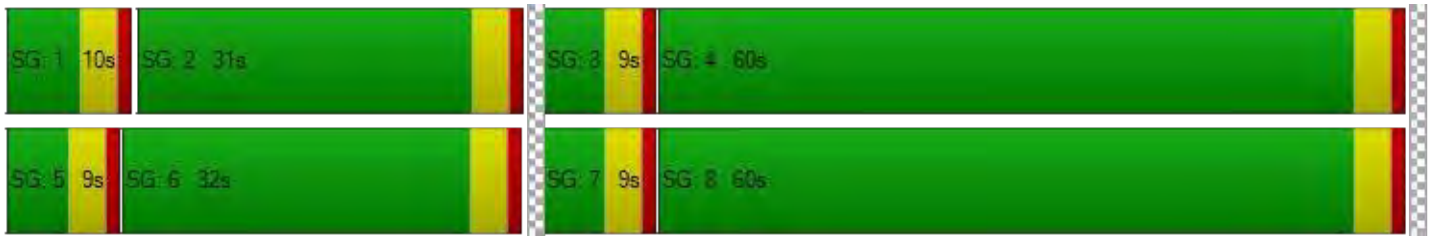
d_M, Delay for Movement [s/veh]	11.09	11.09	18.15	13.42	12.27	12.27	19.30	14.63	27.65	27.65	32.47	32.88	24.58	24.58	31.32	38.72
Movement LOS	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	D
d_A, Approach Delay [s/veh]	17.43				17.07				29.60				36.77			
Approach LOS	B				B				C				D			
d_I, Intersection Delay [s/veh]	21.80															
Intersection LOS	C															
Intersection V/C	0.432															

Other Modes

g_Walk,mi, Effective Walk Time [s]	27.0	28.0	56.0	56.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.31	30.56	13.25	13.25
l_p,int, Pedestrian LOS Score for Intersectio	2.627	2.839	2.305	2.360
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1018	1018	491	509
d_b, Bicycle Delay [s]	13.25	13.25	31.31	30.56
l_b,int, Bicycle LOS Score for Intersection	2.289	2.494	1.706	1.923
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: Perry Worth Road & 450 S

Control Type:	All-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.091

Intersection Setup

Name	Perry Worth Road						E 450 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road						E 450 South		
Base Volume Input [veh/h]	0	1	28	0	2	3	0	68	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	0	3	7	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	28	0	5	10	0	70	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	8	0	1	3	0	19	0
Total Analysis Volume [veh/h]	0	8	30	0	5	11	0	76	1
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	981	852	847
Degree of Utilization, x	0.04	0.02	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.12	0.06	0.30
95th-Percentile Queue Length [ft]	3.02	1.43	7.48
Approach Delay [s/veh]	6.82	7.31	7.67
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.38		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 29: Anson Blvd & 450 S

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	No				No				No				Yes			

Volumes

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Base Volume Input [veh/h]	0	2	69	21	0	5	28	7	0	10	25	1	0	4	58	22
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	69	21	0	5	28	7	0	10	28	1	0	4	60	22
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	19	6	0	1	8	2	0	3	8	0	0	1	16	6
Total Analysis Volume [veh/h]	0	2	75	23	0	5	30	8	0	11	30	1	0	4	65	24
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	24	24	24	24	24	24	24	24	21	21	21	21	21	21	21	21
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	10	10	10	10	6	6	6	6	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	C	R
C, Cycle Length [s]	45	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	18	18	18	18	15	15	15
g / C, Green / Cycle	0.40	0.40	0.40	0.40	0.33	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.00	0.06	0.00	0.02	0.02	0.04	0.02
s, saturation flow rate [veh/h]	1358	1781	1287	1789	1724	1845	1577
c, Capacity [veh/h]	625	712	573	715	676	700	526
d1, Uniform Delay [s]	9.74	8.57	10.43	8.28	10.23	10.39	10.15
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.40	0.03	0.14	0.18	0.28	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.14	0.01	0.05	0.06	0.10	0.05
d, Delay for Lane Group [s/veh]	9.75	8.97	10.45	8.42	10.41	10.67	10.32
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.01	0.56	0.03	0.21	0.27	0.45	0.16
50th-Percentile Queue Length [ft/ln]	0.31	13.96	0.81	5.18	6.68	11.13	3.92
95th-Percentile Queue Length [veh/ln]	0.02	1.01	0.06	0.37	0.48	0.80	0.28
95th-Percentile Queue Length [ft/ln]	0.55	25.13	1.46	9.33	12.03	20.03	7.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.75	9.75	8.97	8.97	10.45	10.45	8.42	8.42	10.41	10.41	10.41	10.41	10.67	10.67	10.67	10.32
Movement LOS	A	A	A	A	B	B	A	A	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	8.99				8.65				10.41				10.58			
Approach LOS	A				A				B				B			
d_I, Intersection Delay [s/veh]	9.68															
Intersection LOS	A															
Intersection V/C	0.092															

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	12.84
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	1.962
Crosswalk LOS	F	F	F	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	800	667	667
d_b, Bicycle Delay [s]	8.10	8.10	10.00	10.00
l_b,int, Bicycle LOS Score for Intersection	1.835	1.733	1.722	1.817
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 30: 450 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	500 East			E 450 South			E 450 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	500 East			E 450 South			E 450 South		
Base Volume Input [veh/h]	0	18	55	0	61	16	0	5	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	2	0	2	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	18	55	0	62	18	0	7	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	15	0	17	5	0	2	2
Total Analysis Volume [veh/h]	0	20	60	0	67	20	0	8	8
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free	
Flared Lane	No							
Storage Area [veh]	0			0			0	
Two-Stage Gap Acceptance	No							
Number of Storage Spaces in Median	0			0			0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.06	0.00	0.04	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.90	9.90	8.70	8.47	7.33	0.00	8.22	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.27	0.12	0.12	0.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.66	6.66	6.66	2.90	2.90	2.90	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.00			5.65			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	6.62								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 31: 450S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	575 East		575 East		E 450 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	575 East		575 East		E 450 South	
Base Volume Input [veh/h]	6	61	22	4	23	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	4	1	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	62	26	5	24	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	17	7	1	7	2
Total Analysis Volume [veh/h]	7	67	28	5	26	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.01
d_M, Delay for Movement [s/veh]	7.30	0.00	0.00	0.00	9.25	8.61
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.12	0.12
95th-Percentile Queue Length [ft/ln]	0.29	0.29	0.00	0.00	2.90	2.90
d_A, Approach Delay [s/veh]	0.69		0.00		9.10	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.56					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 32: Anson Blvd & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	14.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.097

Intersection Setup

Name	East 500 South			Anson Boulevard			East 500 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	31.07			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 500 South			Anson Boulevard			East 500 South		
Base Volume Input [veh/h]	0	179	138	0	21	34	0	34	209
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	0	0	3	0	2	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	193	138	0	21	37	0	36	220
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	52	38	0	6	10	0	10	60
Total Analysis Volume [veh/h]	0	210	150	0	23	40	0	39	239
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.10	0.23
d_M, Delay for Movement [s/veh]	9.52	7.72	0.00	8.88	0.00	0.00	14.80	14.90	9.43
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.47	0.47	0.00	0.00	0.00	0.00	0.32	0.32	0.88
95th-Percentile Queue Length [ft/ln]	11.87	11.87	0.00	0.00	0.00	0.00	7.99	7.99	21.89
d_A, Approach Delay [s/veh]	4.50			0.00			10.20		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	6.36								
Intersection LOS	B								

Intersection 33 removed intentionally

Intersection Level Of Service Report
Intersection 34: 500 S & 575 E

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	575 East			575 East			East 500 South			East 500 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			31.07		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East			575 East			East 500 South			East 500 South		
Base Volume Input [veh/h]	10	4	14	26	0	4	46	89	6	2	23	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	4	1	10	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	4	14	26	0	8	47	99	6	2	31	26
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	1	4	7	0	2	13	27	2	1	8	7
Total Analysis Volume [veh/h]	11	4	15	28	0	9	51	108	7	2	34	28
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.02	0.04	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.74	11.16	9.03	10.95	11.17	8.82	7.41	0.00	0.00	7.46	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.12	0.17	0.17	0.17	0.09	0.09	0.09	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.08	3.08	3.08	4.18	4.18	4.18	2.21	2.21	2.21	0.09	0.09	0.09
d_A, Approach Delay [s/veh]	9.94			10.43			2.28			0.23		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	3.63											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 35: 500S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	33.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.156

Intersection Setup

Name	Main Street		Main Street		East 500 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		East 500 South	
Base Volume Input [veh/h]	64	568	426	16	19	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	63	35	2	2	3
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	631	461	18	21	63
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	171	125	5	6	17
Total Analysis Volume [veh/h]	73	686	501	20	23	68
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.01	0.01	0.00	0.16	0.12
d_M, Delay for Movement [s/veh]	8.55	0.00	0.00	0.00	33.50	15.56
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	1.11	1.11
95th-Percentile Queue Length [ft/ln]	3.17	3.17	0.00	0.00	27.69	27.69
d_A, Approach Delay [s/veh]	0.82		0.00		20.10	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.79					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 36: Perry Worth Road & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	16.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.415

Intersection Setup

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Base Volume Input [veh/h]	0	46	228	0	0	299	0	184	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	0	6	3	0	11	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	46	235	0	6	302	0	195	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	13	64	0	2	82	0	53	2
Total Analysis Volume [veh/h]	0	50	255	0	7	328	0	212	7
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.41	0.01
d_M, Delay for Movement [s/veh]	10.06	0.00	0.00	9.94	7.89	0.00	16.86	16.93	9.21
Movement LOS	B	A	A	A	A	A	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	2.02	2.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.29	0.29	0.29	50.39	50.39	0.61
d_A, Approach Delay [s/veh]	0.00			0.16			16.69		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	4.32								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 37: 550 S & 475 E

Control Type:	Roundabout	Delay (sec / veh):	3.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	475 E				475 E				550 South				550 S			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0	0.00	0.00	0.00	100.0
Speed [mph]	45.00				45.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	475 E				475 E				550 South				550 S			
Base Volume Input [veh/h]	0	14	0	36	0	0	0	1	0	0	65	1	0	24	77	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	36	0	182	0	0	0	0	0	0	4	6	0	73	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	50	0	218	0	0	0	1	0	0	69	7	0	97	84	1
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	14	0	59	0	0	0	0	0	0	19	2	0	26	23	0
Total Analysis Volume [veh/h]	0	54	0	237	0	0	0	1	0	0	75	8	0	105	91	1
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	77				258				108				56			
Exiting Flow Rate [veh/h]	116				1				150				321			
Demand Flow Rate [veh/h]	0	50	0	218	0	0	0	1	0	0	69	7	0	97	84	1
Adjusted Demand Flow Rate [veh/h]	0	54	0	237	0	0	0	1	0	0	75	8	0	105	91	1

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	56	245	2	41	46	109	95
Capacity of Entry and Bypass Lanes [veh/h]	1324	1324	1062	1287	1287	1350	1350
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1286	1286	1031	1250	1250	1311	1311
X, volume / capacity	0.04	0.18	0.00	0.03	0.04	0.08	0.07

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.13	0.67	0.00	0.10	0.11	0.26	0.23
95th-Percentile Queue Length [ft]	3.29	16.87	0.07	2.42	2.73	6.52	5.65
Approach Delay [s/veh]	4.13		3.50	3.15		3.35	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	3.72						
Intersection LOS	A						

Intersection Level Of Service Report
Intersection 38: 550 S & Indianapolis Road

Control Type:	All-way stop	Delay (sec / veh):	15.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name	Indianapolis Road				Indianapolis Road				550 S						
Approach	Northbound				Southbound				Eastbound				Westbound		
Lane Configuration															
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				30.00				30.00		
Grade [%]	0.00				0.00				0.00				0.00		
Crosswalk	Yes				Yes				Yes				Yes		

Volumes

Name	Indianapolis Road				Indianapolis Road				550 S						
Base Volume Input [veh/h]	0	13	49	60	0	245	116	8	0	0	95	4	30	65	81
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	3	2	0	0	4	0	0	0	184	2	1	77	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	16	52	62	0	245	120	8	0	0	279	6	31	142	81
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	14	17	0	67	33	2	0	0	76	2	8	39	22
Total Analysis Volume [veh/h]	0	17	57	67	0	266	130	9	0	0	303	7	34	154	88
Pedestrian Volume [ped/h]	0				0				0				0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	459	519	494	535	535	535	486	542
Degree of Utilization, x	0.04	0.24	0.54	0.26	0.00	0.58	0.07	0.45

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.12	0.92	3.15	1.03	0.00	3.67	0.22	2.28
95th-Percentile Queue Length [ft]	2.88	23.11	78.67	25.78	0.00	91.73	5.62	57.04
Approach Delay [s/veh]	11.68		15.95		18.34		14.11	
Approach LOS	B		C		C		B	
Intersection Delay [s/veh]	15.63							
Intersection LOS	C							

Intersections 39 & 40 removed intentionally

Intersection Level Of Service Report
Intersection 41: Perry Worth Road & 550 S

Control Type:	Signalized	Delay (sec / veh):	18.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.516

Intersection Setup

Name	Perry Worth Road				Perry Worth Road				550 S				550 S			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				30.00				0.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	Perry Worth Road				Perry Worth Road				550 S				550 S			
Base Volume Input [veh/h]	0	79	33	0	0	0	28	424	0	248	0	152	0	0	0	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	51	0	0	0	0	1	13	0	7	0	7	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	130	33	0	0	0	29	437	0	255	0	159	0	0	0	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	35	9	0	0	0	8	119	0	69	0	43	0	0	0	0
Total Analysis Volume [veh/h]	0	141	36	0	0	0	32	475	0	277	0	173	0	0	0	0
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	55
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	32	32	32	32	32	32	32	32	23	23	23	23	23	23	23	23
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	15	15	15	15	15	15	15	15	9	9	9	9	9	9	9	9
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	55	55	55	55	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	26	26	26	26	17	17	17	17	17	17
g / C, Green / Cycle	0.47	0.47	0.47	0.47	0.31	0.31	0.31	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.16	0.02	0.00	0.32	0.20	0.00	0.11	0.00	0.00	0.00
s, saturation flow rate [veh/h]	885	1855	1377	1592	1406	3532	1577	1216	3532	1577
c, Capacity [veh/h]	299	877	718	752	514	1092	487	463	1092	487
d1, Uniform Delay [s]	21.47	7.80	0.00	11.22	18.11	0.00	14.75	0.00	0.00	0.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.26	0.09	0.00	4.78	4.01	0.00	2.02	0.00	0.00	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.04	0.00	0.67	0.54	0.00	0.35	0.00	0.00	0.00
d, Delay for Lane Group [s/veh]	26.72	7.88	0.00	16.00	22.12	0.00	16.76	0.00	0.00	0.00
Lane Group LOS	C	A	A	B	C	A	B	A	A	A
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	No	No
50th-Percentile Queue Length [veh/ln]	1.95	0.19	0.00	4.51	3.41	0.00	1.76	0.00	0.00	0.00
50th-Percentile Queue Length [ft/ln]	48.81	4.87	0.00	112.75	85.27	0.00	44.10	0.00	0.00	0.00
95th-Percentile Queue Length [veh/ln]	3.51	0.35	0.00	7.99	6.14	0.00	3.18	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	87.86	8.76	0.00	199.82	153.48	0.00	79.38	0.00	0.00	0.00

Movement, Approach, & Intersection Results

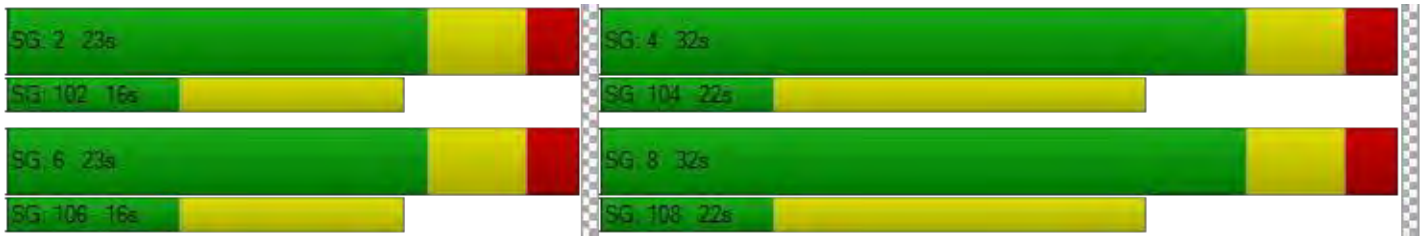
d_M, Delay for Movement [s/veh]	26.72	26.72	7.88	7.88	0.00	0.00	16.00	16.00	22.12	22.12	0.00	16.76	0.00	0.00	0.00	0.00
Movement LOS	C	C	A	A	A	A	B	B	C	C	A	B	A	A	A	A
d_A, Approach Delay [s/veh]	22.89				16.00				20.06				0.00			
Approach LOS	C				B				C				A			
d_I, Intersection Delay [s/veh]	18.69															
Intersection LOS	B															
Intersection V/C	0.516															

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	17.60	17.60	17.60	17.60
l_p,int, Pedestrian LOS Score for Intersectio	2.279	2.662	3.193	2.425
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	945	945	618	618
d_b, Bicycle Delay [s]	7.65	7.65	13.13	13.13
l_b,int, Bicycle LOS Score for Intersection	1.730	2.507	1.702	1.670
Bicycle LOS	A	B	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 42: Indianapolis Road & Commerce Drive

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Base Volume Input [veh/h]	0	9	123	0	164	12	0	16	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	6	0	6	1	0	2	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	10	129	0	170	13	0	18	42
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	35	0	46	4	0	5	11
Total Analysis Volume [veh/h]	0	11	140	0	185	14	0	20	46
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.05
d_M, Delay for Movement [s/veh]	9.34	7.65	0.00	8.82	0.00	0.00	10.98	11.03	9.64
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.00	0.00	0.28	0.28	0.28
95th-Percentile Queue Length [ft/ln]	0.61	0.61	0.00	0.00	0.00	0.00	6.94	6.94	6.94
d_A, Approach Delay [s/veh]	0.56			0.00			10.06		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	1.80								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 43: Perry Worth Road & Juniors Way

Control Type:	Roundabout	Delay (sec / veh):	4.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Base Volume Input [veh/h]	82	98	84	103	61	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	44	0	3	9	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	98	87	112	61	28
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	27	24	30	17	8
Total Analysis Volume [veh/h]	137	107	95	122	66	30
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	98		68		141	
Exiting Flow Rate [veh/h]	194		172		98	
Demand Flow Rate [veh/h]	126	98	87	112	61	28
Adjusted Demand Flow Rate [veh/h]	137	107	95	122	66	30

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	142	0	224	99
Capacity of Entry and Bypass Lanes [veh/h]	1249	1249	1288	1196
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1213	1213	1251	1161
X, volume / capacity	0.11	0.09	0.17	0.08

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.38	0.29	0.63	0.27
95th-Percentile Queue Length [ft]	9.53	7.24	15.68	6.75
Approach Delay [s/veh]	3.82		4.35	3.80
Approach LOS	A		A	A
Intersection Delay [s/veh]	4.02			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 44: 650 E & Central Blvd

Control Type:	Roundabout	Delay (sec / veh):	7.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	94	791	48	117	526	8	17	1	28	68	16	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	58	0	1	35	0	0	0	0	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	97	849	48	118	561	8	17	1	28	68	16	141
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	231	13	32	152	2	5	0	8	18	4	38
Total Analysis Volume [veh/h]	105	923	52	128	610	9	18	1	30	74	17	153
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	151			202			836			1077		
Exiting Flow Rate [veh/h]	735			1127			135			186		
Demand Flow Rate [veh/h]	97	849	48	118	561	8	17	1	28	68	16	141
Adjusted Demand Flow Rate [veh/h]	105	923	52	128	610	9	18	1	30	74	17	153

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	523	590	362	408	20	31	94	158
Capacity of Entry and Bypass Lanes [veh/h]	1175	1249	1122	1197	626	698	502	569
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1141	1213	1089	1162	608	678	487	552
X, volume / capacity	0.45	0.47	0.32	0.34	0.03	0.04	0.19	0.28

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	B	B
95th-Percentile Queue Length [veh]	2.34	2.60	1.41	1.53	0.10	0.14	0.68	1.13
95th-Percentile Queue Length [ft]	58.45	64.99	35.17	38.19	2.42	3.47	17.02	28.14
Approach Delay [s/veh]	7.93		6.44		5.98		10.26	
Approach LOS	A		A		A		B	
Intersection Delay [s/veh]	7.63							
Intersection LOS	A							

Intersection Level Of Service Report
Intersection 45: Central Blvd & Heartland Drive

Control Type:	All-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.227

Intersection Setup

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Approach	Northbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes		

Volumes

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	0	65	66	0	131	23	0	40	141
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	0	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	69	66	0	131	23	0	41	141
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	19	18	0	36	6	0	11	38
Total Analysis Volume [veh/h]	0	75	72	0	142	25	0	45	153
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	605	757	734	642	705
Degree of Utilization, x	0.12	0.10	0.23	0.07	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.42	0.31	0.87	0.23	0.82
95th-Percentile Queue Length [ft]	10.56	7.85	21.81	5.64	20.56
Approach Delay [s/veh]	8.74		9.34	9.11	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	9.08				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 46: Veterans Drive & Central Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	25.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.503

Intersection Setup

Name				South 700 East			Central Boulevard		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			Yes		

Volumes

Name				South 700 East			Central Boulevard		
Base Volume Input [veh/h]	0	66	286	0	167	106	0	157	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	71	0	11	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	66	357	0	178	107	0	157	66
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	18	97	0	48	29	0	43	18
Total Analysis Volume [veh/h]	0	72	388	0	193	116	0	171	72
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.50	0.09
d_M, Delay for Movement [s/veh]	10.65	8.07	0.00	10.60	0.00	0.00	25.82	25.82	10.05
Movement LOS	B	A	A	B	A	A	D	D	B
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.00	0.00	0.00	0.00	2.69	2.69	0.30
95th-Percentile Queue Length [ft/ln]	4.59	4.59	0.00	0.00	0.00	0.00	67.27	67.27	7.55
d_A, Approach Delay [s/veh]	1.26			0.00			21.14		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	5.65								
Intersection LOS	D								

Intersection Level Of Service Report
Intersection 47: Perry Worth Road & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	6.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	2000.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.00
Speed [mph]	25.00				25.00				40.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	No				Yes				Yes			

Volumes

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Base Volume Input [veh/h]	106	183	111	183	30	122	19	10	8	85	125	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	44	1	0	1	2	0	0	0	7	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	227	112	183	31	124	19	10	8	92	132	9
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	62	30	50	8	34	5	3	2	25	36	2
Total Analysis Volume [veh/h]	115	247	122	199	34	135	21	11	9	100	143	10
Pedestrian Volume [ped/h]	0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1			
Circulating Flow Rate [veh/h]	205				675				458			
Exiting Flow Rate [veh/h]	503				173				423			
Demand Flow Rate [veh/h]	106	227	112	183	31	124	19	10	8	92	132	9
Adjusted Demand Flow Rate [veh/h]	115	247	122	199	34	135	21	11	9	100	143	10

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	373	331	208	127	144
Capacity of Entry and Bypass Lanes [veh/h]	1179	1179	694	936	936
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1145	1145	674	909	909
X, volume / capacity	0.32	0.28	0.30	0.14	0.15

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.37	1.16	1.25	0.47	0.54
95th-Percentile Queue Length [ft]	34.24	28.93	31.26	11.70	13.46
Approach Delay [s/veh]	5.99		9.10	5.36	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	6.77				
Intersection LOS	A				

Intersection Setup

Name	Mills Drive				Chick-fil-A Access			
Approach	Westbound				Northeastbound			
Lane Configuration								
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Mills Drive				Chick-fil-A Access			
Base Volume Input [veh/h]	76	20	128	30	10	4	38	85
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00							
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	33	0	3	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	109	20	131	30	10	4	38	85
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	5	36	8	3	1	10	23
Total Analysis Volume [veh/h]	118	22	142	33	11	4	41	92
Pedestrian Volume [ped/h]	0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	2				1			
Circulating Flow Rate [veh/h]	523				555			
Exiting Flow Rate [veh/h]	385				173			
Demand Flow Rate [veh/h]	109	20	131	30	10	4	38	85
Adjusted Demand Flow Rate [veh/h]	118	22	142	33	11	4	41	92

Lanes

Overwrite Calculated Critical Headway	No	No
User-Defined Critical Headway [s]	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No
User-Defined Follow-Up Time [s]	3.00	3.00
A (intercept)	1420.00	1380.00
B (coefficient)	0.00085	0.00102
HV Adjustment Factor	0.97	0.97
Entry Flow Rate [veh/h]	325	153
Capacity of Entry and Bypass Lanes [veh/h]	911	784
Pedestrian Impedance	1.00	1.00
Capacity per Entry Lane [veh/h]	884	761
X, volume / capacity	0.36	0.19

Movement, Approach, & Intersection Results

Lane LOS	A	A
95th-Percentile Queue Length [veh]	1.62	0.72
95th-Percentile Queue Length [ft]	40.62	17.95
Approach Delay [s/veh]	8.10	6.85
Approach LOS	A	A
Intersection Delay [s/veh]	6.77	
Intersection LOS	A	

Intersection Level Of Service Report
Intersection 48: 650 E & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Mills Drive			Mills Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Mills Drive			Mills Drive		
Base Volume Input [veh/h]	190	592	88	79	343	213	268	84	70	80	13	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	54	2	0	3	32	8	0	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	190	646	90	79	346	245	276	84	70	80	17	94
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	176	24	21	94	67	75	23	19	22	5	26
Total Analysis Volume [veh/h]	207	702	98	86	376	266	300	91	76	87	18	102
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	491			321			565			1245		
Exiting Flow Rate [veh/h]	555			1137			506			283		
Demand Flow Rate [veh/h]	190	646	90	79	346	245	276	84	70	80	17	94
Adjusted Demand Flow Rate [veh/h]	207	702	98	86	376	266	300	91	76	87	18	102

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	488	550	353	398	482	214
Capacity of Entry and Bypass Lanes [veh/h]	909	909	1060	1060	879	493
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	882	882	1030	1030	853	479
X, volume / capacity	0.54	0.61	0.33	0.37	0.55	0.43

Movement, Approach, & Intersection Results

Lane LOS	B	B	A	A	B	C
95th-Percentile Queue Length [veh]	3.27	4.20	1.47	1.76	3.39	2.15
95th-Percentile Queue Length [ft]	81.70	104.93	36.73	44.02	84.87	53.80
Approach Delay [s/veh]	12.34		7.19		11.95	15.31
Approach LOS	B		A		B	C
Intersection Delay [s/veh]	10.96					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 49: Whitestown Parkway & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Base Volume Input [veh/h]	1	3	199	3	11	179
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	47	0	0	60
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	3	246	3	11	239
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	67	1	3	65
Total Analysis Volume [veh/h]	1	3	267	3	12	260
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	12.42	9.72	0.00	0.00	7.81	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.45	0.45	0.00	0.00	0.50	0.50
d_A, Approach Delay [s/veh]	10.40		0.00		0.34	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	Two-way stop	Delay (sec / veh):	144.6
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.891

Intersection Setup

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	5	29	5	12	1	2	231	1	77	344	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	68	136	24	31	14	33	0	1	29	42
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	14	97	141	36	32	16	264	1	78	373	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	26	38	10	9	4	72	0	21	101	13
Total Analysis Volume [veh/h]	0	15	105	153	39	35	17	287	1	85	405	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.06	0.14	0.89	0.16	0.05	0.02	0.00	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	27.60	22.04	11.38	144.59	138.06	129.22	8.30	0.00	0.00	7.94	0.00	0.00
Movement LOS	D	C	B	F	F	F	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.76	0.76	0.76	10.63	10.63	10.63	0.03	0.03	0.03	0.15	0.15	0.00
95th-Percentile Queue Length [ft/ln]	19.04	19.04	19.04	265.63	265.63	265.63	0.72	0.72	0.72	3.71	3.71	0.00
d_A, Approach Delay [s/veh]	12.71			141.10			0.46			1.24		
Approach LOS	B			F			A			A		
d_I, Intersection Delay [s/veh]	28.79											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Two-way stop	Delay (sec / veh):	35.7
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.151

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	3	1	39	17	2	3	0	262	4	46	424	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	1	1	236	0	0	71	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	1	39	19	2	4	1	498	4	46	495	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	11	5	1	1	0	135	1	13	135	2
Total Analysis Volume [veh/h]	3	1	42	21	2	4	1	541	4	50	538	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.08	0.15	0.01	0.01	0.00	0.01	0.00	0.05	0.01	0.00
d_M, Delay for Movement [s/veh]	29.19	25.94	12.26	35.67	29.99	11.70	8.54	0.00	0.00	8.71	0.00	0.00
Movement LOS	D	D	B	E	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.08	0.08	0.25	0.56	0.56	0.02	0.00	0.00	0.00	0.15	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.94	1.94	6.33	13.97	13.97	0.56	0.04	0.04	0.04	3.86	0.00	0.00
d_A, Approach Delay [s/veh]	13.66			31.70			0.02			0.73		
Approach LOS	B			D			A			A		
d_I, Intersection Delay [s/veh]	1.59											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 52: Whitestown Parkway & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	20	58	293	170	78	9	7	250	40	278	248	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	35	7	153	0	8	0	0	188	50	268	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	55	65	446	170	86	9	7	438	90	546	285	108
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	18	121	46	23	2	2	119	24	148	77	29
Total Analysis Volume [veh/h]	60	71	485	185	93	10	8	476	98	593	310	117
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	689			992			897			143		
Exiting Flow Rate [veh/h]	808			202			391			681		
Demand Flow Rate [veh/h]	55	65	446	170	86	9	7	438	90	546	285	108
Adjusted Demand Flow Rate [veh/h]	60	71	485	185	93	10	8	476	98	593	310	117

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	135	0	158	140	282	318	611	440
Capacity of Entry and Bypass Lanes [veh/h]	791	797	543	612	592	663	1247	1247
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	768	773	527	594	575	644	1211	1211
X, volume / capacity	0.17	0.63	0.29	0.23	0.48	0.48	0.49	0.35

Movement, Approach, & Intersection Results

Lane LOS	A	C	B	A	B	B	A	A
95th-Percentile Queue Length [veh]	0.61	4.49	1.20	0.87	2.56	2.60	2.78	1.61
95th-Percentile Queue Length [ft]	15.32	112.32	29.88	21.83	63.89	65.08	69.55	40.23
Approach Delay [s/veh]	13.43		10.09		13.60		7.45	
Approach LOS	B		B		B		A	
Intersection Delay [s/veh]	10.65							
Intersection LOS	B							

Intersections 53 & 54 removed intentionally

Intersection Level Of Service Report
Intersection 55: Whitestown Parkway & Perry Worth Road

Control Type:	Signalized	Delay (sec / veh):	34.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.679

Intersection Setup

Name				Perry Worth Road			Whitestown Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Perry Worth Road			Whitestown Parkway					
Base Volume Input [veh/h]	86	44	19	110	29	304	431	1210	24	29	785	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	0	0	3	0	39	10	227	3	0	57	36
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	44	19	113	29	343	441	1437	27	29	842	132
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	12	5	31	8	93	120	390	7	8	229	36
Total Analysis Volume [veh/h]	97	48	21	123	32	373	479	1562	29	32	915	143
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	45	45	9	45	45	14	37	37	9	32	32
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	24	24	0	21	21	0	14	14	0	17	17
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	Yes
Maximum Recall	No	No		No	No		No	No		No	No	No
Pedestrian Recall	No	No		No	No		No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	26	17	26	17	17	62	55	55	62	34	45
g / C, Green / Cycle	0.26	0.17	0.26	0.17	0.17	0.62	0.55	0.55	0.62	0.34	0.45
(v / s)_i Volume / Saturation Flow Rate	0.09	0.04	0.09	0.14	0.14	0.51	0.48	0.48	0.08	0.29	0.10
s, saturation flow rate [veh/h]	1067	1584	1297	1453	1419	943	1669	1659	390	3179	1419
c, Capacity [veh/h]	262	269	396	247	241	563	919	913	227	1081	639
d1, Uniform Delay [s]	30.19	36.01	29.75	40.09	40.09	22.82	19.30	19.41	17.04	30.57	16.81
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.87	0.50	0.44	7.00	7.16	14.94	10.72	11.18	1.30	8.19	0.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.26	0.31	0.83	0.83	0.85	0.87	0.87	0.14	0.85	0.22
d, Delay for Lane Group [s/veh]	31.06	36.50	30.19	47.09	47.25	37.76	30.02	30.59	18.34	38.76	17.62
Lane Group LOS	C	D	C	D	D	D	C	C	B	D	B
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.91	1.51	2.43	5.34	5.23	7.13	16.29	16.47	0.31	10.73	2.01
50th-Percentile Queue Length [ft/ln]	47.80	37.71	60.86	133.62	130.78	178.24	407.31	411.79	7.75	268.27	50.24
95th-Percentile Queue Length [veh/ln]	3.44	2.72	4.38	9.14	8.98	11.51	22.91	23.13	0.56	16.10	3.62
95th-Percentile Queue Length [ft/ln]	86.03	67.88	109.54	228.41	224.55	287.71	572.81	578.19	13.95	402.57	90.44

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.06	36.50	36.50	30.19	47.09	47.17	37.76	30.30	30.59	18.34	38.76	17.62
Movement LOS	C	D	D	C	D	D	D	C	C	B	D	B
d_A, Approach Delay [s/veh]	33.32			43.21			32.03			35.38		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	34.57											
Intersection LOS	C											
Intersection V/C	0.679											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	39.61	39.61	39.61	39.61
l_p,int, Pedestrian LOS Score for Intersectio	2.214	2.744	3.342	3.172
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	780	780	620	520
d_b, Bicycle Delay [s]	18.61	18.61	23.81	27.38
l_b,int, Bicycle LOS Score for Intersection	1.834	2.431	3.267	2.459
Bicycle LOS	A	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 56: Whitestown Parkway & 650 E

Control Type:	Signalized	Delay (sec / veh):	26.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name	650 East			650 East						Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East						Whitestown Parkway		
Base Volume Input [veh/h]	149	196	39	169	131	273	451	596	253	68	489	164
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	1	1	2	0	0	55	168	7	0	88	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	154	197	40	171	131	273	506	764	260	68	577	164
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	54	11	46	36	74	138	208	71	18	157	45
Total Analysis Volume [veh/h]	167	214	43	186	142	297	550	830	283	74	627	178
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	2.5
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	Protecte	Permiss	Overlap	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	41	58	58	11	28	28	15	22	22	9	16	16
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	6.00	6.00	4.00	6.00	6.00	4.00	4.00	6.00	4.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	0.00	4.00	0.00	2.00	4.00	0.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	33	22	32	33	17	45	21	47	65	55	30	43
g / C, Green / Cycle	0.33	0.22	0.32	0.33	0.17	0.45	0.21	0.47	0.65	0.55	0.30	0.43
(v / s)_i Volume / Saturation Flow Rate	0.14	0.13	0.03	0.16	0.09	0.12	0.18	0.26	0.20	0.13	0.20	0.13
s, saturation flow rate [veh/h]	1169	1669	1419	1172	1669	2512	3088	3179	1419	579	3179	1419
c, Capacity [veh/h]	399	336	433	349	262	1083	663	1542	936	352	998	630
d1, Uniform Delay [s]	26.90	36.57	24.90	27.86	38.87	18.34	37.52	17.95	7.23	11.68	29.32	17.68
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.12	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.70	2.00	0.10	1.27	1.75	0.14	2.76	1.35	0.19	1.35	3.00	1.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.64	0.10	0.53	0.54	0.27	0.83	0.54	0.30	0.21	0.63	0.28
d, Delay for Lane Group [s/veh]	27.60	38.57	25.00	29.13	40.62	18.47	40.28	19.30	7.43	13.03	32.32	18.80
Lane Group LOS	C	D	C	C	D	B	D	B	A	B	C	B
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.04	4.83	0.72	3.46	3.26	2.13	6.36	6.54	2.27	0.82	6.62	2.69
50th-Percentile Queue Length [ft/ln]	75.88	120.69	18.07	86.54	81.38	53.25	159.02	163.56	56.70	20.41	165.47	67.35
95th-Percentile Queue Length [veh/ln]	5.46	8.43	1.30	6.23	5.86	3.83	10.50	10.74	4.08	1.47	10.84	4.85
95th-Percentile Queue Length [ft/ln]	136.59	210.78	32.52	155.77	146.49	95.85	262.42	268.43	102.06	36.73	270.94	121.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	27.60	38.57	25.00	29.13	40.62	18.47	40.28	19.30	7.43	13.03	32.32	18.80
Movement LOS	C	D	C	C	D	B	D	B	A	B	C	B
d_A, Approach Delay [s/veh]	32.87			26.67			24.22			27.96		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	26.58											
Intersection LOS	C											
Intersection V/C	0.593											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1040	440	320	200
d_b, Bicycle Delay [s]	11.52	30.42	35.28	40.50
l_b,int, Bicycle LOS Score for Intersection	2.259	2.591	2.932	2.285
Bicycle LOS	B	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 57: Whitestown Parkway & Heartland Drive

Control Type:	Two-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.125

Intersection Setup

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	0	61	0	0	70	108	719	8	67	582	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	0.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	1	1	170	0	0	87	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	61	0	0	71	109	889	8	67	669	115
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	17	0	0	19	30	242	2	18	182	31
Total Analysis Volume [veh/h]	0	0	66	0	0	77	118	966	9	73	727	125
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.13	0.00	0.00	0.13	0.15	0.01	0.00	0.10	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	12.81	0.00	0.00	12.24	10.47	0.00	0.00	10.77	0.00	0.00
Movement LOS			B			B	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.43	0.00	0.00	0.46	0.53	0.00	0.00	0.35	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	10.66	0.00	0.00	11.53	13.36	0.00	0.00	8.73	0.00	0.00
d_A, Approach Delay [s/veh]	12.81			12.24			1.13			0.85		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.76											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 58: Whitestown Parkway & Veterans Drive/700 E

Control Type:	Signalized	Delay (sec / veh):	22.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.498

Intersection Setup

Name							Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name							Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	114	39	60	190	44	93	114	569	41	127	546	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	11	0	0	54	113	3	0	88	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	39	60	201	44	93	168	682	44	127	634	113
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	11	16	55	12	25	46	185	12	35	172	31
Total Analysis Volume [veh/h]	126	42	65	218	48	101	183	741	48	138	689	123
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	46.2
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	42	41	41	18	17	17	12	28	28	13	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	7	7	0	7	7	0	7	7	0	7	7
Pedestrian Clearance [s]	0	17	17	0	10	10	0	10	10	0	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	27	10	27	15	61	51	51	61	49	49
g / C, Green / Cycle	0.27	0.10	0.27	0.15	0.61	0.51	0.51	0.61	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.16	0.10	0.24	0.24	0.24	0.19	0.25	0.25
s, saturation flow rate [veh/h]	1292	1508	1400	1491	755	1669	1634	741	1669	1583
c, Capacity [veh/h]	347	146	413	219	456	850	832	453	824	781
d1, Uniform Delay [s]	29.36	43.90	31.00	40.43	10.95	15.84	15.84	10.15	17.10	17.10
k, delay calibration	0.11	0.11	0.11	0.11	0.25	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.64	6.90	1.05	3.68	1.30	1.86	1.90	1.73	2.22	2.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.73	0.53	0.68	0.40	0.47	0.47	0.30	0.51	0.51
d, Delay for Lane Group [s/veh]	30.00	50.79	32.04	44.11	12.26	17.70	17.74	11.88	19.31	19.43
Lane Group LOS	C	D	C	D	B	B	B	B	B	B
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.44	2.84	4.39	3.59	1.67	5.70	5.59	1.32	6.33	6.03
50th-Percentile Queue Length [ft/ln]	60.95	71.00	109.83	89.80	41.84	142.59	139.79	33.00	158.26	150.67
95th-Percentile Queue Length [veh/ln]	4.39	5.11	7.83	6.47	3.01	9.62	9.47	2.38	10.46	10.05
95th-Percentile Queue Length [ft/ln]	109.71	127.81	195.76	161.65	75.31	240.51	236.75	59.40	261.41	251.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.00	50.79	50.79	32.04	44.11	44.11	12.26	17.72	17.74	11.88	19.36	19.43
Movement LOS	C	D	D	C	D	D	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	39.55			36.94			16.69			18.28		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	22.35											
Intersection LOS	C											
Intersection V/C	0.498											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	39.61	0.00	39.61
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.389	0.000	2.918
Crosswalk LOS	F	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	700	220	440	460
d_b, Bicycle Delay [s]	21.13	39.61	30.42	29.65
l_b,int, Bicycle LOS Score for Intersection	1.944	2.165	2.362	2.343
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Intersection 59 included in 10-year scenario

Intersection Level Of Service Report
Intersection 60: 750 S & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	425 East						750 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	425 East						750 South		
Base Volume Input [veh/h]	0	0	7	0	4	54	0	55	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	82	0	42	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	7	0	4	136	0	97	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	1	37	0	26	0
Total Analysis Volume [veh/h]	0	0	8	0	4	148	0	105	0
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free		
Flared Lane	No								
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance	No								
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.96	10.01	8.83	8.66	7.44	0.00	8.87	0.00	0.00
Movement LOS	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.64	0.64	0.64	0.17	0.17	0.17	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.83			0.20			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	0.38								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 61: 750 S & 475 E

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name	475 East		750 South		750 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	475 East		750 South		750 South	
Base Volume Input [veh/h]	15	19	33	35	36	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	25	0	0	82	42	77
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	19	33	117	78	93
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	5	9	32	21	25
Total Analysis Volume [veh/h]	43	21	36	127	85	101
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.02	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.13	9.46	7.64	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.30	0.30	0.06	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	7.41	7.41	1.53	1.53	0.00	0.00
d_A, Approach Delay [s/veh]	10.58		1.69		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.31					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 62: County Road 750 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	South 600 East		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	South 600 East		750 South		750 South	
Base Volume Input [veh/h]	1	24	64	1	32	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	8	2	1	97
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	24	72	3	33	240
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	20	1	9	65
Total Analysis Volume [veh/h]	3	26	78	3	36	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.03	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	11.36	8.81	0.00	0.00	7.42	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft/ln]	2.46	2.46	0.00	0.00	1.53	1.53
d_A, Approach Delay [s/veh]	9.07		0.00		0.90	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.30					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 63: Indianapolis Road & 750 S

Control Type:	Two-way stop	Delay (sec / veh):	26.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			750 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			750 South		
Base Volume Input [veh/h]	0	118	242	0	239	92	0	57	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	31	0	38	91	0	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	126	273	0	277	183	0	59	60
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	34	74	0	75	50	0	16	16
Total Analysis Volume [veh/h]	0	137	297	0	301	199	0	64	65
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.27	0.10
d_M, Delay for Movement [s/veh]	12.47	8.56	0.00	9.83	0.00	0.00	26.08	26.28	16.57
Movement LOS	B	A	A	A	A	A	D	D	C
95th-Percentile Queue Length [veh/ln]	0.25	0.25	0.25	0.00	0.00	0.00	1.67	1.67	1.67
95th-Percentile Queue Length [ft/ln]	6.17	6.17	6.17	0.00	0.00	0.00	41.82	41.82	41.82
d_A, Approach Delay [s/veh]	2.70			0.00			21.39		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	3.70								
Intersection LOS	D								

Intersections 64, 65, 66, 67, & 68 included in 10-year scenario

Intersection Level Of Service Report
Intersection 69: 100 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	600 E		100 South		100 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	600 E		100 South		100 South	
Base Volume Input [veh/h]	0	1	50	0	0	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	26	0	0	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	76	0	0	43
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	21	0	0	12
Total Analysis Volume [veh/h]	0	1	83	0	0	47
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.18	8.70	0.00	0.00	7.39	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.08	0.08	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.70		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.07					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 70: 300 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.284

Intersection Setup

Name	South 400 East			South 400 East			300 South			300 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			300 South			300 South		
Base Volume Input [veh/h]	7	142	5	8	68	1	1	26	8	8	40	53
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	57	0	0	46	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	199	5	8	114	1	1	26	8	8	40	53
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	54	1	2	31	0	0	7	2	2	11	14
Total Analysis Volume [veh/h]	8	216	5	9	124	1	1	28	9	9	43	58
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	807	786	749	792
Degree of Utilization, x	0.28	0.17	0.05	0.14

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.17	0.61	0.16	0.48
95th-Percentile Queue Length [ft]	29.24	15.30	4.00	12.03
Approach Delay [s/veh]	9.22	8.52	8.06	8.28
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.75			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 71: SR 267 & 550 S

Control Type:	Two-way stop	Delay (sec / veh):	105.4
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.398

Intersection Setup

Name	State Road 267				State Road 267				550 South				550 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				60.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	State Road 267				State Road 267				550 South				550 South			
Base Volume Input [veh/h]	0	17	283	15	0	7	409	61	0	15	30	12	0	35	88	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	77	2	0	0	102	6	0	8	2	8	0	19	9	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	23	360	17	0	7	511	67	0	23	32	20	0	54	97	14
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	6	98	5	0	2	139	18	0	6	9	5	0	15	26	4
Total Analysis Volume [veh/h]	0	25	391	18	0	8	555	73	0	25	35	22	0	59	105	15
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.29	0.17	0.04	0.00	0.40	0.52	0.02
d_M, Delay for Movement [s/veh]	13.37	8.82	0.00	0.00	10.87	8.16	0.00	0.00	67.37	67.94	42.58	32.68	105.0	105.4	98.80	86.67
Movement LOS	B	A	A	A	B	A	A	A	F	F	E	D	F	F	F	F
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	2.45	2.45	2.45	2.45	7.48	7.48	7.48	7.48
95th-Percentile Queue Length [ft/ln]	1.07	1.07	1.07	1.07	0.34	0.34	0.34	0.34	61.25	61.25	61.25	61.25	186.9	186.9	186.9	186.9
d_A, Approach Delay [s/veh]	0.51				0.10				47.66				99.96			
Approach LOS	A				A				E				F			
d_I, Intersection Delay [s/veh]	16.59															
Intersection LOS	F															

Intersection Level Of Service Report
Intersection 72: 750 S & 450 E

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	450 E		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		62.14	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	450 E		750 South		750 South	
Base Volume Input [veh/h]	6	20	59	9	32	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	82	0	0	42
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	20	141	9	32	106
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	5	38	2	9	29
Total Analysis Volume [veh/h]	7	22	153	10	35	115
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	10.84	9.23	0.00	0.00	7.59	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft/ln]	2.79	2.79	0.00	0.00	1.49	1.49
d_A, Approach Delay [s/veh]	9.62		0.00		1.77	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.59					
Intersection LOS	B					

Existing Year - Improved

AM Peak Hour

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	All-way stop	Delay (sec / veh):	14.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.663

Intersection Setup

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	3	9	48	2	4	1	1	357	3	13	144	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	20	98	3	22	8	52	9	0	1	18	84
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	29	146	5	26	9	53	366	3	14	162	87
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	8	40	1	7	2	14	99	1	4	44	24
Total Analysis Volume [veh/h]	3	32	159	5	28	10	58	398	3	15	176	95
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	659	583	693	573	651
Degree of Utilization, x	0.29	0.07	0.66	0.03	0.42

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.22	0.24	5.03	0.08	2.05
95th-Percentile Queue Length [ft]	30.62	5.96	125.75	2.02	51.32
Approach Delay [s/veh]	10.72	9.68	17.81	11.97	
Approach LOS	B	A	C	B	
Intersection Delay [s/veh]	14.35				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Roundabout	Delay (sec / veh):	6.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	2	0	33	6	1	0	4	402	4	65	156	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	0	1	2	108	0	0	102	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	0	33	7	1	1	6	510	4	65	258	28
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	9	2	0	0	2	139	1	18	70	8
Total Analysis Volume [veh/h]	2	0	36	8	1	1	7	554	4	71	280	30
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	586			364			82			9		
Exiting Flow Rate [veh/h]	78			38			291			616		
Demand Flow Rate [veh/h]	2	0	33	7	1	1	6	510	4	65	258	28
Adjusted Demand Flow Rate [veh/h]	2	0	36	8	1	1	7	554	4	71	280	30

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	40	11	582	393
Capacity of Entry and Bypass Lanes [veh/h]	760	953	1269	1368
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	737	925	1232	1328
X, volume / capacity	0.05	0.01	0.46	0.29

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.16	0.03	2.47	1.20
95th-Percentile Queue Length [ft]	4.07	0.82	61.72	29.90
Approach Delay [s/veh]	5.41	3.99	7.67	5.24
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	6.61			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 71: SR 267 & 550 S

Control Type:	Roundabout	Delay (sec / veh):	5.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	State Road 267				State Road 267				550 South				550 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				60.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	State Road 267				State Road 267				550 South				550 South			
Base Volume Input [veh/h]	0	17	279	11	0	9	216	33	0	34	82	15	0	13	31	18
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	57	2	0	13	40	5	0	3	10	1	0	1	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	22	336	13	0	22	256	38	0	37	92	16	0	14	32	18
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	6	91	4	0	6	70	10	0	10	25	4	0	4	9	5
Total Analysis Volume [veh/h]	0	24	365	14	0	24	278	41	0	40	100	17	0	15	35	20
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	169				76				327				442			
Exiting Flow Rate [veh/h]	319				438				103				142			
Demand Flow Rate [veh/h]	0	22	336	13	0	22	256	38	0	37	92	16	0	14	32	18
Adjusted Demand Flow Rate [veh/h]	0	24	365	14	0	24	278	41	0	40	100	17	0	15	35	20

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	416	354	162	73
Capacity of Entry and Bypass Lanes [veh/h]	1162	1277	990	880
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1128	1240	961	854
X, volume / capacity	0.36	0.28	0.16	0.08

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	1.64	1.14	0.58	0.27
95th-Percentile Queue Length [ft]	40.96	28.40	14.57	6.68
Approach Delay [s/veh]	6.74	5.39	5.30	5.00
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	5.91			
Intersection LOS	A			

PM Peak Hour

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	All-way stop	Delay (sec / veh):	19.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.784

Intersection Setup

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	475 East			475 E			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	5	29	5	12	1	2	231	1	77	344	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	9	68	136	24	31	14	33	0	1	29	42
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	14	97	141	36	32	16	264	1	78	373	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	26	38	10	9	4	72	0	21	101	13
Total Analysis Volume [veh/h]	0	15	105	153	39	35	17	287	1	85	405	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	558	541	581	532	583
Degree of Utilization, x	0.22	0.42	0.53	0.16	0.78

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.81	2.06	3.05	0.56	7.40
95th-Percentile Queue Length [ft]	20.26	51.54	76.18	14.11	185.00
Approach Delay [s/veh]	11.22	14.39	15.84	24.99	
Approach LOS	B	B	C	C	
Intersection Delay [s/veh]	19.25				
Intersection LOS	C				

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Roundabout	Delay (sec / veh):	7.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	3	1	39	17	2	3	0	262	4	46	424	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	1	1	236	0	0	71	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	1	39	19	2	4	1	498	4	46	495	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	0	11	5	1	1	0	135	1	13	135	2
Total Analysis Volume [veh/h]	3	1	42	21	2	4	1	541	4	50	538	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	580			609			75			5		
Exiting Flow Rate [veh/h]	58			11			561			622		
Demand Flow Rate [veh/h]	3	1	39	19	2	4	1	498	4	46	495	8
Adjusted Demand Flow Rate [veh/h]	3	1	42	21	2	4	1	541	4	50	538	9

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	48	28	563	615
Capacity of Entry and Bypass Lanes [veh/h]	764	742	1279	1373
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	742	721	1241	1333
X, volume / capacity	0.06	0.04	0.44	0.45

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.20	0.12	2.30	2.37
95th-Percentile Queue Length [ft]	4.95	2.92	57.41	59.32
Approach Delay [s/veh]	5.49	5.38	7.36	7.11
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	7.12			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 71: SR 267 & 550 S

Control Type:	Roundabout	Delay (sec / veh):	8.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	State Road 267				State Road 267				550 South				550 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				60.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	State Road 267				State Road 267				550 South				550 South			
Base Volume Input [veh/h]	0	17	283	15	0	7	409	61	0	15	30	12	0	35	88	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	77	2	0	0	102	6	0	8	2	8	0	19	9	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	23	360	17	0	7	511	67	0	23	32	20	0	54	97	14
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	6	98	5	0	2	139	18	0	6	9	5	0	15	26	4
Total Analysis Volume [veh/h]	0	25	391	18	0	8	555	73	0	25	35	22	0	59	105	15
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	70				195				641				454			
Exiting Flow Rate [veh/h]	655				444				209				63			
Demand Flow Rate [veh/h]	0	23	360	17	0	7	511	67	0	23	32	20	0	54	97	14
Adjusted Demand Flow Rate [veh/h]	0	25	391	18	0	8	555	73	0	25	35	22	0	59	105	15

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	448	656	85	185
Capacity of Entry and Bypass Lanes [veh/h]	1285	1132	718	869
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1248	1099	698	843
X, volume / capacity	0.35	0.58	0.12	0.21

Movement, Approach, & Intersection Results

Lane LOS	A	B	A	A
95th-Percentile Queue Length [veh]	1.58	3.87	0.40	0.80
95th-Percentile Queue Length [ft]	39.40	96.67	9.95	20.03
Approach Delay [s/veh]	6.16	10.58	6.44	6.48
Approach LOS	A	B	A	A
Intersection Delay [s/veh]	8.33			
Intersection LOS	A			

10-Year - Unimproved;

with recommended configurations for new/reconstructed roadways

AM Peak Hour

Intersection Level Of Service Report
Intersection 1: 100 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.362

Intersection Setup

Name	South 400 East			South 400 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			100 South			100 South		
Base Volume Input [veh/h]	2	58	2	0	84	2	3	7	6	0	33	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	76	73	46	107	0	0	0	0	122	0	68
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	134	75	46	191	2	3	7	6	122	33	69
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	36	20	13	52	1	1	2	2	33	9	19
Total Analysis Volume [veh/h]	2	146	82	50	208	2	3	8	7	133	36	75
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	748	719	667	702
Degree of Utilization, x	0.31	0.36	0.03	0.35

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.31	1.65	0.08	1.56
95th-Percentile Queue Length [ft]	32.67	41.33	2.08	38.90
Approach Delay [s/veh]	9.94	10.82	8.55	10.84
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	10.50			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 2: 100 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	17.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.125

Intersection Setup

Name	500 East			500 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	500 East			500 East			100 South			100 South		
Base Volume Input [veh/h]	10	29	1	0	85	3	0	4	3	1	28	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	19	0	56	25	70	36	79	4	0	114	83
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	48	1	56	110	73	36	83	7	1	142	83
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	0	15	30	20	10	23	2	0	39	23
Total Analysis Volume [veh/h]	17	52	1	61	120	79	39	90	8	1	154	90
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.10	0.00	0.13	0.22	0.09	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	16.92	13.51	10.17	17.20	16.53	14.09	7.78	0.00	0.00	7.42	0.00	0.00
Movement LOS	C	B	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.54	0.54	0.54	2.27	2.27	2.27	0.07	0.07	0.07	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	13.41	13.41	13.41	56.65	56.65	56.65	1.69	1.69	1.69	0.04	0.04	0.04
d_A, Approach Delay [s/veh]	14.29			15.95			2.21			0.03		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	7.67											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 3: 100 S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	17.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.232

Intersection Setup

Name	650 East				650 East				100 South				100 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	650 East				650 East				100 South				100 South			
Base Volume Input [veh/h]	0	11	74	0	0	0	38	1	0	0	4	4	0	2	10	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	96	48	0	0	0	39	110	0	88	0	153	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	107	122	0	0	0	77	111	0	88	4	157	0	2	10	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	29	33	0	0	0	21	30	0	24	1	43	0	1	3	0
Total Analysis Volume [veh/h]	0	116	133	0	0	0	84	121	0	96	4	171	0	2	11	0
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.19	0.00	0.01	0.03	0.00
d_M, Delay for Movement [s/veh]	10.33	7.78	0.00	0.00	8.78	7.49	0.00	0.00	17.86	17.95	17.78	13.26	17.17	17.29	14.57	9.29
Movement LOS	B	A	A	A	A	A	A	A	C	C	C	B	C	C	B	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.21	0.21	0.00	0.00	0.00	0.00	2.17	2.17	2.17	2.17	0.11	0.11	0.11	0.11
95th-Percentile Queue Length [ft/ln]	5.16	5.16	5.16	5.16	0.00	0.00	0.00	0.00	54.18	54.18	54.18	54.18	2.70	2.70	2.70	2.70
d_A, Approach Delay [s/veh]	3.63				0.00				14.99				14.99			
Approach LOS	A				A				B				B			
d_I, Intersection Delay [s/veh]	6.99															
Intersection LOS	C															

Intersection Level Of Service Report
Intersection 4: 200 S & 600 East (575 Realigned)

Control Type:	All-way stop	Delay (sec / veh):	22.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.854

Intersection Setup

Name	600 East (575 Realigned)			600 East			East 200 South				200 South			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00				40.00			
Grade [%]	0.00			0.00			0.00				0.00			
Crosswalk	No			No			No				No			

Volumes

Name	600 East (575 Realigned)			600 East			East 200 South				200 South			
Base Volume Input [veh/h]	0	0	2	1	0	0	0	0	9	0	0	0	30	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	228	83	38	478	1	0	3	21	0	0	128	20	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	228	85	39	478	1	0	3	30	0	0	128	50	25
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	62	23	11	130	0	0	1	8	0	0	35	14	7
Total Analysis Volume [veh/h]	0	248	92	42	520	1	0	3	33	0	0	139	54	27
Pedestrian Volume [ped/h]	0			0			0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	583	660	659	516	561
Degree of Utilization, x	0.43	0.14	0.85	0.07	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	2.11	0.48	9.72	0.22	1.86
95th-Percentile Queue Length [ft]	52.79	12.08	242.99	5.60	46.42
Approach Delay [s/veh]	12.19		32.03	10.50	13.51
Approach LOS	B		D	B	B
Intersection Delay [s/veh]	22.02				
Intersection LOS	C				

Intersection Level Of Service Report
Intersection 5: 650 E & 200 S

Control Type:	Two-way stop	Delay (sec / veh):	24.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	650 East			650 East			200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			200 South			200 South		
Base Volume Input [veh/h]	4	72	8	8	35	0	3	3	1	4	22	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	41	0	132	57	4	0	59	1	5	82	103
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	113	8	140	92	4	3	62	2	9	104	110
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	31	2	38	25	1	1	17	1	2	28	30
Total Analysis Volume [veh/h]	4	123	9	152	100	4	3	67	2	10	113	120
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.11	0.00	0.00	0.01	0.17	0.00	0.03	0.29	0.13
d_M, Delay for Movement [s/veh]	7.43	0.00	0.00	7.68	0.00	0.00	23.97	16.29	10.92	21.56	19.41	14.20
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.28	0.28	0.28	0.68	0.68	0.68	2.30	2.30	2.30
95th-Percentile Queue Length [ft/ln]	0.17	0.17	0.17	6.97	6.97	6.97	16.91	16.91	16.91	57.42	57.42	57.42
d_A, Approach Delay [s/veh]	0.22			4.56			16.46			16.93		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	9.19											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: 200 S & 700 E

Control Type:	All-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.307

Intersection Setup

Name	700 East				700 East				200 South				200 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	700 East				700 East				200 South				200 South			
Base Volume Input [veh/h]	0	11	16	17	0	1	20	0	0	4	34	8	0	10	17	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	169	0	0	0	0	0	0	0	0	6	185	0	3	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	180	16	17	0	1	20	0	0	4	40	193	0	13	28	1
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	49	4	5	0	0	5	0	0	1	11	52	0	4	8	0
Total Analysis Volume [veh/h]	0	196	17	18	0	1	22	0	0	4	43	210	0	14	30	1
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	753	728	864	729
Degree of Utilization, x	0.31	0.03	0.30	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.30	0.10	1.25	0.20
95th-Percentile Queue Length [ft]	32.59	2.44	31.24	4.92
Approach Delay [s/veh]	9.89	8.11	8.92	8.26
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	9.24			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 7: 500 E & Future Minor Collector

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.072

Intersection Setup

Name	500 East		500 East			
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	500 East		500 East			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	83	23	4	164	46	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	83	23	4	164	46	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	6	1	45	13	2
Total Analysis Volume [veh/h]	90	25	4	178	50	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.07	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.46	0.00	10.59	9.22
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.26	0.26
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.17	0.17	6.42	6.42
d_A, Approach Delay [s/veh]	0.00		0.16		10.42	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.76					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: 600 East (575 Realigned) & Future Minor Collector

Control Type:	All-way stop	Delay (sec / veh):	17.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.716

Intersection Setup

Name	600 East (575 Realigned)			600 East (575 Realigned)						Madera Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	500.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	600 East (575 Realigned)			600 East (575 Realigned)						Madera Drive		
Base Volume Input [veh/h]	0	7	0	0	11	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	457	31	0	861	3	5	0	0	60	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	464	31	0	872	3	5	0	0	60	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	126	8	0	237	1	1	0	0	16	0	0
Total Analysis Volume [veh/h]	0	504	34	0	948	3	5	0	0	65	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	611	619	665	665	517	532
Degree of Utilization, x	0.44	0.43	0.72	0.71	0.01	0.12

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	2.25	2.19	6.01	6.00	0.03	0.41
95th-Percentile Queue Length [ft]	56.16	54.80	150.37	150.08	0.73	10.36
Approach Delay [s/veh]	13.03		20.52		10.04	10.70
Approach LOS	B		C		B	B
Intersection Delay [s/veh]	17.49					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: 650 E/Main St & Madera Drive

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.048

Intersection Setup

Name	North Main Street			650 East			Madera Drive	
Approach	Northbound			Southbound			Eastbound	
Lane Configuration								
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			No			Yes	

Volumes

Name	North Main Street			650 East			Madera Drive	
Base Volume Input [veh/h]	0	17	55	0	45	4	12	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	61	0	148	31	14	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	29	116	0	193	35	26	94
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	32	0	52	10	7	26
Total Analysis Volume [veh/h]	0	32	126	0	210	38	28	102
Pedestrian Volume [ped/h]	0			0			0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.00	0.00	0.05	0.12
d_M, Delay for Movement [s/veh]	9.91	7.81	0.00	8.74	0.00	0.00	11.42	9.96
Movement LOS	A	A	A	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00	0.15	0.42
95th-Percentile Queue Length [ft/ln]	1.87	1.87	0.00	0.00	0.00	0.00	3.73	10.49
d_A, Approach Delay [s/veh]	1.58			0.00			10.27	
Approach LOS	A			A			B	
d_I, Intersection Delay [s/veh]	2.96							
Intersection LOS	B							

Intersection Level Of Service Report
Intersection 10: 700 E & Future Minor Collector

Control Type:	Roundabout	Delay (sec / veh):	6.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	700 East				700 East									
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	31.07				31.07				30.00			30.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	700 East				700 East									
Base Volume Input [veh/h]	0	0	70	0	0	0	162	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	18	149	212	0	30	176	0	0	7	44	121	6	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	18	219	212	0	30	338	0	0	7	44	121	6	30
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	60	58	0	8	92	0	0	2	12	33	2	8
Total Analysis Volume [veh/h]	0	20	238	230	0	33	367	0	0	8	48	132	7	33
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1		
Circulating Flow Rate [veh/h]	42				164				548				266		
Exiting Flow Rate [veh/h]	563				279				28				279		
Demand Flow Rate [veh/h]	0	18	219	212	0	30	338	0	0	7	44		121	6	30
Adjusted Demand Flow Rate [veh/h]	0	20	238	230	0	33	367	0	0	8	48		132	7	33

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	503	412	58	178
Capacity of Entry and Bypass Lanes [veh/h]	1322	1168	790	1053
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1284	1134	767	1022
X, volume / capacity	0.38	0.35	0.07	0.17

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	1.81	1.61	0.24	0.60
95th-Percentile Queue Length [ft]	45.20	40.18	5.90	15.10
Approach Delay [s/veh]	6.42	6.66	5.43	5.08
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	6.25			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 11: Pierce Street/300 S & 600 East (575 Realigned)

Control Type:	Roundabout	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	600 East (575 Realigned)			600 East (575 Realigned)			300 South				West Pierce Street			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00				25.00			
Grade [%]	0.00			0.00			0.00				0.00			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	600 East (575 Realigned)			600 East (575 Realigned)			300 South				West Pierce Street			
Base Volume Input [veh/h]	3	0	4	2	1	8	0	6	41	5	0	4	50	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	461	201	4	938	45	0	25	112	0	0	53	143	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	461	205	6	939	53	0	31	153	5	0	57	193	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	1	125	56	2	255	14	0	8	42	1	0	15	52	3
Total Analysis Volume [veh/h]	3	501	223	7	1021	58	0	34	166	5	0	62	210	12
Pedestrian Volume [ped/h]	0			0			0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2				2			
Circulating Flow Rate [veh/h]	213			283			1123				554			
Exiting Flow Rate [veh/h]	1121			563			279				408			
Demand Flow Rate [veh/h]	3	461	205	6	939	53	0	31	153	5	0	57	193	11
Adjusted Demand Flow Rate [veh/h]	3	501	223	7	1021	58	0	34	166	5	0	62	210	12

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	352	397	526	593	212	293
Capacity of Entry and Bypass Lanes [veh/h]	1170	1170	1098	1098	547	887
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1136	1136	1066	1066	531	861
X, volume / capacity	0.30	0.34	0.48	0.54	0.39	0.33

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	1.27	1.52	2.66	3.34	1.81	1.45
95th-Percentile Queue Length [ft]	31.87	37.91	66.43	83.57	45.17	36.20
Approach Delay [s/veh]	6.27		9.44		12.91	7.88
Approach LOS	A		A		B	A
Intersection Delay [s/veh]	8.56					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: Main & Pierce

Control Type:	All-way stop	Delay (sec / veh):	20.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.743

Intersection Setup

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				25.00				20.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Base Volume Input [veh/h]	0	12	76	14	0	9	127	19	0	18	22	17	0	25	14	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	63	10	0	64	112	0	0	1	312	12	0	8	147	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	24	139	24	0	73	239	19	0	19	334	29	0	33	161	9
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	7	38	7	0	20	65	5	0	5	91	8	0	9	44	2
Total Analysis Volume [veh/h]	0	26	151	26	0	79	260	21	0	21	363	32	0	36	175	10
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	543	560	518
Degree of Utilization, x	0.40	0.66	0.74	0.43

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.87	4.88	6.39	2.11
95th-Percentile Queue Length [ft]	46.84	122.04	159.75	52.85
Approach Delay [s/veh]	14.54	21.78	25.69	15.03
Approach LOS	B	C	D	C
Intersection Delay [s/veh]	20.67			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 13: Pierce Street & 700 E

Control Type:	Two-way stop	Delay (sec / veh):	863.7
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.765

Intersection Setup

Name	700 East		East Pierce Street		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	700 East		East Pierce Street		East 300 South	
Base Volume Input [veh/h]	147	15	8	70	53	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	331	9	175	211	152	203
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	478	24	183	281	205	265
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	7	50	76	56	72
Total Analysis Volume [veh/h]	520	26	199	305	223	288
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	2.77	0.04	0.19	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	863.71	849.89	8.68	0.00	0.00	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	48.16	48.16	0.37	0.37	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1204.02	1204.02	9.30	9.30	0.00	0.00
d_A, Approach Delay [s/veh]	863.05		3.43		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	302.98					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 14: Pierce Street & 300 S & Albert South White Drive

Control Type:	Two-way stop	Delay (sec / veh):	9,281.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	19.913

Intersection Setup

Name	East 300 South			Albert S. White Drive			East 300 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 300 South			Albert S. White Drive			East 300 South		
Base Volume Input [veh/h]	0	105	107	0	44	134	0	156	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	332	210	0	133	524	0	751	222
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	437	317	0	177	658	0	907	264
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	119	86	0	48	179	0	246	72
Total Analysis Volume [veh/h]	0	475	345	0	192	715	0	986	287
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	19.91	1.15	0.00	0.35	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9278.36	9281.31	9142.42	10000.00	11.97	0.00	14.11	0.00	0.00
Movement LOS	F	F	F	F	B	A	B	A	A
95th-Percentile Queue Length [veh/ln]	100.69	100.69	100.69	0.42	0.42	0.42	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2517.20	2517.20	2517.20	10.62	10.62	10.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9222.87			2.53			0.00		
Approach LOS	F			A			A		
d_I, Intersection Delay [s/veh]	2521.68								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 15: Main Street & Future Minor Collector

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.333

Intersection Setup

Name	South Main Street			South Main Street								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	500.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Main Street			South Main Street								
Base Volume Input [veh/h]	0	149	0	0	258	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	69	27	2	150	10	12	0	39	68	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	218	27	2	408	10	12	0	39	68	0	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	59	7	1	111	3	3	0	11	18	0	2
Total Analysis Volume [veh/h]	20	237	29	2	443	11	13	0	42	74	0	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	656	682	686	691	681	625
Degree of Utilization, x	0.22	0.21	0.33	0.33	0.08	0.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.83	0.79	1.46	1.44	0.26	0.44
95th-Percentile Queue Length [ft]	20.65	19.66	36.44	36.06	6.57	11.10
Approach Delay [s/veh]	9.54		10.50		8.75	9.62
Approach LOS	A		B		A	A
Intersection Delay [s/veh]	10.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 16: Albert S. White Drive & Future Minor Collector

Control Type:	Roundabout	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Albert S. White Drive			Albert S. White Drive								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Albert S. White Drive			Albert S. White Drive								
Base Volume Input [veh/h]	0	194	0	0	263	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	665	162	2	1055	7	19	0	51	182	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	859	162	2	1318	7	19	0	51	182	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	233	44	1	358	2	5	0	14	49	0	1
Total Analysis Volume [veh/h]	15	934	176	2	1433	8	21	0	55	198	0	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	24			219			1682			999		
Exiting Flow Rate [veh/h]	1737			986			24			183		
Demand Flow Rate [veh/h]	14	859	162	2	1318	7	19	0	51	182	0	2
Adjusted Demand Flow Rate [veh/h]	15	934	176	2	1433	8	21	0	55	198	0	2

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	545	615	699	788	79	206
Capacity of Entry and Bypass Lanes [veh/h]	1390	1390	1164	1164	340	608
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1350	1350	1130	1130	331	590
X, volume / capacity	0.39	0.44	0.60	0.68	0.23	0.34

Movement, Approach, & Intersection Results

Lane LOS	A	A	B	B	C	B
95th-Percentile Queue Length [veh]	1.90	2.32	4.20	5.61	0.87	1.49
95th-Percentile Queue Length [ft]	47.45	57.96	104.98	140.17	21.84	37.35
Approach Delay [s/veh]	6.67		11.99		15.29	10.90
Approach LOS	A		B		C	B
Intersection Delay [s/veh]	9.90					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 17: 400 E & Perry Worth Road

Control Type:	Two-way stop	Delay (sec / veh):	20.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	South 400 East			South 400 East			Perry Worth Road		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	South 400 East			South 400 East			Perry Worth Road		
Base Volume Input [veh/h]	0	6	76	0	112	0	0	1	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	473	0	322	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	549	0	434	0	0	1	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	149	0	118	0	0	0	2
Total Analysis Volume [veh/h]	0	7	597	0	472	0	0	1	7
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	11.38	8.33	0.00	12.61	0.00	0.00	20.10	20.31	11.22
Movement LOS	B	A	A	B	A	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.29	0.29	0.29	0.00	0.00	0.00	1.23	1.23	1.23
d_A, Approach Delay [s/veh]	0.10			0.00			12.36		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	0.14								
Intersection LOS	C								

Intersections 18 & 19 removed intentionally

Intersection Level Of Service Report
Intersection 20: Albert S. White Dr. (400 S) & 400 E

Control Type:	Signalized	Delay (sec / veh):	275.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.522

Intersection Setup

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Base Volume Input [veh/h]	0	0	0	16	0	91	53	724	0	1	449	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	5	9	2	18	302	458	799	96	21	1123	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	5	9	18	18	393	511	1523	96	22	1572	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	1	2	5	5	107	139	414	26	6	427	5
Total Analysis Volume [veh/h]	50	5	10	20	20	427	555	1655	104	24	1709	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	6	6	6	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	25	25	25	25	25	25	65	65	65	65	65	65
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	10	10	10	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	19	19	19	19	59	59	59	59	59
g / C, Green / Cycle	0.21	0.21	0.21	0.21	0.66	0.66	0.66	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.06	0.01	0.03	0.30	2.22	0.53	0.54	0.63	0.60
s, saturation flow rate [veh/h]	849	1506	1400	1419	250	1669	1635	1346	1513
c, Capacity [veh/h]	214	318	356	300	107	1094	1072	923	992
d1, Uniform Delay [s]	33.86	28.29	28.70	35.50	43.75	11.28	11.55	12.18	13.46
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.53	0.28	0.64	209.77	1899.21	6.28	7.05	14.73	14.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.23	0.05	0.11	1.43	5.17	0.80	0.82	0.91	0.92
d, Delay for Lane Group [s/veh]	36.39	28.57	29.34	245.27	1942.96	17.57	18.60	26.91	28.33
Lane Group LOS	D	C	C	F	F	B	B	C	C
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	1.12	0.28	0.75	23.85	58.90	11.71	12.14	12.74	16.24
50th-Percentile Queue Length [ft/ln]	27.88	7.00	18.83	596.27	1472.62	292.79	303.38	318.44	405.90
95th-Percentile Queue Length [veh/ln]	2.01	0.50	1.36	37.39	106.03	17.32	17.85	18.59	22.84
95th-Percentile Queue Length [ft/ln]	50.19	12.59	33.90	934.64	2650.72	433.10	446.20	464.77	571.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	36.39	28.57	28.57	29.34	29.34	245.27	1942.96	18.05	18.60	26.91	27.65	28.33
Movement LOS	D	C	C	C	C	F	F	B	B	C	C	C
d_A, Approach Delay [s/veh]	34.59			226.78			479.76			27.65		
Approach LOS	C			F			F			C		
d_I, Intersection Delay [s/veh]	275.34											
Intersection LOS	F											
Intersection V/C	2.522											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	34.67	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	3.070	0.000	0.000
Crosswalk LOS	F	C	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	422	1311	1311
d_b, Bicycle Delay [s]	28.01	28.01	5.34	5.34
l_b,int, Bicycle LOS Score for Intersection	1.667	2.330	3.469	3.007
Bicycle LOS	A	B	C	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: Albert S. White Dr. (400 S) & 450 E/Anson Blvd

Control Type:	Signalized	Delay (sec / veh):	105.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.315

Intersection Setup

Name	Anson Boulevard			450 East			Albert S. White Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Anson Boulevard			450 East			Albert S. White Drive					
Base Volume Input [veh/h]	69	2	23	8	4	5	22	586	115	26	397	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	1	0	2	4	151	306	491	14	22	997	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	3	23	10	8	156	328	1077	129	48	1394	25
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	1	6	3	2	42	89	293	35	13	379	7
Total Analysis Volume [veh/h]	82	3	25	11	9	170	357	1171	140	52	1515	27
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	6	6	6	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	27	27	27	27	27	27	63	63	63	63	63	63
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	14	14	14	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	21	21	21	21	57	57	57	57	57
g / C, Green / Cycle	0.23	0.23	0.23	0.23	0.63	0.63	0.63	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.08	0.02	0.01	0.13	1.19	0.40	0.40	0.58	0.55
s, saturation flow rate [veh/h]	1076	1442	1234	1430	300	1669	1608	1321	1511
c, Capacity [veh/h]	189	337	322	334	129	1057	1019	879	957
d1, Uniform Delay [s]	39.34	26.97	29.36	30.24	42.22	10.02	10.15	13.42	13.45
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.09	0.48	0.20	6.07	818.16	2.80	3.05	11.31	10.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.43	0.08	0.03	0.54	2.77	0.63	0.64	0.87	0.87
d, Delay for Lane Group [s/veh]	46.43	27.46	29.55	36.30	860.38	12.82	13.20	24.73	24.00
Lane Group LOS	D	C	C	D	F	B	B	C	C
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	2.11	0.51	0.20	3.80	32.07	7.21	7.21	10.95	13.57
50th-Percentile Queue Length [ft/ln]	52.77	12.76	5.09	95.03	801.82	180.23	180.33	273.86	339.20
95th-Percentile Queue Length [veh/ln]	3.80	0.92	0.37	6.84	57.73	11.61	11.62	16.38	19.61
95th-Percentile Queue Length [ft/ln]	94.98	22.96	9.17	171.06	1443.27	290.31	290.45	409.56	490.23

Movement, Approach, & Intersection Results

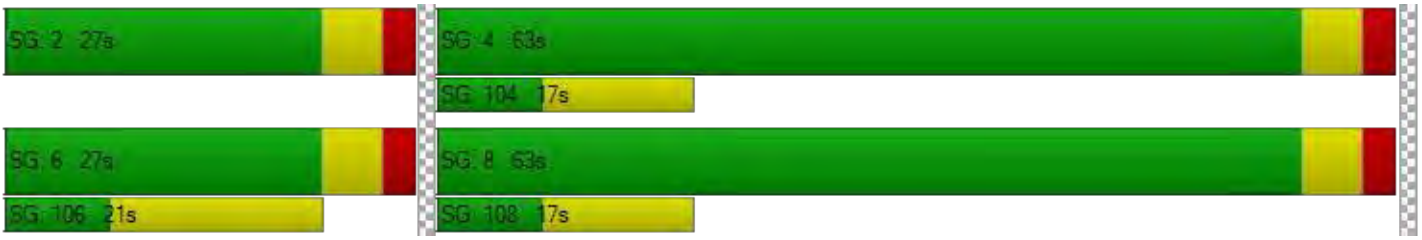
d_M, Delay for Movement [s/veh]	46.43	27.46	27.46	29.55	36.30	36.30	860.38	12.99	13.20	24.73	24.34	24.00
Movement LOS	D	C	C	C	D	D	F	B	B	C	C	C
d_A, Approach Delay [s/veh]	41.60			35.91			194.37			24.35		
Approach LOS	D			D			F			C		
d_I, Intersection Delay [s/veh]	105.11											
Intersection LOS	F											
Intersection V/C	1.315											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	34.67	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersectio	2.115	2.698	0.000	3.057
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	467	467	1267	1267
d_b, Bicycle Delay [s]	26.45	26.45	6.05	6.05
l_b,int, Bicycle LOS Score for Intersection	1.741	1.873	2.936	2.875
Bicycle LOS	A	A	C	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: Albert S. White Dr. (400 S) & 500 E

Control Type:	All-way stop	Delay (sec / veh):	200.7
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.838

Intersection Setup

Name	500 East			500 East								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			Yes		

Volumes

Name	500 East			500 East								
Base Volume Input [veh/h]	15	3	3	10	30	130	137	136	45	20	336	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	24	12	10	42	461	175	315	3	10	584	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	27	15	20	72	591	312	451	48	30	920	17
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	7	4	5	20	161	85	123	13	8	250	5
Total Analysis Volume [veh/h]	26	29	16	22	78	642	339	490	52	33	1000	18
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	303	324	642	360	379	385	526	526
Degree of Utilization, x	0.23	0.31	1.84	0.94	0.71	0.70	1.43	1.42

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.89	1.28	42.29	10.03	5.38	5.23	26.99	26.79
95th-Percentile Queue Length [ft]	22.28	32.00	1057.24	250.71	134.52	130.85	674.72	669.74
Approach Delay [s/veh]	18.49	358.70		45.12			231.79	
Approach LOS	C	F		E			F	
Intersection Delay [s/veh]	200.67							
Intersection LOS	F							

Intersection Level Of Service Report
Intersection 23: Albert S. White Dr. (400 S) & 575 E

Control Type:	Signalized	Delay (sec / veh):	29.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.744

Intersection Setup

Name	575 East			575 East						400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	200.00	200.00	100.00	200.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	575 East			575 East						400 S		
Base Volume Input [veh/h]	10	8	6	10	8	12	18	94	11	28	305	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	665	504	7	1222	248	155	177	10	754	349	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	194	0	0	99	0	0	8	0	0	0
Total Hourly Volume [veh/h]	24	673	316	17	1230	161	173	271	13	782	654	27
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	183	86	5	334	44	47	74	4	213	178	7
Total Analysis Volume [veh/h]	26	732	343	18	1337	175	188	295	14	850	711	29
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	0
Auxiliary Signal Groups			6,7			2,3			1,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	0
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	9	33	33	9	33	33	35	35	35	23	23	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	52	46	69	52	45	58	40	17	24	40	27	27
g / C, Green / Cycle	0.52	0.46	0.69	0.52	0.45	0.58	0.40	0.17	0.24	0.40	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.06	0.23	0.24	0.03	0.42	0.12	0.11	0.09	0.01	0.34	0.22	0.22
s, saturation flow rate [veh/h]	423	3179	1419	555	3179	1419	1745	3179	1419	2498	1669	1647
c, Capacity [veh/h]	199	1453	975	313	1434	823	570	550	339	987	457	451
d1, Uniform Delay [s]	20.62	19.15	6.46	13.24	26.01	10.05	21.67	37.69	29.25	25.93	33.91	33.96
k, delay calibration	0.11	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.12	0.12
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.29	1.25	1.00	0.35	12.34	0.59	0.33	0.81	0.05	2.35	3.97	4.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.50	0.35	0.06	0.93	0.21	0.33	0.54	0.04	0.86	0.81	0.82
d, Delay for Lane Group [s/veh]	20.91	20.40	7.46	13.59	38.34	10.64	22.00	38.51	29.30	28.29	37.88	38.17
Lane Group LOS	C	C	A	B	D	B	C	D	C	C	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.28	5.72	2.59	0.21	15.93	1.75	1.35	3.26	0.26	8.09	8.54	8.51
50th-Percentile Queue Length [ft/ln]	6.91	143.12	64.66	5.24	398.21	43.81	33.82	81.38	6.41	202.32	213.59	212.82
95th-Percentile Queue Length [veh/ln]	0.50	9.65	4.66	0.38	22.47	3.15	2.43	5.86	0.46	12.76	13.34	13.30
95th-Percentile Queue Length [ft/ln]	12.45	241.22	116.38	9.44	561.84	78.85	60.87	146.49	11.54	318.95	333.43	332.45

Movement, Approach, & Intersection Results

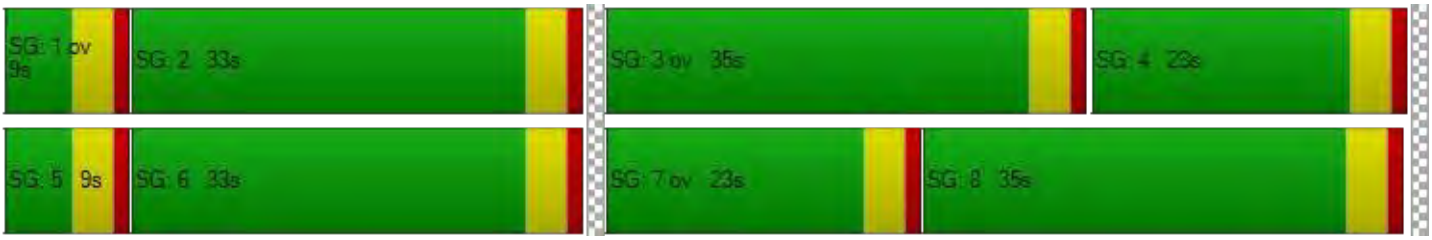
d_M, Delay for Movement [s/veh]	20.91	20.40	7.46	13.59	38.34	10.64	22.00	38.51	29.30	28.29	38.02	38.17
Movement LOS	C	C	A	B	D	B	C	D	C	C	D	D
d_A, Approach Delay [s/veh]	16.38			34.88			32.00			32.82		
Approach LOS	B			C			C			C		
d_I, Intersection Delay [s/veh]	29.57											
Intersection LOS	C											
Intersection V/C	0.744											

Other Modes

g_Walk,mi, Effective Walk Time [s]	31.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	23.81	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	3.801	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	580	580	620	380
d_b, Bicycle Delay [s]	25.21	25.21	23.81	32.81
l_b,int, Bicycle LOS Score for Intersection	2.628	2.904	1.976	2.871
Bicycle LOS	B	C	A	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Intersection Level Of Service Report
Intersection 24: 400 S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	44.6
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street			South Main Street			400 S			400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Main Street			South Main Street			400 S			400 S		
Base Volume Input [veh/h]	54	103	82	37	178	43	29	98	67	125	166	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	73	372	18	111	128	32	636	14	440	864	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	176	454	55	289	171	61	734	81	565	1030	27
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	48	123	15	79	46	17	199	22	154	280	7
Total Analysis Volume [veh/h]	87	191	493	60	314	186	66	798	88	614	1120	29
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	952			1876			1018			354		
Exiting Flow Rate [veh/h]	1046			295			1435			1392		
Demand Flow Rate [veh/h]	80	176	454	55	289	171	61	734	81	565	1030	27
Adjusted Demand Flow Rate [veh/h]	87	191	493	60	314	186	66	798	88	614	1120	29

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	287	508	272	306	461	520	854	963
Capacity of Entry and Bypass Lanes [veh/h]	563	633	241	289	530	598	975	1051
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	547	614	234	280	514	581	947	1021
X, volume / capacity	0.51	0.80	1.13	1.06	0.87	0.87	0.88	0.92

Movement, Approach, & Intersection Results

Lane LOS	C	D	F	F	E	E	D	D
95th-Percentile Queue Length [veh]	2.87	8.00	11.97	11.66	9.45	9.81	11.75	14.11
95th-Percentile Queue Length [ft]	71.65	199.95	299.27	291.41	236.21	245.14	293.84	352.81
Approach Delay [s/veh]	24.52		125.61		40.23		30.00	
Approach LOS	C		F		E		D	
Intersection Delay [s/veh]	44.59							
Intersection LOS	E							

Intersection Level Of Service Report
Intersection 25: 400 S/Albert S. White Drive & 400 S/Ginger Way

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	65.458

Intersection Setup

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Base Volume Input [veh/h]	3	162	60	34	205	2	12	7	8	74	2	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	940	21	189	1265	0	0	6	13	15	0	51
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	1102	81	223	1470	2	12	13	21	89	2	71
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	299	22	61	399	1	3	4	6	24	1	19
Total Analysis Volume [veh/h]	53	1198	88	242	1598	2	13	14	23	97	2	77
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.01	0.00	0.45	0.02	0.00	65.46	6.72	0.18	64.71	0.90	0.36
d_M, Delay for Movement [s/veh]	15.19	0.00	0.00	17.12	0.00	0.00	10000.0	5018.76	3318.83	10000.0	1869.93	270.61
Movement LOS	C	A	A	C	A	A	F	F	F	F	F	F
95th-Percentile Queue Length [veh/ln]	0.45	0.00	0.00	2.32	0.00	0.00	3.15	6.19	6.19	14.45	6.56	6.56
95th-Percentile Queue Length [ft/ln]	11.14	0.00	0.00	58.05	0.00	0.00	78.71	154.86	154.86	361.36	164.00	164.00
d_A, Approach Delay [s/veh]	0.60			2.25			5531.92			5651.00		
Approach LOS	A			A			F			F		
d_I, Intersection Delay [s/veh]	374.56											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 26: 700 E & 425 S

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	South 700 East			South 700 East			East 425 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Left	Right	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	South 700 East			South 700 East			East 425 South		
Base Volume Input [veh/h]	0	32	7	0	63	46	0	9	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	66	0	0	216	0	0	66
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	32	73	0	63	262	0	9	121
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	20	0	17	71	0	2	33
Total Analysis Volume [veh/h]	0	35	79	0	68	285	0	10	132
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free			Stop			Free	
Flared Lane				No				
Storage Area [veh]	0			0			0	
Two-Stage Gap Acceptance				No				
Number of Storage Spaces in Median	0			0			0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.09	0.29	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.44	7.55	0.00	12.20	12.24	11.05	8.49	0.00	0.00
Movement LOS	B	A	A	B	B	B	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	1.81	1.81	1.81	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.49	1.49	1.49	45.18	45.18	45.18	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	2.32			11.28			0.00		
Approach LOS	A			B			A		
d_I, Intersection Delay [s/veh]	6.97								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 27: SR 267 & Indianapolis Road

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.731

Intersection Setup

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Base Volume Input [veh/h]	0	26	260	33	0	142	284	79	0	72	34	26	0	12	28	146
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	457	14	0	83	676	21	0	14	0	2	0	1	1	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	30	717	47	0	225	960	100	0	86	34	28	0	13	29	169
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	8	195	13	0	61	261	27	0	23	9	8	0	4	8	46
Total Analysis Volume [veh/h]	0	33	779	51	0	245	1043	109	0	93	37	30	0	14	32	184
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	8	3	8	8	4	7	4	4	2	5	2	2	6	1	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lead	-	-	Lag	Lead	-	-	Lag	Lead	-	-	Lag	Lead	-	-
Minimum Green [s]	10	5	10	10	10	5	10	10	10	5	10	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0
All red [s]	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Split [s]	72	9	72	72	72	9	72	72	20	9	20	20	20	9	20	20
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	75	66	66	75	66	66	23	14	14	23	14	14
g / C, Green / Cycle	0.68	0.60	0.60	0.68	0.60	0.60	0.21	0.13	0.13	0.21	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.05	0.42	0.03	0.32	0.56	0.07	0.07	0.02	0.02	0.01	0.02	0.12
s, saturation flow rate [veh/h]	604	1855	1577	759	1855	1577	1342	1855	1577	1458	1855	1577
c, Capacity [veh/h]	261	1113	946	425	1113	946	360	236	201	379	236	201
d1, Uniform Delay [s]	21.26	15.17	9.09	13.83	20.10	9.45	36.33	42.74	42.70	34.70	42.63	47.43
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.00	3.67	0.11	5.58	15.55	0.25	1.73	1.41	1.57	0.18	1.19	44.95
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.70	0.05	0.58	0.94	0.12	0.26	0.16	0.15	0.04	0.14	0.92
d, Delay for Lane Group [s/veh]	22.26	18.84	9.20	19.42	35.66	9.70	38.06	44.16	44.27	34.88	43.82	92.37
Lane Group LOS	C	B	A	B	D	A	D	D	D	C	D	F
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.26	11.84	0.45	2.48	25.98	1.11	2.22	0.97	0.80	0.31	0.84	7.37
50th-Percentile Queue Length [ft/ln]	6.41	296.08	11.22	61.90	649.46	27.64	55.44	24.33	20.02	7.83	20.94	184.13
95th-Percentile Queue Length [veh/ln]	0.46	17.49	0.81	4.46	34.34	1.99	3.99	1.75	1.44	0.56	1.51	11.82
95th-Percentile Queue Length [ft/ln]	11.54	437.18	20.19	111.42	858.43	49.74	99.80	43.80	36.04	14.09	37.70	295.40

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.26	22.26	18.84	9.20	19.42	19.42	35.66	9.70	38.06	38.06	44.16	44.27	34.88	34.88	43.82	92.37
Movement LOS	C	C	B	A	B	B	D	A	D	D	D	D	C	C	D	F
d_A, Approach Delay [s/veh]	18.40				30.78				40.63				82.12			
Approach LOS	B				C				D				F			
d_I, Intersection Delay [s/veh]	31.80															
Intersection LOS	C															
Intersection V/C	0.731															

Other Modes

g_Walk,mi, Effective Walk Time [s]	14.0	14.0	66.0	66.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.89	41.89	8.80	8.80
l_p,int, Pedestrian LOS Score for Intersectio	3.121	3.179	2.232	2.477
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1200	255	255
d_b, Bicycle Delay [s]	8.80	8.80	41.89	41.89
l_b,int, Bicycle LOS Score for Intersection	2.984	3.460	1.670	1.916
Bicycle LOS	C	C	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 28: Perry Worth Road & 450 S

Control Type:	All-way stop	Delay (sec / veh):	7.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.048

Intersection Setup

Name	Perry Worth Road						E 450 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road						E 450 South		
Base Volume Input [veh/h]	0	1	39	0	1	0	0	37	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	14	0	0	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2	39	0	1	14	0	37	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	11	0	0	4	0	10	0
Total Analysis Volume [veh/h]	0	2	42	0	1	15	0	40	1
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	1032	880	848
Degree of Utilization, x	0.04	0.02	0.05

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.13	0.06	0.15
95th-Percentile Queue Length [ft]	3.34	1.39	3.81
Approach Delay [s/veh]	6.64	7.17	7.46
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.06		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 29: Anson Blvd & 450 S

Control Type:	Signalized	Delay (sec / veh):	16.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.071

Intersection Setup

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	No				No				No				Yes			

Volumes

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Base Volume Input [veh/h]	0	2	28	7	0	18	41	12	0	16	34	0	0	17	11	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	1	5	0	9	12	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	29	12	0	27	53	12	0	16	34	0	0	17	11	8
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	8	3	0	7	14	3	0	4	9	0	0	5	3	2
Total Analysis Volume [veh/h]	0	3	32	13	0	29	58	13	0	17	37	0	0	18	12	9
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	66	66	66	66	66	66	66	66	39	39	39	39	39	39	39	39
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	10	10	10	10	6	6	6	6	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	C	R
C, Cycle Length [s]	105	105	105	105	105	105	105
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	60	60	60	60	33	33	33
g / C, Green / Cycle	0.57	0.57	0.57	0.57	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.02	0.04	0.03	0.02	0.01
s, saturation flow rate [veh/h]	1318	1765	1350	1797	1697	1560	1577
c, Capacity [veh/h]	774	1009	799	1027	579	545	496
d1, Uniform Delay [s]	11.39	9.90	11.30	10.04	25.43	25.09	24.83
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.08	0.08	0.13	0.32	0.19	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.04	0.04	0.07	0.09	0.06	0.02
d, Delay for Lane Group [s/veh]	11.40	9.98	11.38	10.17	25.75	25.28	24.89
Lane Group LOS	B	A	B	B	C	C	C
Critical Lane Group	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.03	0.47	0.33	0.75	1.00	0.55	0.16
50th-Percentile Queue Length [ft/ln]	0.85	11.68	8.25	18.70	25.09	13.78	4.10
95th-Percentile Queue Length [veh/ln]	0.06	0.84	0.59	1.35	1.81	0.99	0.30
95th-Percentile Queue Length [ft/ln]	1.53	21.03	14.85	33.66	45.15	24.80	7.39

Movement, Approach, & Intersection Results

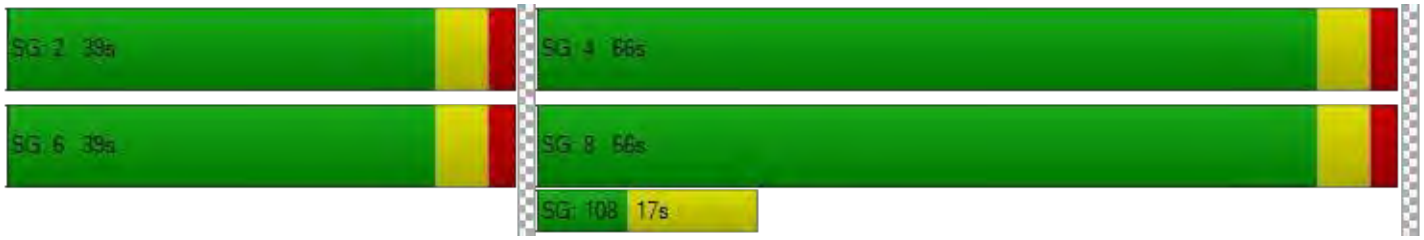
d_M, Delay for Movement [s/veh]	11.40	11.40	9.98	9.98	11.38	11.38	10.17	10.17	25.75	25.75	25.75	25.75	25.28	25.28	25.28	24.89
Movement LOS	B	B	A	A	B	B	B	B	C	C	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	10.07				10.52				25.75				25.19			
Approach LOS	B				B				C				C			
d_I, Intersection Delay [s/veh]	16.22															
Intersection LOS	B															
Intersection V/C	0.071															

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	42.08
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	2.053
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1143	1143	629	629
d_b, Bicycle Delay [s]	9.64	9.64	24.69	24.69
l_b,int, Bicycle LOS Score for Intersection	1.750	1.788	1.732	1.705
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 30: 450 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name	500 East			E 450 South			E 450 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	500 East			E 450 South			E 450 South		
Base Volume Input [veh/h]	0	4	16	0	33	8	0	23	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	11	0	13	12	0	6	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	16	27	0	46	20	0	29	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	7	0	13	5	0	8	4
Total Analysis Volume [veh/h]	0	17	29	0	50	22	0	32	14
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free		
Flared Lane	No								
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance	No								
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.03	0.00	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.70	9.70	8.70	8.50	7.37	0.00	8.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.16	0.09	0.09	0.09	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.89	3.89	3.89	2.14	2.14	2.14	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.07			5.12			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	4.79								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 31: 450S & 575 E

Control Type:	Roundabout	Delay (sec / veh):	21.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	575 East		575 East		E 450 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	575 East		575 East		E 450 South	
Base Volume Input [veh/h]	9	21	24	18	5	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	86	1227	1986	72	11	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	95	1248	2010	90	16	23
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	339	546	24	4	6
Total Analysis Volume [veh/h]	103	1357	2185	98	17	25
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		2	
Circulating Flow Rate [veh/h]	18		106		2251	
Exiting Flow Rate [veh/h]	2276		1415		207	
Demand Flow Rate [veh/h]	95	1248	2010	90	16	23
Adjusted Demand Flow Rate [veh/h]	103	1357	2185	98	17	25

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1350.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	707	798	1106	1247	18	26
Capacity of Entry and Bypass Lanes [veh/h]	1398	1398	1290	1290	171	210
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1357	1357	1252	1252	166	204
X, volume / capacity	0.51	0.57	0.86	0.97	0.10	0.12

Movement, Approach, & Intersection Results

Lane LOS	A	A	C	E	C	C
95th-Percentile Queue Length [veh]	2.96	3.78	11.79	18.85	0.34	0.41
95th-Percentile Queue Length [ft]	74.12	94.62	294.71	471.24	8.44	10.31
Approach Delay [s/veh]	8.45		29.29		22.39	
Approach LOS	A		D		C	
Intersection Delay [s/veh]	21.17					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 32: Anson Blvd & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.038

Intersection Setup

Name	East 500 South			Anson Boulevard			East 500 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 500 South			Anson Boulevard			East 500 South		
Base Volume Input [veh/h]	0	82	25	0	22	15	0	20	116
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	0	2	5	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	82	32	0	24	20	0	25	116
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	22	9	0	7	5	0	7	32
Total Analysis Volume [veh/h]	0	89	35	0	26	22	0	27	126
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.04	0.12
d_M, Delay for Movement [s/veh]	8.80	7.46	0.00	8.27	0.00	0.00	10.27	10.32	8.91
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.00	0.00	0.00	0.00	0.12	0.12	0.41
95th-Percentile Queue Length [ft/ln]	4.56	4.56	0.00	0.00	0.00	0.00	2.99	2.99	10.23
d_A, Approach Delay [s/veh]	5.35			0.00			9.16		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	6.35								
Intersection LOS	B								

Intersection 33 removed intentionally

Intersection Level Of Service Report
Intersection 34: 500 S & 575 E

Control Type:	Roundabout	Delay (sec / veh):	94.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	575 East			575 East			East 500 South			East 500 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	600.00	100.00	100.00	100.00	200.00	100.00	100.00	300.00	100.00	300.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East			575 East			East 500 South			East 500 South		
Base Volume Input [veh/h]	0	0	0	10	0	6	8	13	0	0	93	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	1398	77	5	1981	42	23	6	3	348	29	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	1398	77	15	1981	48	31	19	3	348	122	46
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	380	21	4	538	13	8	5	1	95	33	13
Total Analysis Volume [veh/h]	2	1520	84	16	2153	52	34	21	3	378	133	50
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	73			528			2623			1603		
Exiting Flow Rate [veh/h]	2610			1601			193			38		
Demand Flow Rate [veh/h]	2	1398	77	15	1981	48	31	19	3	348	122	46
Adjusted Demand Flow Rate [veh/h]	2	1520	84	16	2153	52	34	21	3	378	133	50

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
A (intercept)	1350.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	737	831	0	1076	1213	36	25	279	248	0
Capacity of Entry and Bypass Lanes [veh/h]	1263	1335	1375	831	907	121	153	310	364	365
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1226	1296	1335	807	880	118	149	301	354	354
X, volume / capacity	0.58	0.62	0.06	1.29	1.34	0.29	0.16	0.90	0.68	0.14

Movement, Approach, & Intersection Results

Lane LOS	A	B	A	F	F	E	D	F	D	B
95th-Percentile Queue Length [veh]	3.96	4.60	0.20	39.61	46.63	1.11	0.56	8.42	4.77	0.49
95th-Percentile Queue Length [ft]	99.03	115.08	5.03	990.18	1165.75	27.67	13.98	210.43	119.26	12.19
Approach Delay [s/veh]	9.78			168.23		38.22		47.87		
Approach LOS	A			F		E		E		
Intersection Delay [s/veh]	94.11									
Intersection LOS	F									

Intersection Level Of Service Report
Intersection 35: 500S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	266.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Main Street		Main Street		East 500 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		East 500 South	
Base Volume Input [veh/h]	61	234	441	17	13	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	63	432	413	199	14	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	124	666	854	216	27	105
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	181	232	59	7	29
Total Analysis Volume [veh/h]	135	724	928	235	29	114
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.01	0.01	0.00	0.76	0.41
d_M, Delay for Movement [s/veh]	11.19	0.00	0.00	0.00	266.30	185.59
Movement LOS	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.24	0.24	0.00	0.00	8.72	8.72
95th-Percentile Queue Length [ft/ln]	6.07	6.07	0.00	0.00	217.92	217.92
d_A, Approach Delay [s/veh]	1.76		0.00		201.95	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	14.04					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 36: Perry Worth Road & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.167

Intersection Setup

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Base Volume Input [veh/h]	0	134	133	0	0	22	0	106	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	5	0	0	14	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	135	138	0	0	36	0	111	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	37	38	0	0	10	0	30	0
Total Analysis Volume [veh/h]	0	147	150	0	0	39	0	121	0
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
d_M, Delay for Movement [s/veh]	8.29	0.00	0.00	9.83	7.86	0.00	10.91	10.95	9.42
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	14.89	14.89	0.00
d_A, Approach Delay [s/veh]	0.00			0.00			10.95		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	2.90								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 37: 550 S & 475 E

Control Type:	Roundabout	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	475 E				475 E				550 South				550 S			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0	0.00	0.00	0.00	100.0
Speed [mph]	45.00				45.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	475 E				475 E				550 South				550 S			
Base Volume Input [veh/h]	0	0	0	11	0	1	0	0	0	1	131	1	0	10	52	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	387	0	0	0	0	0	0	132	15	0	821	163	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	0	398	0	1	0	0	0	1	263	16	0	831	215	1
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	0	108	0	0	0	0	0	0	71	4	0	226	58	0
Total Analysis Volume [veh/h]	0	5	0	433	0	1	0	0	0	1	286	17	0	903	234	1
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	297				1176				931				6			
Exiting Flow Rate [veh/h]	948				2				246				742			
Demand Flow Rate [veh/h]	0	5	0	398	0	1	0	0	0	1	263	16	0	831	215	1
Adjusted Demand Flow Rate [veh/h]	0	5	0	433	0	1	0	0	0	1	286	17	0	903	234	1

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	6	446	2	148	166	931	243
Capacity of Entry and Bypass Lanes [veh/h]	1085	1085	416	609	609	1413	1413
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1053	1053	404	591	591	1371	1371
X, volume / capacity	0.00	0.41	0.00	0.24	0.27	0.66	0.17

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.01	2.04	0.01	0.94	1.10	5.31	0.62
95th-Percentile Queue Length [ft]	0.36	51.07	0.19	23.53	27.56	132.70	15.45
Approach Delay [s/veh]	7.80		8.95	9.49		9.43	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	9.06						
Intersection LOS	A						

Intersection Level Of Service Report
Intersection 38: 550 S & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	92.5
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			550 S					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			550 S					
Base Volume Input [veh/h]	6	138	46	48	22	1	4	118	7	29	52	177
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	16	27	43	4	7	21	489	39	100	1144	178
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	154	73	91	26	8	25	607	46	129	1196	355
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	42	20	25	7	2	7	165	13	35	325	96
Total Analysis Volume [veh/h]	24	167	79	99	28	9	27	660	50	140	1300	386
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	810			1508			275			225		
Exiting Flow Rate [veh/h]	225			200			1373			782		
Demand Flow Rate [veh/h]	22	154	73	91	26	8	25	607	46	129	1196	355
Adjusted Demand Flow Rate [veh/h]	24	167	79	99	28	9	27	660	50	140	1300	386

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	0.00	1380.00	1380.00	1380.00	0.00
B (coefficient)	0.00102	0.00000	0.00102	0.00102	0.00102	0.00000
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	197	0	141	760	1484	0
Capacity of Entry and Bypass Lanes [veh/h]	605	103001	297	1043	1098	103000
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	587	100000	288	1013	1066	100000
X, volume / capacity	0.33	0.00	0.47	0.73	1.35	0.00

Movement, Approach, & Intersection Results

Lane LOS	B	A	D	C	F	A
95th-Percentile Queue Length [veh]	1.41	0.00	2.39	6.72	56.38	0.00
95th-Percentile Queue Length [ft]	35.20	0.00	59.69	168.08	1409.58	0.00
Approach Delay [s/veh]	7.57		25.60	16.08	140.83	
Approach LOS	A		D	C	F	
Intersection Delay [s/veh]	92.47					
Intersection LOS	F					

Intersections 39 & 40 removed intentionally

Intersection Level Of Service Report
Intersection 41: Perry Worth Road & 550 S

Control Type:	Signalized	Delay (sec / veh):	275.6
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.728

Intersection Setup

Name	Perry Worth Road				Perry Worth Road				550 S							
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500.0
Speed [mph]	40.00				40.00				30.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	Perry Worth Road				Perry Worth Road				550 S							
Base Volume Input [veh/h]	0	142	37	0	0	0	11	96	0	265	0	36	0	0	0	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	39	30	145	0	1	21	59	0	127	1388	55	0	298	2073	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	181	67	145	0	1	32	155	0	392	1388	91	0	298	2073	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	49	18	39	0	0	9	42	0	107	377	25	0	81	563	0
Total Analysis Volume [veh/h]	0	197	73	158	0	1	35	168	0	426	1509	99	0	324	2253	0
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	85
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	36	36	36	36	36	36	36	36	49	49	49	49	49	49	49	49
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	15	15	15	15	15	15	15	15	9	9	9	9	9	9	9	9
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	30	30	30	30	43	43	43	43	43	43
g / C, Green / Cycle	0.35	0.35	0.35	0.35	0.51	0.51	0.51	0.51	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.17	0.14	0.00	0.13	2.56	0.43	0.06	1.04	0.64	0.00
s, saturation flow rate [veh/h]	1169	1655	1140	1619	166	3532	1577	313	3532	1577
c, Capacity [veh/h]	361	584	341	571	85	1787	798	120	1787	798
d1, Uniform Delay [s]	29.78	20.68	25.58	20.35	42.50	18.12	11.07	41.07	21.00	0.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.80	2.00	0.02	1.73	1839.27	5.10	0.32	785.28	122.12	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.40	0.00	0.36	5.03	0.84	0.12	2.69	1.26	0.00
d, Delay for Lane Group [s/veh]	35.59	22.68	25.60	22.07	1881.77	23.22	11.39	826.35	143.12	0.00
Lane Group LOS	D	C	C	C	F	C	B	F	F	A
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	No	No
50th-Percentile Queue Length [veh/ln]	4.06	3.53	0.02	3.05	45.03	12.84	1.00	28.65	44.95	0.00
50th-Percentile Queue Length [ft/ln]	101.55	88.25	0.41	76.14	1125.82	320.89	24.96	716.20	1123.81	0.00
95th-Percentile Queue Length [veh/ln]	7.31	6.35	0.03	5.48	80.33	18.71	1.80	51.57	65.81	0.00
95th-Percentile Queue Length [ft/ln]	182.78	158.86	0.74	137.04	2008.22	467.78	44.93	1289.16	1645.28	0.00

Movement, Approach, & Intersection Results

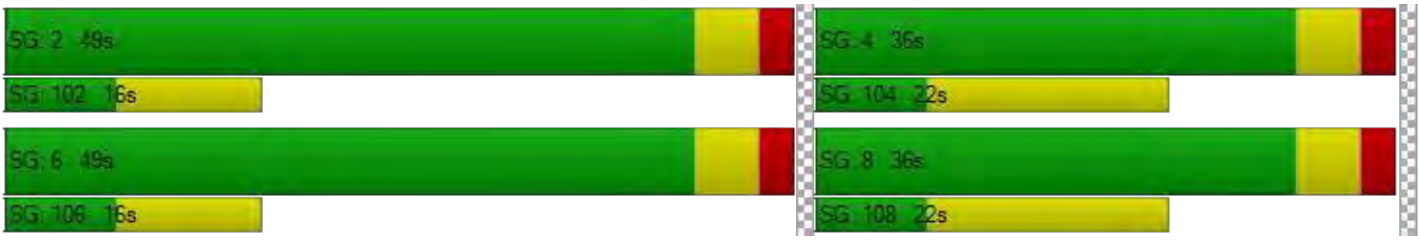
d_M, Delay for Movement [s/veh]	35.59	35.59	22.68	22.68	25.60	25.60	22.07	22.07	1881.	1881.	23.22	11.39	826.3	826.3	143.1	0.00
Movement LOS	D	D	C	C	C	C	C	C	F	F	C	B	F	F	F	A
d_A, Approach Delay [s/veh]	28.62				22.09				411.90				229.02			
Approach LOS	C				C				F				F			
d_I, Intersection Delay [s/veh]	275.56															
Intersection LOS	F															
Intersection V/C	2.728															

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.21	32.21	32.21	32.21
l_p,int, Pedestrian LOS Score for Intersectio	3.062	2.849	4.092	3.946
Crosswalk LOS	C	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	706	706	1012	1012
d_b, Bicycle Delay [s]	17.79	17.79	10.38	10.38
l_b,int, Bicycle LOS Score for Intersection	2.052	2.005	2.886	3.796
Bicycle LOS	B	B	C	D

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 42: Indianapolis Road & Commerce Drive

Control Type:	Two-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.044

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Base Volume Input [veh/h]	0	22	196	0	62	12	0	8	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	123	0	38	24	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	22	319	0	100	36	0	21	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	87	0	27	10	0	6	3
Total Analysis Volume [veh/h]	0	24	347	0	109	39	0	23	12
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	8.74	7.57	0.00	10.21	0.00	0.00	12.25	12.32	9.18
Movement LOS	A	A	A	B	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00	0.18	0.18	0.18
95th-Percentile Queue Length [ft/ln]	1.28	1.28	0.00	0.00	0.00	0.00	4.54	4.54	4.54
d_A, Approach Delay [s/veh]	0.49			0.00			11.24		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	1.04								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 43: Perry Worth Road & Juniors Way

Control Type:	Roundabout	Delay (sec / veh):	5.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Base Volume Input [veh/h]	66	24	15	35	93	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	182	0	14	306	0	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	248	24	29	341	93	145
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	7	8	93	25	39
Total Analysis Volume [veh/h]	270	26	32	371	101	158
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	33		104		278	
Exiting Flow Rate [veh/h]	486		441		33	
Demand Flow Rate [veh/h]	248	24	29	341	93	145
Adjusted Demand Flow Rate [veh/h]	270	26	32	371	101	158

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	279	0	416	267
Capacity of Entry and Bypass Lanes [veh/h]	1335	1335	1242	1040
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1296	1296	1205	1009
X, volume / capacity	0.21	0.02	0.33	0.26

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.79	0.06	1.49	1.02
95th-Percentile Queue Length [ft]	19.63	1.54	37.14	25.62
Approach Delay [s/veh]	4.41		6.15	6.08
Approach LOS	A		A	A
Intersection Delay [s/veh]	5.59			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 44: 650 E & Central Blvd

Control Type:	Roundabout	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	39	394	50	161	720	4	17	0	43	62	19	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	463	0	11	447	9	0	0	7	4	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	857	50	172	1167	13	17	0	50	66	19	75
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	233	14	47	317	4	5	0	14	18	5	20
Total Analysis Volume [veh/h]	53	932	54	187	1268	14	18	0	54	72	21	82
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	211			150			1573			1033		
Exiting Flow Rate [veh/h]	1436			1063			91			248		
Demand Flow Rate [veh/h]	49	857	50	172	1167	13	17	0	50	66	19	75
Adjusted Demand Flow Rate [veh/h]	53	932	54	187	1268	14	18	0	54	72	21	82

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	503	568	712	802	19	56	85	96
Capacity of Entry and Bypass Lanes [veh/h]	1112	1187	1176	1250	318	373	522	591
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1080	1153	1142	1214	309	363	507	573
X, volume / capacity	0.45	0.48	0.60	0.64	0.06	0.15	0.16	0.16

Movement, Approach, & Intersection Results

Lane LOS	A	A	B	B	B	B	A	A
95th-Percentile Queue Length [veh]	2.40	2.65	4.27	4.93	0.19	0.52	0.58	0.57
95th-Percentile Queue Length [ft]	60.03	66.33	106.75	123.18	4.63	12.97	14.38	14.35
Approach Delay [s/veh]	8.33		11.12		12.49		8.77	
Approach LOS	A		B		B		A	
Intersection Delay [s/veh]	9.95							
Intersection LOS	A							

Intersection Level Of Service Report
Intersection 45: Central Blvd & Heartland Drive

Control Type:	All-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.213

Intersection Setup

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Approach	Northbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes		

Volumes

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	0	41	26	0	108	40	0	25	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	11	0	5	0	0	8	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	45	37	0	113	40	0	33	113
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	12	10	0	31	11	0	9	31
Total Analysis Volume [veh/h]	0	49	40	0	123	43	0	36	123
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	618	779	779	663	731
Degree of Utilization, x	0.08	0.05	0.21	0.05	0.17

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.26	0.16	0.80	0.17	0.60
95th-Percentile Queue Length [ft]	6.44	4.06	20.10	4.30	15.07
Approach Delay [s/veh]	8.37		8.87	8.58	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.65				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 46: Veterans Drive & Central Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	27.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.341

Intersection Setup

Name				South 700 East			Central Boulevard		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			Yes		

Volumes

Name				South 700 East			Central Boulevard		
Base Volume Input [veh/h]	0	34	229	0	217	71	0	75	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	63	0	337	10	0	1	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	35	292	0	554	81	0	76	52
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	79	0	151	22	0	21	14
Total Analysis Volume [veh/h]	0	38	317	0	602	88	0	83	57
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.01	0.00	0.00	0.34	0.12
d_M, Delay for Movement [s/veh]	15.28	9.18	0.00	10.03	0.00	0.00	27.23	27.23	13.72
Movement LOS	C	A	A	B	A	A	D	D	B
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.00	0.00	1.45	1.45	0.41
95th-Percentile Queue Length [ft/ln]	3.30	3.30	0.00	0.00	0.00	0.00	36.16	36.16	10.27
d_A, Approach Delay [s/veh]	0.98			0.00			21.73		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	2.86								
Intersection LOS	D								

Intersection Level Of Service Report
Intersection 47: Perry Worth Road & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	6.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	2000.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.00
Speed [mph]	25.00				25.00				40.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	No				Yes				Yes			

Volumes

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Base Volume Input [veh/h]	82	130	22	135	4	4	2	3	2	49	99	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	164	5	246	3	7	0	5	11	17	255	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	82	294	27	381	7	11	2	8	13	66	354	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	80	7	104	2	3	1	2	4	18	96	1
Total Analysis Volume [veh/h]	89	320	29	414	8	12	2	9	14	72	385	3
Pedestrian Volume [ped/h]	0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1			
Circulating Flow Rate [veh/h]	140				641				248			
Exiting Flow Rate [veh/h]	576				64				424			
Demand Flow Rate [veh/h]	82	294	27	381	7	11	2	8	13	66	354	3
Adjusted Demand Flow Rate [veh/h]	89	320	29	414	8	12	2	9	14	72	385	3

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	422	457	32	230	259
Capacity of Entry and Bypass Lanes [veh/h]	1251	1251	718	1133	1133
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1214	1214	698	1100	1100
X, volume / capacity	0.34	0.37	0.04	0.20	0.23

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.50	1.69	0.14	0.76	0.88
95th-Percentile Queue Length [ft]	37.56	42.37	3.49	18.92	22.02
Approach Delay [s/veh]	6.33		5.63	5.26	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	6.05				
Intersection LOS	A				

Intersection Setup

Name	Mills Drive				Chick-fil-A Access			
Approach	Westbound				Northeastbound			
Lane Configuration								
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Mills Drive				Chick-fil-A Access			
Base Volume Input [veh/h]	78	41	70	9	4	1	34	71
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00							
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	3	8	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	78	41	73	17	4	1	34	71
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	11	20	5	1	0	9	19
Total Analysis Volume [veh/h]	85	45	79	18	4	1	37	77
Pedestrian Volume [ped/h]	0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	2				1			
Circulating Flow Rate [veh/h]	471				593			
Exiting Flow Rate [veh/h]	547				143			
Demand Flow Rate [veh/h]	78	41	73	17	4	1	34	71
Adjusted Demand Flow Rate [veh/h]	85	45	79	18	4	1	37	77

Lanes

Overwrite Calculated Critical Headway	No	No
User-Defined Critical Headway [s]	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No
User-Defined Follow-Up Time [s]	3.00	3.00
A (intercept)	1420.00	1380.00
B (coefficient)	0.00085	0.00102
HV Adjustment Factor	0.97	0.97
Entry Flow Rate [veh/h]	234	123
Capacity of Entry and Bypass Lanes [veh/h]	952	754
Pedestrian Impedance	1.00	1.00
Capacity per Entry Lane [veh/h]	925	732
X, volume / capacity	0.25	0.16

Movement, Approach, & Intersection Results

Lane LOS	A	A
95th-Percentile Queue Length [veh]	0.97	0.58
95th-Percentile Queue Length [ft]	24.16	14.46
Approach Delay [s/veh]	6.39	6.69
Approach LOS	A	A
Intersection Delay [s/veh]	6.05	
Intersection LOS	A	

Intersection Level Of Service Report
Intersection 48: 650 E & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	27.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Mills Drive			Mills Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Mills Drive			Mills Drive		
Base Volume Input [veh/h]	64	325	31	44	608	179	148	31	32	23	3	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	222	0	4	443	11	247	18	0	11	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	547	31	48	1051	190	395	49	32	34	3	16
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	149	8	13	286	52	107	13	9	9	1	4
Total Analysis Volume [veh/h]	70	595	34	52	1142	207	429	53	35	37	3	17
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	550			113			1268			1127		
Exiting Flow Rate [veh/h]	1250			1072			288			143		
Demand Flow Rate [veh/h]	64	547	31	48	1051	190	395	49	32	34	3	16
Adjusted Demand Flow Rate [veh/h]	70	595	34	52	1142	207	429	53	35	37	3	17

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	339	382	679	765	533	59
Capacity of Entry and Bypass Lanes [veh/h]	861	861	1281	1281	484	545
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	836	836	1244	1244	470	530
X, volume / capacity	0.39	0.44	0.53	0.60	1.10	0.11

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	B	F	A
95th-Percentile Queue Length [veh]	1.89	2.30	3.23	4.17	17.23	0.36
95th-Percentile Queue Length [ft]	47.17	57.45	80.83	104.21	430.63	9.00
Approach Delay [s/veh]	9.50		9.45		101.36	8.16
Approach LOS	A		A		F	A
Intersection Delay [s/veh]	27.21					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 49: Whitestown Parkway & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Base Volume Input [veh/h]	0	6	358	0	3	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	109	0	0	51
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	467	0	3	139
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	127	0	1	38
Total Analysis Volume [veh/h]	0	7	508	0	3	151
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.61	11.48	0.00	0.00	8.43	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.94	0.94	0.00	0.00	0.13	0.13
d_A, Approach Delay [s/veh]	11.48		0.00		0.16	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.16					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	All-way stop	Delay (sec / veh):	120.6
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.376

Intersection Setup

Name	475 East				475 E				Whitestown Parkway				Whitestown Parkway		
Approach	Northbound				Southbound				Eastbound				Westbound		
Lane Configuration															
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2500.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				45.00				45.00		
Grade [%]	0.00				0.00				0.00				0.00		
Crosswalk	No				No				No				No		

Volumes

Name	475 East				475 E				Whitestown Parkway				Whitestown Parkway		
Base Volume Input [veh/h]	0	3	9	48	0	2	4	1	0	1	357	3	13	144	3
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	83	0	23	0	10	0	52	150	0	0	463	161
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	9	131	0	25	4	11	0	53	507	3	13	607	164
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	36	0	7	1	3	0	14	138	1	4	165	45
Total Analysis Volume [veh/h]	0	3	10	142	0	27	4	12	0	58	551	3	14	660	178
Pedestrian Volume [ped/h]	0				0				0				0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	540	469	629	548	838
Degree of Utilization, x	0.29	0.09	0.97	0.03	1.38

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.18	0.30	14.12	0.08	37.11
95th-Percentile Queue Length [ft]	29.52	7.53	352.91	1.96	927.70
Approach Delay [s/veh]	12.34	11.45	53.02	194.26	
Approach LOS	B	B	F	F	
Intersection Delay [s/veh]	120.55				
Intersection LOS	F				

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Roundabout	Delay (sec / veh):	13.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	2	0	33	6	1	0	4	402	4	65	156	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	60	12	0	7	5	228	23	44	587	22
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	0	93	18	1	7	9	630	27	109	743	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	25	5	0	2	2	171	7	30	202	13
Total Analysis Volume [veh/h]	36	0	101	20	1	8	10	685	29	118	808	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	736			991			143			47		
Exiting Flow Rate [veh/h]	152			64			878			830		
Demand Flow Rate [veh/h]	33	0	93	18	1	7	9	630	27	109	743	48
Adjusted Demand Flow Rate [veh/h]	36	0	101	20	1	8	10	685	29	118	808	52

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	142	30	746	1008
Capacity of Entry and Bypass Lanes [veh/h]	652	503	1193	1315
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	633	488	1158	1277
X, volume / capacity	0.22	0.06	0.63	0.77

Movement, Approach, & Intersection Results

Lane LOS	A	A	B	C
95th-Percentile Queue Length [veh]	0.82	0.19	4.61	8.08
95th-Percentile Queue Length [ft]	20.48	4.73	115.36	201.94
Approach Delay [s/veh]	8.35	8.15	11.28	15.19
Approach LOS	A	A	B	C
Intersection Delay [s/veh]	13.06			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 52: Whitestown Parkway & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	151.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	38	76	453	87	12	11	11	387	38	291	264	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	74	38	624	15	16	0	0	377	45	618	692	96
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	112	114	1077	102	28	11	11	764	83	909	956	180
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	31	293	28	8	3	3	208	23	247	260	49
Total Analysis Volume [veh/h]	122	124	1171	111	30	12	12	830	90	988	1039	196
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	982			2213			1163			266		
Exiting Flow Rate [veh/h]	1141			342			1208			969		
Demand Flow Rate [veh/h]	112	114	1077	102	28	11	11	764	83	909	956	180
Adjusted Demand Flow Rate [veh/h]	122	124	1171	111	30	12	12	830	90	988	1039	196

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	254	0	84	75	452	509	1077	1214
Capacity of Entry and Bypass Lanes [veh/h]	617	624	177	217	464	529	1115	1115
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	599	605	172	211	450	514	1083	1083
X, volume / capacity	0.41	1.94	0.47	0.34	0.97	0.96	0.97	1.09

Movement, Approach, & Intersection Results

Lane LOS	B	F	E	D	F	F	E	F
95th-Percentile Queue Length [veh]	2.00	76.51	2.25	1.44	12.11	12.47	17.58	27.83
95th-Percentile Queue Length [ft]	50.06	1912.66	56.33	36.03	302.79	311.70	439.45	695.86
Approach Delay [s/veh]	369.12		34.70		62.69		57.19	
Approach LOS	F		D		F		F	
Intersection Delay [s/veh]	151.09							
Intersection LOS	F							

Intersections 53 & 54 removed intentionally

Intersection Level Of Service Report
Intersection 55: Whitestown Parkway & Perry Worth Road

Control Type:	Signalized	Delay (sec / veh):	143.6
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.972

Intersection Setup

Name				Perry Worth Road			Whitestown Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Perry Worth Road			Whitestown Parkway					
Base Volume Input [veh/h]	49	7	15	58	17	211	252	700	14	26	1031	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	225	21	15	254	321	8	3	1040	161
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	7	15	283	38	226	506	1021	22	29	2071	195
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	2	4	77	10	61	138	277	6	8	563	53
Total Analysis Volume [veh/h]	73	8	16	308	41	246	550	1110	24	32	2251	212
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2,3						4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	16	16	9	16	16	11	56	56	9	54	54
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No	No	No	Yes		No	Yes	Yes
Maximum Recall	No	No		No	No	No	No	No		No	No	No
Pedestrian Recall	No	No		No	No	No	No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	4.00	6.00	6.00	6.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	19	10	19	10	24	59	52	52	59	48	59
g / C, Green / Cycle	0.21	0.11	0.21	0.12	0.26	0.66	0.58	0.58	0.66	0.53	0.65
(v / s)_i Volume / Saturation Flow Rate	0.06	0.02	0.23	0.02	0.10	1.57	0.34	0.34	0.06	0.71	0.15
s, saturation flow rate [veh/h]	1189	1494	1369	1669	2512	349	1669	1657	538	3179	1419
c, Capacity [veh/h]	342	164	384	191	655	280	969	961	370	1693	929
d1, Uniform Delay [s]	29.47	36.24	36.33	36.17	27.25	36.84	12.02	12.04	7.83	21.03	6.30
k, delay calibration	0.11	0.11	0.18	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.31	0.41	6.45	0.55	0.36	447.43	2.60	2.64	0.46	152.38	0.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.15	0.80	0.21	0.38	1.97	0.59	0.59	0.09	1.33	0.23
d, Delay for Lane Group [s/veh]	29.78	36.64	42.77	36.72	27.61	484.27	14.62	14.69	8.29	173.40	6.87
Lane Group LOS	C	D	D	D	C	F	B	B	A	F	A
Critical Lane Group	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.34	0.50	7.21	0.85	2.19	36.48	6.66	6.66	0.21	50.55	1.41
50th-Percentile Queue Length [ft/ln]	33.41	12.40	180.36	21.19	54.71	911.90	166.44	166.39	5.29	1263.75	35.25
95th-Percentile Queue Length [veh/ln]	2.41	0.89	11.62	1.53	3.94	64.72	10.89	10.89	0.38	75.59	2.54
95th-Percentile Queue Length [ft/ln]	60.14	22.33	290.48	38.14	98.48	1618.03	272.23	272.17	9.52	1889.86	63.45

Movement, Approach, & Intersection Results

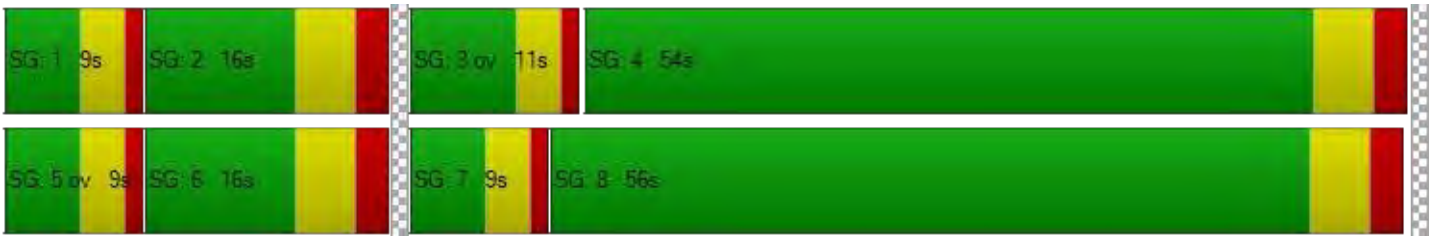
d_M, Delay for Movement [s/veh]	29.78	36.64	36.64	42.77	36.72	27.61	484.27	14.65	14.69	8.29	173.40	6.87
Movement LOS	C	D	D	D	D	C	F	B	B	A	F	A
d_A, Approach Delay [s/veh]	31.48			36.09			168.03			157.14		
Approach LOS	C			D			F			F		
d_I, Intersection Delay [s/veh]	143.61											
Intersection LOS	F											
Intersection V/C	0.972											

Other Modes

g_Walk,mi, Effective Walk Time [s]	50.0	48.0	10.0	10.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	8.89	9.80	35.56	35.56
l_p,int, Pedestrian LOS Score for Intersectio	2.143	3.088	3.559	3.623
Crosswalk LOS	B	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	222	1111	1067
d_b, Bicycle Delay [s]	35.56	35.56	8.89	9.80
l_b,int, Bicycle LOS Score for Intersection	1.720	2.541	2.949	3.618
Bicycle LOS	A	B	C	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 56: Whitestown Parkway & 650 E

Control Type:	Signalized	Delay (sec / veh):	66.9
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.104

Intersection Setup

Name	650 East			650 East						Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East						Whitestown Parkway		
Base Volume Input [veh/h]	168	39	23	98	47	419	266	506	82	23	526	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	44	17	1	107	7	340	0	518	29	3	821	205
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	212	56	24	205	54	759	266	1024	111	26	1347	262
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	15	7	56	15	206	72	278	30	7	366	71
Total Analysis Volume [veh/h]	230	61	26	223	59	825	289	1113	121	28	1464	285
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	5.5
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	Protecte	Permiss	Overlap	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	30	35	35	11	16	16	17	35	35	9	27	27
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.00	6.00	4.00	6.00	6.00	6.00	4.00	6.00	4.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	0.00	4.00	0.00	2.00	4.00	0.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	29	18	26	29	10	46	13	43	63	32	32	62
g / C, Green / Cycle	0.32	0.19	0.29	0.32	0.11	0.51	0.14	0.48	0.71	0.36	0.36	0.69
(v / s)_i Volume / Saturation Flow Rate	0.41	0.04	0.02	0.17	0.04	0.33	0.15	0.35	0.09	0.05	0.46	0.20
s, saturation flow rate [veh/h]	561	1669	1419	1302	1669	2512	1897	3179	1419	570	3179	1419
c, Capacity [veh/h]	252	325	412	497	185	1271	312	1515	1000	205	1146	985
d1, Uniform Delay [s]	24.62	30.27	23.11	24.67	36.86	16.35	40.59	18.96	4.28	22.73	28.77	5.27
k, delay calibration	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	38.22	0.28	0.06	0.63	0.97	0.56	11.67	3.20	0.05	1.39	131.56	0.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.91	0.19	0.06	0.45	0.32	0.65	0.93	0.73	0.12	0.14	1.28	0.29
d, Delay for Lane Group [s/veh]	62.84	30.55	23.17	25.30	37.83	16.91	52.25	22.17	4.34	24.11	160.34	6.02
Lane Group LOS	E	C	C	C	D	B	D	C	A	C	F	A
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.14	1.12	0.40	3.77	1.23	5.92	3.60	8.81	0.52	0.43	32.07	1.66
50th-Percentile Queue Length [ft/ln]	128.52	27.93	10.03	94.24	30.82	147.97	90.06	220.31	12.96	10.82	801.80	41.43
95th-Percentile Queue Length [veh/ln]	8.86	2.01	0.72	6.79	2.22	9.91	6.48	13.68	0.93	0.78	47.95	2.98
95th-Percentile Queue Length [ft/ln]	221.48	50.27	18.06	169.64	55.48	247.72	162.12	342.02	23.33	19.47	1198.67	74.57

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.84	30.55	23.17	25.30	37.83	16.91	52.25	22.17	4.34	24.11	160.34	6.02
Movement LOS	E	C	C	C	D	B	D	C	A	C	F	A
d_A, Approach Delay [s/veh]	53.37			19.72			26.46			133.44		
Approach LOS	D			B			C			F		
d_I, Intersection Delay [s/veh]	66.93											
Intersection LOS	E											
Intersection V/C	1.104											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	644	222	644	467
d_b, Bicycle Delay [s]	20.67	35.56	20.67	26.45
l_b,int, Bicycle LOS Score for Intersection	2.083	3.386	2.816	3.026
Bicycle LOS	B	C	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 57: Whitestown Parkway & Heartland Drive

Control Type:	Two-way stop	Delay (sec / veh):	22.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.287

Intersection Setup

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	0	23	0	0	68	106	512	6	39	525	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	0.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	13	613	0	0	1022	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	23	0	0	76	119	1125	6	39	1547	66
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	6	0	0	21	32	306	2	11	420	18
Total Analysis Volume [veh/h]	0	0	25	0	0	83	129	1223	7	42	1682	72
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.06	0.00	0.00	0.29	0.37	0.01	0.00	0.08	0.02	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	13.80	0.00	0.00	22.35	21.26	0.00	0.00	11.99	0.00	0.00
Movement LOS			B			C	C	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.18	0.00	0.00	1.15	1.66	0.00	0.00	0.24	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.57	0.00	0.00	28.84	41.52	0.00	0.00	6.10	0.00	0.00
d_A, Approach Delay [s/veh]	13.80			22.35			2.02			0.28		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	1.67											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 58: Whitestown Parkway & Veterans Drive/700 E

Control Type:	Signalized	Delay (sec / veh):	74.3
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.773

Intersection Setup

Name							Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name							Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	94	58	144	189	46	106	91	370	16	57	367	156
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	25	0	0	182	18	141	51	562	0	0	858	14
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	58	144	371	64	247	142	932	16	57	1225	170
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	16	39	101	17	67	39	253	4	15	333	46
Total Analysis Volume [veh/h]	129	63	157	403	70	268	154	1013	17	62	1332	185
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	54.2
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	13	31	31	9	27	27	9	40	40	10	41	41
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	34	25	34	23	23	44	36	36	44	35	35
g / C, Green / Cycle	0.38	0.28	0.38	0.26	0.26	0.49	0.40	0.40	0.49	0.39	0.39
(v / s)_i Volume / Saturation Flow Rate	0.12	0.15	0.35	0.04	0.19	0.30	0.31	0.31	0.10	0.46	0.47
s, saturation flow rate [veh/h]	1100	1483	1151	1669	1419	518	1669	1660	637	1669	1600
c, Capacity [veh/h]	498	410	417	430	365	250	670	667	297	646	619
d1, Uniform Delay [s]	19.08	27.64	37.00	25.90	30.59	20.46	23.33	23.33	15.86	27.58	27.58
k, delay calibration	0.11	0.11	0.44	0.11	0.11	0.37	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.27	1.09	33.87	0.18	2.87	8.13	8.33	8.38	1.59	100.13	108.62
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.54	0.97	0.16	0.73	0.61	0.77	0.77	0.21	1.19	1.21
d, Delay for Lane Group [s/veh]	19.36	28.73	70.87	26.08	33.46	28.58	31.66	31.72	17.45	127.72	136.21
Lane Group LOS	B	C	E	C	C	C	C	C	B	F	F
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.82	4.05	10.53	1.13	5.32	2.13	10.08	10.03	0.72	30.35	30.54
50th-Percentile Queue Length [ft/ln]	45.47	101.19	263.20	28.32	132.94	53.34	251.95	250.82	18.12	758.78	763.58
95th-Percentile Queue Length [veh/ln]	3.27	7.29	15.85	2.04	9.10	3.84	15.28	15.23	1.30	44.12	44.76
95th-Percentile Queue Length [ft/ln]	81.85	182.14	396.24	50.97	227.49	96.02	382.11	380.69	32.61	1102.90	1119.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.36	28.73	28.73	70.87	26.08	33.46	28.58	31.69	31.72	17.45	131.31	136.21
Movement LOS	B	C	C	E	C	C	C	C	C	B	F	F
d_A, Approach Delay [s/veh]	25.26			53.11			31.29			127.41		
Approach LOS	C			D			C			F		
d_I, Intersection Delay [s/veh]	74.33											
Intersection LOS	E											
Intersection V/C	0.773											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	35.0	0.0	25.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	16.81	0.00	23.47
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.563	0.000	3.553
Crosswalk LOS	F	B	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	467	756	778
d_b, Bicycle Delay [s]	23.47	26.45	17.42	16.81
l_b,int, Bicycle LOS Score for Intersection	2.135	2.782	2.536	2.862
Bicycle LOS	B	C	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 59: Indianapolis Road & Future Minor Collector

Control Type:	Roundabout	Delay (sec / veh):	6.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road		Indianapolis Road		Future Minor Collector	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Indianapolis Road		Indianapolis Road		Future Minor Collector	
Base Volume Input [veh/h]	0	567	341	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	480	400	84	78	9
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	1047	741	84	78	9
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	285	201	23	21	2
Total Analysis Volume [veh/h]	5	1138	805	91	85	10
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	88		5		829	
Exiting Flow Rate [veh/h]	839		1260		99	
Demand Flow Rate [veh/h]	5	1047	741	84	78	9
Adjusted Demand Flow Rate [veh/h]	5	1138	805	91	85	10

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1380.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	554	624	434	490	98
Capacity of Entry and Bypass Lanes [veh/h]	1312	1312	1414	1414	593
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1274	1274	1373	1373	576
X, volume / capacity	0.42	0.48	0.31	0.35	0.17

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	2.14	2.64	1.31	1.57	0.59
95th-Percentile Queue Length [ft]	53.51	66.00	32.85	39.15	14.70
Approach Delay [s/veh]	7.39		5.54		8.32
Approach LOS	A		A		A
Intersection Delay [s/veh]	6.65				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 60: 750 S & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	425 East						750 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	425 East						750 South		
Base Volume Input [veh/h]	0	0	2	0	3	43	0	52	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	68	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	2	0	3	111	0	103	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	0	1	30	0	28	0
Total Analysis Volume [veh/h]	0	0	2	0	3	121	0	112	1
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.80	9.84	8.85	8.68	7.45	0.00	8.71	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.16	0.16	0.16	0.13	0.13	0.13	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.85			0.18			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	0.17								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 61: 750 S & 475 E

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	475 East			750 South			750 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	475 East			750 South			750 South		
Base Volume Input [veh/h]	0	5	16	0	30	27	0	44	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	93	0	266	83
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	16	0	30	120	0	310	104
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	4	0	8	33	0	84	28
Total Analysis Volume [veh/h]	0	5	17	0	33	130	0	337	113
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free		
Flared Lane	No								
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance	No								
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.03	0.00	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.08	13.17	10.74	11.29	8.29	0.00	8.76	0.00	0.00
Movement LOS	B	B	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.12	0.06	0.06	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.88	2.88	2.88	1.40	1.40	1.40	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.29			1.68			0.00		
Approach LOS	B			A			A		
d_I, Intersection Delay [s/veh]	0.82								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 62: County Road 750 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.077

Intersection Setup

Name	South 600 East		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	South 600 East		750 South		750 South	
Base Volume Input [veh/h]	5	30	127	2	20	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	42	69	6	27	114
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	72	196	8	47	169
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	20	53	2	13	46
Total Analysis Volume [veh/h]	39	78	213	9	51	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.10	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	13.25	10.50	0.00	0.00	7.74	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.62	0.62	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	15.50	15.50	0.00	0.00	2.19	2.19
d_A, Approach Delay [s/veh]	11.41		0.00		1.68	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	3.01					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 63: Indianapolis Road & 750 S

Control Type:	Two-way stop	Delay (sec / veh):	437.6
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.556

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			750 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			750 South		
Base Volume Input [veh/h]	0	30	300	0	196	60	0	96	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	28	272	0	251	118	0	121	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	58	572	0	447	178	0	217	129
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	16	155	0	121	48	0	59	35
Total Analysis Volume [veh/h]	0	63	622	0	486	193	0	236	140
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free			Free			Stop		
Flared Lane							No		
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance							No		
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.07	0.01	0.00	0.00	0.00	0.00	1.56	0.27
d_M, Delay for Movement [s/veh]	16.96	9.04	0.00	12.91	0.00	0.00	437.23	437.58	420.89
Movement LOS	C	A	A	B	A	A	F	F	F
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.11	0.00	0.00	0.00	26.62	26.62	26.62
95th-Percentile Queue Length [ft/ln]	2.72	2.72	2.72	0.00	0.00	0.00	665.40	665.40	665.40
d_A, Approach Delay [s/veh]	0.83			0.00			431.37		
Approach LOS	A			A			F		
d_I, Intersection Delay [s/veh]	93.54								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 64: SR 267 & Proposed Ronald Reagan Corridor

Control Type:	Roundabout	Delay (sec / veh):	7.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	State Road 267		State Road 267		Proposed Ronald Reagan Corridor	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	60.00		60.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	State Road 267		State Road 267		Proposed Ronald Reagan Corridor	
Base Volume Input [veh/h]	205	50	144	208	50	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	291	17	228	330	6	173
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	496	67	372	538	56	359
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	135	18	101	146	15	98
Total Analysis Volume [veh/h]	539	73	404	585	61	390
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	416		63		555	
Exiting Flow Rate [veh/h]	665		555		491	
Demand Flow Rate [veh/h]	496	67	372	538	56	359
Adjusted Demand Flow Rate [veh/h]	539	73	404	585	61	390

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1380.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00102	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	297	335	417	603	63	0
Capacity of Entry and Bypass Lanes [veh/h]	973	973	1342	1342	784	886
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	945	945	1303	1303	761	861
X, volume / capacity	0.30	0.34	0.31	0.45	0.08	0.45

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.29	1.54	1.33	2.38	0.26	2.39
95th-Percentile Queue Length [ft]	32.35	38.49	33.34	59.60	6.52	59.80
Approach Delay [s/veh]	7.27		6.56		9.29	
Approach LOS	A		A		A	
Intersection Delay [s/veh]	7.37					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 65: Proposed Ronald Reagan Spur & 475 E

Control Type:	Roundabout	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	475 E		475 E		Proposed Ronald Reagan Spur	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	475 E		475 E		Proposed Ronald Reagan Spur	
Base Volume Input [veh/h]	0	13	11	193	236	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	56	253	498	370	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	69	264	691	606	17
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	19	72	188	165	5
Total Analysis Volume [veh/h]	2	75	287	751	659	18
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	679		2		296	
Exiting Flow Rate [veh/h]	296		756		776	
Demand Flow Rate [veh/h]	2	69	264	691	606	17
Adjusted Demand Flow Rate [veh/h]	2	75	287	751	659	18

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1420.00	1420.00	1380.00	1380.00
B (coefficient)	0.00102	0.00091	0.00091	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	80	296	774	679	0
Capacity of Entry and Bypass Lanes [veh/h]	691	1418	1418	1021	1021
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	671	1377	1377	992	992
X, volume / capacity	0.11	0.21	0.55	0.66	0.02

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.39	0.79	3.45	5.28	0.06
95th-Percentile Queue Length [ft]	9.68	19.65	86.30	132.05	1.39
Approach Delay [s/veh]	6.64	7.31		13.58	
Approach LOS	A	A		B	
Intersection Delay [s/veh]	9.65				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 66: Proposed Ronald Reagan Corridor & Proposed Ronald Reagan Spur

Control Type:	Roundabout	Delay (sec / veh):	7.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Spur	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Spur	
Base Volume Input [veh/h]	236	236	0	194	193	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	230	355	31	135	393	107
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	466	591	31	329	586	107
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	127	161	8	89	159	29
Total Analysis Volume [veh/h]	507	642	34	358	637	116
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		2		2	
Circulating Flow Rate [veh/h]	35		656		522	
Exiting Flow Rate [veh/h]	1025		642		35	
Demand Flow Rate [veh/h]	466	591	31	329	586	107
Adjusted Demand Flow Rate [veh/h]	507	642	34	358	637	116

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00091	0.00091	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	246	277	0	190	214	412	365
Capacity of Entry and Bypass Lanes [veh/h]	1376	1376	1379	739	813	835	911
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1336	1336	1339	717	790	811	885
X, volume / capacity	0.18	0.20	0.48	0.26	0.26	0.49	0.40

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.65	0.75	2.68	1.02	1.06	2.76	1.94
95th-Percentile Queue Length [ft]	16.21	18.79	67.09	25.56	26.41	69.02	48.60
Approach Delay [s/veh]	6.10			7.75		10.02	
Approach LOS	A			A		B	
Intersection Delay [s/veh]	7.67						
Intersection LOS	A						

Intersection Level Of Service Report
Intersection 67: Proposed Ronald Reagan Corridor & Whitestown Parkway

Control Type:	Roundabout	Delay (sec / veh):	15.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	Pr Ro			Pr Ro			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Pr Ro			Pr Ro			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	42	384	46	35	324	28	33	284	27	36	25	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	520	98	39	452	0	25	66	0	211	118	145
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	904	144	74	776	28	58	350	27	247	143	200
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	246	39	20	211	8	16	95	7	67	39	54
Total Analysis Volume [veh/h]	66	983	157	80	843	30	63	380	29	268	155	217
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	539			504			1227			1145		
Exiting Flow Rate [veh/h]	1174			1301			259			474		
Demand Flow Rate [veh/h]	61	904	144	74	776	28	58	350	27	247	143	200
Adjusted Demand Flow Rate [veh/h]	66	983	157	80	843	30	63	380	29	268	155	217

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00091	0.00091	0.00085	0.00091	0.00091	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	508	573	0	462	521	229	258	310	350
Capacity of Entry and Bypass Lanes [veh/h]	870	870	950	898	898	437	501	471	537
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	845	845	922	872	872	424	486	457	521
X, volume / capacity	0.58	0.66	0.17	0.51	0.58	0.52	0.51	0.66	0.65

Movement, Approach, & Intersection Results

Lane LOS	B	C	A	B	B	C	C	D	C
95th-Percentile Queue Length [veh]	3.87	5.07	0.61	3.00	3.81	2.95	2.90	4.66	4.65
95th-Percentile Queue Length [ft]	96.71	126.74	15.30	75.01	95.37	73.71	72.44	116.61	116.28
Approach Delay [s/veh]	13.12			11.81		18.74		23.54	
Approach LOS	B			B		C		C	
Intersection Delay [s/veh]	15.59								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 68: Proposed Ronald Reagan Corridor & 750 S

Control Type:	Roundabout	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Pr Ro			Pr Ro			750 South			750 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Pr Ro			Pr Ro			750 South			750 South		
Base Volume Input [veh/h]	28	416	28	23	341	23	28	6	23	23	9	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	405	24	48	354	261	62	21	5	37	59	169
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	821	52	71	695	284	90	27	28	60	68	197
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	223	14	19	189	77	24	7	8	16	18	54
Total Analysis Volume [veh/h]	54	892	57	77	755	309	98	29	30	65	74	214
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	210			199			924			1075		
Exiting Flow Rate [veh/h]	876			1240			450			168		
Demand Flow Rate [veh/h]	50	821	52	71	695	284	90	27	28	60	68	197
Adjusted Demand Flow Rate [veh/h]	54	892	57	77	755	309	98	29	30	65	74	214

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	486	548	553	623	86	77	364
Capacity of Entry and Bypass Lanes [veh/h]	1173	1173	1186	1186	578	648	570
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1139	1139	1151	1151	561	629	553
X, volume / capacity	0.41	0.47	0.47	0.53	0.15	0.12	0.64

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A	C
95th-Percentile Queue Length [veh]	2.07	2.54	2.54	3.18	0.52	0.40	4.49
95th-Percentile Queue Length [ft]	51.70	63.54	63.39	79.41	12.97	9.92	112.34
Approach Delay [s/veh]	7.86		8.70		7.72		20.50
Approach LOS	A		A		A		C
Intersection Delay [s/veh]	9.89						
Intersection LOS	A						

Intersection Level Of Service Report
Intersection 69: 100 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	19.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.269

Intersection Setup

Name	600 E		100 South		100 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	600 E		100 South		100 South	
Base Volume Input [veh/h]	0	0	22	2	0	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	93	70	171	159	104	102
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	93	70	193	161	104	137
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	19	52	44	28	37
Total Analysis Volume [veh/h]	101	76	210	175	113	149
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.27	0.10	0.00	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	19.01	14.28	0.00	0.00	8.22	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.70	1.70	0.00	0.00	0.20	0.20
95th-Percentile Queue Length [ft/ln]	42.50	42.50	0.00	0.00	5.02	5.02
d_A, Approach Delay [s/veh]	16.98		0.00		3.54	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	4.77					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 70: 300 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.446

Intersection Setup

Name	South 400 East			South 400 East			300 South			300 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			300 South			300 South		
Base Volume Input [veh/h]	20	109	3	5	73	4	3	20	11	11	37	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	129	0	32	197	0	0	0	0	0	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	238	3	37	270	4	3	20	11	11	37	67
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	65	1	10	73	1	1	5	3	3	10	18
Total Analysis Volume [veh/h]	22	259	3	40	293	4	3	22	12	12	40	73
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	747	756	657	697
Degree of Utilization, x	0.38	0.45	0.06	0.18

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.78	2.31	0.18	0.65
95th-Percentile Queue Length [ft]	44.60	57.80	4.47	16.23
Approach Delay [s/veh]	10.74	11.54	8.81	9.29
Approach LOS	B	B	A	A
Intersection Delay [s/veh]	10.76			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 71: SR 267 & 550 S

Control Type:	Roundabout	Delay (sec / veh):	7.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	State Road 267			State Road 267			550 South				550 South			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00			60.00			45.00				45.00			
Grade [%]	0.00			0.00			0.00				0.00			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	State Road 267			State Road 267			550 South				550 South			
Base Volume Input [veh/h]	17	279	11	9	216	33	0	34	82	15	0	13	31	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	375	66	1	492	87	0	70	42	34	0	32	20	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	654	77	10	708	120	0	104	124	49	0	45	51	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	11	178	21	3	192	33	0	28	34	13	0	12	14	5
Total Analysis Volume [veh/h]	43	711	84	11	770	130	0	113	135	53	0	49	55	22
Pedestrian Volume [ped/h]	0			0			0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2				2			
Circulating Flow Rate [veh/h]	267			151			855				893			
Exiting Flow Rate [veh/h]	898			871			235				237			
Demand Flow Rate [veh/h]	40	654	77	10	708	120	0	104	124	49	0	45	51	20
Adjusted Demand Flow Rate [veh/h]	43	711	84	11	770	130	0	113	135	53	0	49	55	22

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	406	458	442	498	311	130
Capacity of Entry and Bypass Lanes [veh/h]	1114	1114	1238	1238	687	665
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1082	1082	1202	1202	667	646
X, volume / capacity	0.36	0.41	0.36	0.40	0.45	0.20

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	1.69	2.04	1.63	1.97	2.35	0.72
95th-Percentile Queue Length [ft]	42.13	50.96	40.85	49.33	58.73	18.00
Approach Delay [s/veh]	7.38		6.74		12.03	7.90
Approach LOS	A		A		B	A
Intersection Delay [s/veh]	7.78					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 72: 750 S & 450 E

Control Type:	Two-way stop	Delay (sec / veh):	23.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.117

Intersection Setup

Name	450 E		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	450 E		750 South		750 South	
Base Volume Input [veh/h]	10	37	60	11	12	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	72	16	53	305	37
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	109	76	64	317	100
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	30	21	17	86	27
Total Analysis Volume [veh/h]	26	118	83	70	345	109
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.00	0.00	0.24	0.00
d_M, Delay for Movement [s/veh]	23.09	10.81	0.00	0.00	8.03	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.95	0.95	0.00	0.00	0.73	0.73
95th-Percentile Queue Length [ft/ln]	23.71	23.71	0.00	0.00	18.25	18.25
d_A, Approach Delay [s/veh]	13.03		0.00		6.10	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	6.19					
Intersection LOS	C					

PM Peak Hour

Intersection Level Of Service Report
Intersection 1: 100 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	24.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.884

Intersection Setup

Name	South 400 East			South 400 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			100 South			100 South		
Base Volume Input [veh/h]	6	83	3	2	48	1	7	44	7	1	28	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	133	360	91	95	0	0	0	0	99	0	74
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	216	363	93	143	1	7	44	7	100	28	75
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	59	99	25	39	0	2	12	2	27	8	20
Total Analysis Volume [veh/h]	7	235	395	101	155	1	8	48	8	109	30	82
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	721	605	524	570
Degree of Utilization, x	0.88	0.42	0.12	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	11.09	2.11	0.41	1.83
95th-Percentile Queue Length [ft]	277.19	52.85	10.36	45.65
Approach Delay [s/veh]	33.54	13.28	10.82	13.27
Approach LOS	D	B	B	B
Intersection Delay [s/veh]	24.09			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 2: 100 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	161.7
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.833

Intersection Setup

Name	500 East			500 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	500 East			500 East			100 South			100 South		
Base Volume Input [veh/h]	6	77	3	0	29	2	4	40	8	2	22	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	20	0	105	28	48	93	350	9	0	120	91
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	97	3	105	57	50	97	390	17	2	142	92
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	26	1	29	15	14	26	106	5	1	39	25
Total Analysis Volume [veh/h]	12	105	3	114	62	54	105	424	18	2	154	100
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.43	0.00	0.83	0.24	0.06	0.08	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	40.99	33.92	25.13	161.68	149.20	139.71	7.88	0.00	0.00	8.24	0.00	0.00
Movement LOS	E	D	D	F	F	F	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.58	2.58	2.58	11.15	11.15	11.15	0.19	0.19	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	64.57	64.57	64.57	278.86	278.86	278.86	4.68	4.68	4.68	0.09	0.09	0.09
d_A, Approach Delay [s/veh]	34.41			153.16			1.51			0.06		
Approach LOS	D			F			A			A		
d_I, Intersection Delay [s/veh]	34.87											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 3: 100 S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	66.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.614

Intersection Setup

Name	650 East				650 East				100 South				100 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	650 East				650 East				100 South				100 South			
Base Volume Input [veh/h]	0	24	71	0	0	4	78	1	0	4	15	20	0	0	4	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	168	63	0	0	0	61	119	0	136	0	171	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	192	134	0	0	4	139	120	0	140	15	191	0	0	4	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	52	36	0	0	1	38	33	0	38	4	52	0	0	1	0
Total Analysis Volume [veh/h]	0	209	146	0	0	4	151	130	0	152	16	208	0	0	4	0
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.06	0.25	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	11.58	8.08	0.00	0.00	8.86	7.52	0.00	0.00	66.07	66.24	65.35	56.09	28.94	29.24	20.14	9.26
Movement LOS	B	A	A	A	A	A	A	A	F	F	F	F	D	D	C	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.39	0.39	0.01	0.01	0.01	0.01	10.18	10.18	10.18	10.18	0.05	0.05	0.05	0.05
95th-Percentile Queue Length [ft/ln]	9.83	9.83	9.83	9.83	0.18	0.18	0.18	0.18	254.4	254.4	254.4	254.4	1.26	1.26	1.26	1.26
d_A, Approach Delay [s/veh]	4.76				0.11				60.59				20.14			
Approach LOS	A				A				F				C			
d_I, Intersection Delay [s/veh]	24.10															
Intersection LOS	F															

Intersection Level Of Service Report
Intersection 4: 200 S & 600 East (575 Realigned)

Control Type:	All-way stop	Delay (sec / veh):	17.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.718

Intersection Setup

Name	600 East (575 Realigned)			600 East			East 200 South				200 South			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00				40.00			
Grade [%]	0.00			0.00			0.00				0.00			
Crosswalk	No			No			No				No			

Volumes

Name	600 East (575 Realigned)			600 East			East 200 South				200 South			
Base Volume Input [veh/h]	2	1	0	1	0	2	0	0	13	0	0	2	11	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	381	168	37	300	4	0	3	17	0	0	134	53	45
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	382	168	38	300	6	0	3	30	0	0	136	64	47
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	1	104	46	10	82	2	0	1	8	0	0	37	17	13
Total Analysis Volume [veh/h]	2	415	183	41	326	7	0	3	33	0	0	148	70	51
Pedestrian Volume [ped/h]	0			0			0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	580	656	601	494	557
Degree of Utilization, x	0.72	0.28	0.62	0.07	0.48

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.93	1.14	4.29	0.23	2.61
95th-Percentile Queue Length [ft]	148.23	28.47	107.30	5.87	65.29
Approach Delay [s/veh]	19.21		18.34	10.85	15.35
Approach LOS	C		C	B	C
Intersection Delay [s/veh]	17.91				
Intersection LOS	C				

Intersection Level Of Service Report
Intersection 5: 650 E & 200 S

Control Type:	Two-way stop	Delay (sec / veh):	71.4
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.108

Intersection Setup

Name	650 East			650 East			200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			200 South			200 South		
Base Volume Input [veh/h]	5	86	14	14	82	1	0	18	3	11	8	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	65	0	153	72	8	3	68	1	8	161	162
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	151	14	167	154	9	3	86	4	19	169	172
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	41	4	45	42	2	1	23	1	5	46	47
Total Analysis Volume [veh/h]	5	164	15	182	167	10	3	93	4	21	184	187
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.13	0.00	0.00	0.04	0.31	0.00	0.11	0.61	0.22
d_M, Delay for Movement [s/veh]	7.59	0.00	0.00	7.82	0.00	0.00	61.43	24.07	16.14	71.42	64.95	57.06
Movement LOS	A	A	A	A	A	A	F	C	C	F	F	F
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.01	0.34	0.34	0.34	1.56	1.56	1.56	10.61	10.61	10.61
95th-Percentile Queue Length [ft/ln]	0.21	0.21	0.21	8.53	8.53	8.53	39.04	39.04	39.04	265.26	265.26	265.26
d_A, Approach Delay [s/veh]	0.21			3.96			24.88			61.53		
Approach LOS	A			A			C			F		
d_I, Intersection Delay [s/veh]	27.12											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 6: 200 S & 700 E

Control Type:	All-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.532

Intersection Setup

Name	700 East				700 East				200 South				200 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	700 East				700 East				200 South				200 South			
Base Volume Input [veh/h]	0	6	15	16	0	2	15	0	0	2	28	6	0	18	27	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	318	0	0	0	0	0	0	0	0	24	190	0	4	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	324	15	16	0	2	15	0	0	2	52	196	0	22	36	2
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	88	4	4	0	1	4	0	0	1	14	53	0	6	10	1
Total Analysis Volume [veh/h]	0	352	16	17	0	2	16	0	0	2	57	213	0	24	39	2
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	724	671	775	662
Degree of Utilization, x	0.53	0.03	0.35	0.10

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.17	0.08	1.58	0.33
95th-Percentile Queue Length [ft]	79.27	2.07	39.52	8.14
Approach Delay [s/veh]	13.48	8.51	10.13	9.04
Approach LOS	B	A	B	A
Intersection Delay [s/veh]	11.74			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 7: 500 E & Future Minor Collector

Control Type:	Two-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.084

Intersection Setup

Name	500 East		500 East			
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	500 East		500 East			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	184	68	8	238	40	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	184	68	8	238	40	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	18	2	65	11	2
Total Analysis Volume [veh/h]	200	74	9	259	43	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.08	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.82	0.00	12.67	10.18
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.30	0.30
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.38	0.38	7.59	7.59
d_A, Approach Delay [s/veh]	0.00		0.26		12.32	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.16					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: 600 East (575 Realigned) & Future Minor Collector

Control Type:	All-way stop	Delay (sec / veh):	22.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.795

Intersection Setup

Name	600 East (575 Realigned)			600 East (575 Realigned)						Madera Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	500.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	600 East (575 Realigned)			600 East (575 Realigned)						Madera Drive		
Base Volume Input [veh/h]	0	7	0	0	11	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	833	92	0	678	6	4	0	0	41	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	840	92	0	689	6	4	0	0	41	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	228	25	0	187	2	1	0	0	11	0	0
Total Analysis Volume [veh/h]	0	913	100	0	749	7	4	0	0	45	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	637	653	604	606	500	510
Degree of Utilization, x	0.80	0.78	0.63	0.62	0.01	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	7.86	7.39	4.34	4.32	0.02	0.29
95th-Percentile Queue Length [ft]	196.40	184.68	108.48	108.00	0.60	7.23
Approach Delay [s/veh]	25.62		18.02		10.26	10.75
Approach LOS	D		C		B	B
Intersection Delay [s/veh]	22.06					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: 650 E/Main St & Madera Drive

Control Type:	Two-way stop	Delay (sec / veh):	17.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.110

Intersection Setup

Name	North Main Street			650 East			Madera Drive	
Approach	Northbound			Southbound			Eastbound	
Lane Configuration								
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			25.00	
Grade [%]	0.00			0.00			0.00	
Crosswalk	No			No			Yes	

Volumes

Name	North Main Street			650 East			Madera Drive	
Base Volume Input [veh/h]	0	89	107	0	79	13	6	54
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	15	129	0	178	25	28	48
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	104	236	0	257	38	34	102
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	28	64	0	70	10	9	28
Total Analysis Volume [veh/h]	0	113	257	0	279	41	37	111
Pedestrian Volume [ped/h]	0			0			0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.09	0.00	0.00	0.00	0.00	0.11	0.15
d_M, Delay for Movement [s/veh]	10.81	8.21	0.00	9.55	0.00	0.00	16.98	10.57
Movement LOS	B	A	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.30	0.30	0.00	0.00	0.00	0.00	0.37	0.51
95th-Percentile Queue Length [ft/ln]	7.54	7.54	0.00	0.00	0.00	0.00	9.15	12.80
d_A, Approach Delay [s/veh]	2.51			0.00			12.17	
Approach LOS	A			A			B	
d_I, Intersection Delay [s/veh]	3.26							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 10: 700 E & Future Minor Collector

Control Type:	Roundabout	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	700 East				700 East									
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	31.06				31.07				30.00			30.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	700 East				700 East									
Base Volume Input [veh/h]	0	0	70	0	0	0	162	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	38	285	275	0	40	169	0	0	9	26	216	10	52
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	38	355	275	0	40	331	0	0	9	26	216	10	52
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	96	75	0	11	90	0	0	2	7	59	3	14
Total Analysis Volume [veh/h]	0	41	386	299	0	43	360	0	0	10	28	235	11	57
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	55				296				657				440			
Exiting Flow Rate [veh/h]	642				456				54				363			
Demand Flow Rate [veh/h]	0	38	355	275	0	40	331	0	0	9	26		216	10	52	
Adjusted Demand Flow Rate [veh/h]	0	41	386	299	0	43	360	0	0	10	28		235	11	57	

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	748	416	40	313
Capacity of Entry and Bypass Lanes [veh/h]	1306	1021	706	882
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1268	992	686	856
X, volume / capacity	0.57	0.41	0.06	0.35

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	3.81	2.00	0.18	1.61
95th-Percentile Queue Length [ft]	95.24	50.04	4.39	40.20
Approach Delay [s/veh]	9.44	8.13	5.84	8.27
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.75			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 11: Pierce Street/300 S & 600 East (575 Realigned)

Control Type:	Roundabout	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	600 East (575 Realigned)			600 East (575 Realigned)			300 South				West Pierce Street			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00				25.00			
Grade [%]	0.00			0.00			0.00				0.00			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	600 East (575 Realigned)			600 East (575 Realigned)			300 South				West Pierce Street			
Base Volume Input [veh/h]	1	0	1	1	3	4	0	8	70	1	0	4	47	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	899	289	11	694	64	0	48	171	0	0	35	143	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	899	290	12	697	68	0	56	241	1	0	39	190	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	244	79	3	189	18	0	15	65	0	0	11	52	2
Total Analysis Volume [veh/h]	1	977	315	13	758	74	0	61	262	1	0	42	207	9
Pedestrian Volume [ped/h]	0			0			0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2				2			
Circulating Flow Rate [veh/h]	346			258			837				1070			
Exiting Flow Rate [veh/h]	825			1078			290				608			
Demand Flow Rate [veh/h]	1	899	290	12	697	68	0	56	241	1	0	39	190	8
Adjusted Demand Flow Rate [veh/h]	1	977	315	13	758	74	0	61	262	1	0	42	207	9

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	626	706	410	462	334	266
Capacity of Entry and Bypass Lanes [veh/h]	1037	1037	1124	1124	697	572
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1007	1007	1091	1091	677	556
X, volume / capacity	0.60	0.68	0.36	0.41	0.48	0.46

Movement, Approach, & Intersection Results

Lane LOS	B	B	A	A	B	B
95th-Percentile Queue Length [veh]	4.22	5.62	1.69	2.04	2.60	2.44
95th-Percentile Queue Length [ft]	105.45	140.49	42.13	50.96	65.07	61.10
Approach Delay [s/veh]	13.15		7.34		12.51	14.31
Approach LOS	B		A		B	B
Intersection Delay [s/veh]	11.38					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 12: Main & Pierce

Control Type:	All-way stop	Delay (sec / veh):	173.8
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.452

Intersection Setup

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				25.00				20.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Base Volume Input [veh/h]	0	19	173	25	0	8	124	17	0	26	22	29	0	53	27	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	133	90	0	72	139	0	0	3	391	32	0	145	187	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	29	306	115	0	80	263	17	0	29	413	61	0	198	214	13
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	8	83	31	0	22	71	5	0	8	112	17	0	54	58	4
Total Analysis Volume [veh/h]	0	32	333	125	0	87	286	18	0	32	449	66	0	215	233	14
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	490	391	547	462
Degree of Utilization, x	1.29	1.05	1.45	1.24

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	22.08	13.23	28.48	19.98
95th-Percentile Queue Length [ft]	552.05	330.87	712.01	499.52
Approach Delay [s/veh]	176.41	91.15	242.96	159.27
Approach LOS	F	F	F	F
Intersection Delay [s/veh]	173.84			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 13: Pierce Street & 700 E

Control Type:	Two-way stop	Delay (sec / veh):	2,301.7
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.557

Intersection Setup

Name	700 East		East Pierce Street		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	700 East		East Pierce Street		East 300 South	
Base Volume Input [veh/h]	104	11	13	48	80	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	257	154	261	292	190	337
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	361	165	274	340	270	472
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	98	45	74	92	73	128
Total Analysis Volume [veh/h]	392	179	298	370	293	513
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	5.56	0.34	0.37	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	2301.71	2257.43	10.06	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	62.68	62.68	0.77	0.77	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1566.98	1566.98	19.30	19.30	0.00	0.00
d_A, Approach Delay [s/veh]	2287.83		4.49		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	640.27					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 14: Pierce Street & 300 S & Albert South White Drive

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.186

Intersection Setup

Name	East 300 South			Albert S. White Drive			East 300 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 300 South			Albert S. White Drive			East 300 South		
Base Volume Input [veh/h]	0	72	85	0	144	176	0	201	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	388	161	0	168	838	0	901	359
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	460	246	0	312	1014	0	1102	494
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	125	67	0	85	276	0	299	134
Total Analysis Volume [veh/h]	0	500	267	0	339	1102	0	1198	537
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	1.19	0.00	0.94	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	10000.00	10000.00	10000.00	10000.00	22.75	0.00	21.55	0.00	0.00
Movement LOS	F	F	F	F	C	A	C	A	A
95th-Percentile Queue Length [veh/ln]	98.79	98.79	98.79	3.59	3.59	3.59	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2469.66	2469.66	2469.66	89.69	89.69	89.69	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10000.00			5.35			0.00		
Approach LOS	F			A			A		
d_I, Intersection Delay [s/veh]	1947.18								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 15: Main Street & Future Minor Collector

Control Type:	All-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	South Main Street			South Main Street								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	500.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	South Main Street			South Main Street								
Base Volume Input [veh/h]	0	149	0	0	258	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	42	255	121	9	294	30	10	0	39	69	0	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	404	121	9	552	30	10	0	39	69	0	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	110	33	2	150	8	3	0	11	19	0	1
Total Analysis Volume [veh/h]	46	439	132	10	600	33	11	0	42	75	0	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	616	658	627	636	581	539
Degree of Utilization, x	0.50	0.47	0.51	0.51	0.09	0.15

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	2.81	2.50	2.94	2.86	0.30	0.51
95th-Percentile Queue Length [ft]	70.21	62.61	73.45	71.47	7.50	12.79
Approach Delay [s/veh]	13.59		14.18		9.82	10.84
Approach LOS	B		B		A	B
Intersection Delay [s/veh]	13.56					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 16: Albert S. White Drive & Future Minor Collector

Control Type:	Roundabout	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Albert S. White Drive			Albert S. White Drive								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Albert S. White Drive			Albert S. White Drive								
Base Volume Input [veh/h]	0	194	0	0	263	0	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	851	749	8	1118	17	13	0	12	254	0	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1045	749	8	1381	17	13	0	12	254	0	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	284	204	2	375	5	4	0	3	69	0	1
Total Analysis Volume [veh/h]	12	1136	814	9	1501	18	14	0	13	276	0	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	24			297			1840			1197		
Exiting Flow Rate [veh/h]	1844			1188			31			848		
Demand Flow Rate [veh/h]	11	1045	749	8	1381	17	13	0	12	254	0	3
Adjusted Demand Flow Rate [veh/h]	12	1136	814	9	1501	18	14	0	13	276	0	3

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	950	1072	740	835	28	288
Capacity of Entry and Bypass Lanes [veh/h]	1390	1390	1085	1085	298	514
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1350	1350	1053	1053	289	499
X, volume / capacity	0.68	0.77	0.68	0.77	0.09	0.56

Movement, Approach, & Intersection Results

Lane LOS	B	B	B	C	B	C
95th-Percentile Queue Length [veh]	5.84	8.30	5.67	7.94	0.31	3.39
95th-Percentile Queue Length [ft]	145.97	207.54	141.85	198.40	7.67	84.85
Approach Delay [s/veh]	13.32		15.86		14.22	18.81
Approach LOS	B		C		B	C
Intersection Delay [s/veh]	14.75					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 17: 400 E & Perry Worth Road

Control Type:	Two-way stop	Delay (sec / veh):	28.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	South 400 East			South 400 East			Perry Worth Road		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	South 400 East			South 400 East			Perry Worth Road		
Base Volume Input [veh/h]	0	18	104	0	70	0	0	2	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	533	0	510	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	18	637	0	580	0	0	2	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	173	0	158	0	0	1	2
Total Analysis Volume [veh/h]	0	20	692	0	630	0	0	2	9
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.01	0.02
d_M, Delay for Movement [s/veh]	13.18	8.82	0.00	13.80	0.00	0.00	27.96	28.30	12.84
Movement LOS	B	A	A	B	A	A	D	D	B
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.00	0.00	0.00	0.10	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.84	0.84	0.84	0.00	0.00	0.00	2.43	2.43	2.43
d_A, Approach Delay [s/veh]	0.25			0.00			15.65		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	0.26								
Intersection LOS	D								

Intersections 18 & 19 removed intentionally

Intersection Level Of Service Report
Intersection 20: Albert S. White Dr. (400 S) & 400 E

Control Type:	Signalized	Delay (sec / veh):	416.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.351

Intersection Setup

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Base Volume Input [veh/h]	0	0	0	17	0	79	120	461	1	1	672	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	227	25	49	5	36	470	495	1357	213	45	1242	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	227	25	49	22	36	549	615	1818	214	46	1914	41
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	7	13	6	10	149	167	494	58	13	520	11
Total Analysis Volume [veh/h]	247	27	53	24	39	597	668	1976	233	50	2080	45
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	45
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	6	6	6	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	17	17	17	17	17	17	28	28	28	28	28	28
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	5	5	5	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	10	10	10	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	C	C
C, Cycle Length [s]	45	45	45	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	11	11	11	11	22	22	22	22	22
g / C, Green / Cycle	0.24	0.24	0.24	0.24	0.49	0.49	0.49	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.35	0.05	0.05	0.42	3.93	0.66	0.69	0.98	0.97
s, saturation flow rate [veh/h]	713	1507	1387	1419	170	1669	1610	729	1511
c, Capacity [veh/h]	240	368	449	347	160	816	787	442	739
d1, Uniform Delay [s]	21.66	13.56	13.36	17.00	22.50	11.50	11.50	12.31	11.50
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	65.85	1.35	0.65	336.42	1443.39	167.00	189.26	286.51	445.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.03	0.22	0.14	1.72	4.18	1.35	1.40	1.61	1.98
d, Delay for Lane Group [s/veh]	87.51	14.92	14.01	353.42	1465.89	178.50	200.76	298.83	456.97
Lane Group LOS	F	B	B	F	F	F	F	F	F
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	6.70	0.69	0.51	35.43	65.62	42.73	46.07	37.61	95.82
50th-Percentile Queue Length [ft/ln]	167.45	17.31	12.77	885.70	1640.42	1068.37	1151.68	940.28	2395.50
95th-Percentile Queue Length [veh/ln]	11.10	1.25	0.92	56.67	113.85	65.01	70.81	61.86	155.78
95th-Percentile Queue Length [ft/ln]	277.58	31.16	22.99	1416.78	2846.21	1625.17	1770.30	1546.39	3894.54

Movement, Approach, & Intersection Results

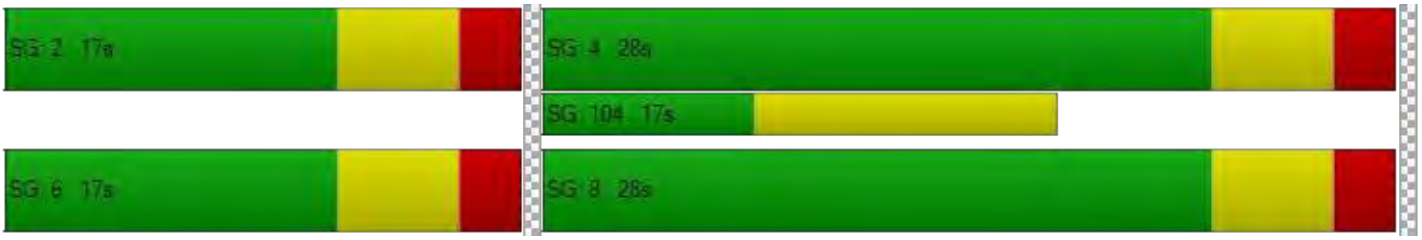
d_M, Delay for Movement [s/veh]	87.51	14.92	14.92	14.01	14.01	353.42	1465.89	188.32	200.76	298.83	406.56	456.97
Movement LOS	F	B	B	B	B	F	F	F	F	F	F	F
d_A, Approach Delay [s/veh]	69.75			321.02			485.96			405.13		
Approach LOS	E			F			F			F		
d_I, Intersection Delay [s/veh]	416.29											
Intersection LOS	F											
Intersection V/C	4.351											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	12.84	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	3.305	0.000	0.000
Crosswalk LOS	F	C	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	978	978
d_b, Bicycle Delay [s]	12.84	12.84	5.88	5.88
l_b,int, Bicycle LOS Score for Intersection	2.099	2.649	3.933	3.354
Bicycle LOS	B	B	D	C

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: Albert S. White Dr. (400 S) & 450 E/Anson Blvd

Control Type:	Signalized	Delay (sec / veh):	223.5
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.337

Intersection Setup

Name	Anson Boulevard			450 East			Albert S. White Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Anson Boulevard			450 East			Albert S. White Drive					
Base Volume Input [veh/h]	168	1	40	13	7	27	14	437	97	22	404	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	5	14	5	18	693	307	1095	9	6	600	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	176	6	54	18	25	720	321	1532	106	28	1004	17
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	2	15	5	7	196	87	416	29	8	273	5
Total Analysis Volume [veh/h]	191	7	59	20	27	783	349	1665	115	30	1091	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	55
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	6	6	6	2	2	2	8	8	8	4	4	4
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	Lag	-	-	Lag	-	-	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	27	27	27	27	27	27	28	28	28	28	28	28
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	14	14	14	10	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	C	C	C
C, Cycle Length [s]	55	55	55	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	21	21	21	21	22	22	22	22	22
g / C, Green / Cycle	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.32	0.05	0.02	0.57	0.77	0.53	0.55	0.49	0.48
s, saturation flow rate [veh/h]	601	1442	1192	1426	454	1669	1632	834	1513
c, Capacity [veh/h]	131	551	507	545	131	668	653	404	605
d1, Uniform Delay [s]	27.50	11.01	13.09	17.00	27.50	16.50	16.50	15.31	16.50
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	243.62	0.44	0.15	229.03	771.08	159.85	173.18	47.85	107.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.46	0.12	0.04	1.49	2.67	1.33	1.36	1.01	1.21
d, Delay for Lane Group [s/veh]	271.12	11.46	13.24	246.03	798.58	176.35	189.68	63.16	124.47
Lane Group LOS	F	B	B	F	F	F	F	F	F
Critical Lane Group	No	No	No	Yes	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	10.48	0.52	0.17	40.02	29.60	36.14	37.75	8.69	24.02
50th-Percentile Queue Length [ft/ln]	262.03	13.04	4.13	1000.57	740.06	903.49	943.78	217.25	600.61
95th-Percentile Queue Length [veh/ln]	18.87	0.94	0.30	62.65	52.78	54.77	57.56	13.63	36.12
95th-Percentile Queue Length [ft/ln]	471.66	23.48	7.44	1566.37	1319.47	1369.22	1439.01	340.71	903.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	271.12	11.46	11.46	13.24	246.03	246.03	798.58	182.56	189.68	63.16	103.18	124.47
Movement LOS	F	B	B	B	F	F	F	F	F	E	F	F
d_A, Approach Delay [s/veh]	204.44			240.42			283.92			102.46		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	223.48											
Intersection LOS	F											
Intersection V/C	1.337											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	17.60	17.60	0.00	17.60
l_p,int, Pedestrian LOS Score for Intersectio	2.095	2.931	0.000	3.069
Crosswalk LOS	B	C	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	764	764	800	800
d_b, Bicycle Delay [s]	10.51	10.51	9.90	9.90
l_b,int, Bicycle LOS Score for Intersection	1.984	2.929	3.316	2.499
Bicycle LOS	A	C	C	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 22: Albert S. White Dr. (400 S) & 500 E

Control Type:	All-way stop	Delay (sec / veh):	205.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.616

Intersection Setup

Name	500 East			500 East								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			No			Yes		

Volumes

Name	500 East			500 East								
Base Volume Input [veh/h]	99	22	5	13	11	81	91	205	70	6	230	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	45	21	9	27	56	430	688	7	5	562	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	67	26	22	38	137	521	893	77	11	792	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	18	7	6	10	37	142	243	21	3	215	4
Total Analysis Volume [veh/h]	115	73	28	24	41	149	566	971	84	12	861	15
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	279	272	291	566	528	528	444	444
Degree of Utilization, x	0.77	0.24	0.51	1.62	1.43	1.42	1.30	1.30

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.89	0.91	2.73	33.33	27.19	26.77	20.90	20.79
95th-Percentile Queue Length [ft]	147.25	22.82	68.34	833.25	679.71	669.29	522.46	519.75
Approach Delay [s/veh]	49.27	25.20		260.82			184.92	
Approach LOS	E	D		F			F	
Intersection Delay [s/veh]	205.18							
Intersection LOS	F							

Intersection Level Of Service Report
Intersection 23: Albert S. White Dr. (400 S) & 575 E

Control Type:	Signalized	Delay (sec / veh):	42.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.870

Intersection Setup

Name	575 East			575 East						400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	200.00	100.00	200.00	200.00	100.00	200.00	200.00	100.00	200.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00			45.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	575 East			575 East						400 S		
Base Volume Input [veh/h]	46	11	69	9	7	9	14	255	7	8	165	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	1306	551	2	933	179	380	336	21	770	404	35
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	236	0	0	71	0	0	11	0	0	0
Total Hourly Volume [veh/h]	50	1317	384	11	940	117	394	591	17	778	569	47
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	358	104	3	255	32	107	161	5	211	155	13
Total Analysis Volume [veh/h]	54	1432	417	12	1022	127	428	642	18	846	618	51
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	0
Auxiliary Signal Groups			6,7			2,3			1,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	0
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	37	44	44	9	16	16	9	24	24	23	38	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	49	44	67	49	41	50	43	20	28	43	34	34
g / C, Green / Cycle	0.49	0.44	0.67	0.49	0.41	0.50	0.43	0.20	0.28	0.43	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.09	0.45	0.29	0.04	0.32	0.09	0.26	0.20	0.01	0.39	0.20	0.20
s, saturation flow rate [veh/h]	578	3179	1419	318	3179	1419	1617	3179	1419	2195	1669	1625
c, Capacity [veh/h]	262	1385	945	163	1303	710	604	636	397	809	568	553
d1, Uniform Delay [s]	18.11	28.22	7.91	23.10	25.65	13.73	24.61	40.00	26.25	25.08	27.30	27.36
k, delay calibration	0.11	0.50	0.50	0.50	0.50	0.50	0.11	0.11	0.11	0.14	0.16	0.16
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	33.41	1.50	0.88	4.78	0.55	1.55	19.04	0.05	30.02	1.44	1.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	1.03	0.44	0.07	0.78	0.18	0.71	1.01	0.05	1.05	0.59	0.60
d, Delay for Lane Group [s/veh]	18.50	61.62	9.41	23.97	30.43	14.28	26.16	59.04	26.30	55.10	28.75	28.91
Lane Group LOS	B	F	A	C	C	B	C	F	C	F	C	C
Critical Lane Group	No	Yes	No	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.62	21.28	3.77	0.17	10.51	1.55	3.23	9.18	0.31	10.22	6.57	6.48
50th-Percentile Queue Length [ft/ln]	15.51	532.08	94.26	4.20	262.79	38.66	80.85	229.61	7.73	255.58	164.34	162.00
95th-Percentile Queue Length [veh/ln]	1.12	29.57	6.79	0.30	15.83	2.78	5.82	14.23	0.56	15.92	10.78	10.65
95th-Percentile Queue Length [ft/ln]	27.93	739.20	169.67	7.55	395.72	69.60	145.53	355.64	13.91	398.08	269.46	266.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.50	61.62	9.41	23.97	30.43	14.28	26.16	59.04	26.30	55.10	28.82	28.91
Movement LOS	B	F	A	C	C	B	C	F	C	F	C	C
d_A, Approach Delay [s/veh]	48.96			28.60			45.56			43.50		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	42.68											
Intersection LOS	D											
Intersection V/C	0.870											

Other Modes

g_Walk,mi, Effective Walk Time [s]	20.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	32.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	4.033	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	240	400	680
d_b, Bicycle Delay [s]	18.00	38.72	32.00	21.78
l_b,int, Bicycle LOS Score for Intersection	3.324	2.576	2.466	2.809
Bicycle LOS	C	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 24: 400 S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	287.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street			South Main Street			400 S			400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Main Street			South Main Street			400 S			400 S		
Base Volume Input [veh/h]	101	273	132	21	181	36	28	160	109	143	140	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	35	292	412	41	277	85	109	736	19	459	1016	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	136	565	544	62	458	121	137	896	128	602	1156	31
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	154	148	17	124	33	37	243	35	164	314	8
Total Analysis Volume [veh/h]	148	614	591	67	498	132	149	974	139	654	1257	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	1226			2121			1256			938		
Exiting Flow Rate [veh/h]	1330			821			1583			1681		
Demand Flow Rate [veh/h]	136	565	544	62	458	121	137	896	128	602	1156	31
Adjusted Demand Flow Rate [veh/h]	148	614	591	67	498	132	149	974	139	654	1257	34

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	655	739	338	381	611	689	942	1062
Capacity of Entry and Bypass Lanes [veh/h]	438	501	192	235	426	489	570	640
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	425	487	187	228	413	475	553	621
X, volume / capacity	1.50	1.47	1.76	1.63	1.44	1.41	1.65	1.66

Movement, Approach, & Intersection Results

Lane LOS	F	F	F	F	F	F	F	F
95th-Percentile Queue Length [veh]	33.55	36.25	23.01	23.63	29.96	32.14	51.79	57.91
95th-Percentile Queue Length [ft]	838.70	906.37	575.13	590.71	748.91	803.44	1294.64	1447.77
Approach Delay [s/veh]	253.42		370.24		227.59		321.53	
Approach LOS	F		F		F		F	
Intersection Delay [s/veh]	287.91							
Intersection LOS	F							

Intersection Level Of Service Report
Intersection 25: 400 S/Albert S. White Drive & 400 S/Ginger Way

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.024

Intersection Setup

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Base Volume Input [veh/h]	14	257	70	40	207	3	8	5	3	69	5	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	79	1061	56	283	1315	0	0	29	46	46	71	508
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	93	1318	126	323	1522	3	8	34	49	115	76	551
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	358	34	88	414	1	2	9	13	31	21	150
Total Analysis Volume [veh/h]	101	1433	137	351	1654	3	9	37	53	125	83	599
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.26	0.01	0.00	0.84	0.02	0.00	0.00	0.00	0.44	0.00	0.00	4.02
d_M, Delay for Movement [s/veh]	17.59	0.00	0.00	45.33	0.00	0.00	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0
Movement LOS	C	A	A	E	A	A	F	F	F	F	F	F
95th-Percentile Queue Length [veh/ln]	1.03	0.00	0.00	8.06	0.00	0.00	2.48	13.71	13.71	18.20	88.15	88.15
95th-Percentile Queue Length [ft/ln]	25.82	0.00	0.00	201.49	0.00	0.00	62.10	342.79	342.79	455.01	2203.78	2203.78
d_A, Approach Delay [s/veh]	1.06			7.92			10000.00			10000.00		
Approach LOS	A			A			F			F		
d_I, Intersection Delay [s/veh]	1979.87											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 26: 700 E & 425 S

Control Type:	Two-way stop	Delay (sec / veh):	315.8
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.058

Intersection Setup

Name	South 700 East			South 700 East			East 425 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Left	Right	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	South 700 East			South 700 East			East 425 South		
Base Volume Input [veh/h]	0	63	11	0	59	38	0	8	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	625	0	0	0	368	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	688	11	0	59	406	0	8	83
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	187	3	0	16	110	0	2	23
Total Analysis Volume [veh/h]	0	748	12	0	64	441	0	9	90
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free			Stop			Free		
Flared Lane				No					
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance				No					
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.50	0.00	0.00	1.06	0.44	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.79	8.83	0.00	314.80	315.76	259.79	8.16	0.00	0.00
Movement LOS	B	A	A	F	F	F	A	A	A
95th-Percentile Queue Length [veh/ln]	2.10	2.10	2.10	27.73	27.73	27.73	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	52.49	52.49	52.49	693.19	693.19	693.19	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.69			266.89			0.00		
Approach LOS	A			F			A		
d_I, Intersection Delay [s/veh]	103.66								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 27: SR 267 & Indianapolis Road

Control Type:	Signalized	Delay (sec / veh):	67.0
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.920

Intersection Setup

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	State Road 267				SR267				Indianapolis Road				Indianapolis Road			
Base Volume Input [veh/h]	0	31	265	14	0	139	319	93	0	118	40	40	0	16	27	173
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	799	7	0	46	678	59	0	69	1	12	0	15	7	71
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	43	1064	21	0	185	997	152	0	187	41	52	0	31	34	244
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	12	289	6	0	50	271	41	0	51	11	14	0	8	9	66
Total Analysis Volume [veh/h]	0	47	1157	23	0	201	1084	165	0	203	45	57	0	34	37	265
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi	Permi	ProtP	Permi	Permi
Signal Group	8	3	8	8	4	7	4	4	2	5	2	2	6	1	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lead	-	-	Lag	Lead	-	-	Lag	Lead	-	-	Lag	Lead	-	-
Minimum Green [s]	10	5	10	10	10	5	10	10	10	5	10	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0
All red [s]	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Split [s]	69	9	69	69	69	9	69	69	23	9	23	23	23	9	23	23
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	72	63	63	72	63	63	26	17	17	26	17	17
g / C, Green / Cycle	0.65	0.57	0.57	0.65	0.57	0.57	0.24	0.15	0.15	0.24	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.08	0.62	0.01	0.34	0.58	0.10	0.16	0.02	0.04	0.02	0.02	0.17
s, saturation flow rate [veh/h]	570	1855	1577	597	1855	1577	1256	1855	1577	1412	1855	1577
c, Capacity [veh/h]	218	1062	903	219	1062	903	376	287	244	404	287	244
d1, Uniform Delay [s]	25.78	23.50	10.19	41.13	23.50	11.21	37.33	40.29	40.79	32.73	40.11	46.50
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.25	55.13	0.05	43.03	32.84	0.45	5.47	1.17	2.24	0.41	0.93	82.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.22	1.09	0.03	0.92	1.02	0.18	0.54	0.16	0.23	0.08	0.13	1.09
d, Delay for Lane Group [s/veh]	28.03	78.63	10.24	84.17	56.34	11.66	42.79	41.46	43.03	33.14	41.04	129.46
Lane Group LOS	C	F	B	F	F	B	D	D	D	C	D	F
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.44	38.17	0.22	4.25	33.85	1.90	5.16	1.13	1.48	0.74	0.92	12.10
50th-Percentile Queue Length [ft/ln]	11.03	954.19	5.47	106.24	846.36	47.56	128.93	28.26	37.05	18.48	23.08	302.47
95th-Percentile Queue Length [veh/ln]	0.79	51.80	0.39	7.63	44.16	3.42	8.88	2.03	2.67	1.33	1.66	18.51
95th-Percentile Queue Length [ft/ln]	19.85	1294.99	9.84	190.76	1103.88	85.61	222.04	50.86	66.69	33.26	41.54	462.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	28.03	28.03	78.63	10.24	84.17	84.17	56.34	11.66	42.79	42.79	41.46	43.03	33.14	33.14	41.04	129.4
Movement LOS	C	C	F	B	F	F	F	B	D	D	D	D	C	C	D	F
d_A, Approach Delay [s/veh]	75.41				55.11				42.64				109.97			
Approach LOS	E				E				D				F			
d_I, Intersection Delay [s/veh]	67.03															
Intersection LOS	E															
Intersection V/C	0.920															

Other Modes

g_Walk,mi, Effective Walk Time [s]	17.0	17.0	63.0	63.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	39.31	39.31	10.04	10.04
l_p,int, Pedestrian LOS Score for Intersectio	3.354	3.356	2.384	2.455
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1145	1145	309	309
d_b, Bicycle Delay [s]	10.04	10.04	39.31	39.31
l_b,int, Bicycle LOS Score for Intersection	3.584	3.620	1.728	2.058
Bicycle LOS	D	D	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 28: Perry Worth Road & 450 S

Control Type:	All-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	Perry Worth Road						E 450 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road						E 450 South		
Base Volume Input [veh/h]	0	1	28	0	2	3	0	68	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	0	0	7	25	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	6	28	0	9	28	0	68	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	8	0	2	8	0	18	1
Total Analysis Volume [veh/h]	0	7	30	0	10	30	0	74	3
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	978	855	842
Degree of Utilization, x	0.04	0.05	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.12	0.15	0.30
95th-Percentile Queue Length [ft]	2.95	3.68	7.53
Approach Delay [s/veh]	6.83	7.42	7.71
Approach LOS	A	A	A
Intersection Delay [s/veh]	7.42		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 29: Anson Blvd & 450 S

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.102

Intersection Setup

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	No				No				No				Yes			

Volumes

Name	Anson Boulevard				Anson Boulevard				E 450 South				E 450 South			
Base Volume Input [veh/h]	0	2	69	21	0	5	28	7	0	10	25	1	0	4	58	22
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	4	11	0	0	13	0	0	0	5	2	0	1	1	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	73	32	0	5	41	7	0	10	30	3	0	5	59	23
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	20	9	0	1	11	2	0	3	8	1	0	1	16	6
Total Analysis Volume [veh/h]	0	3	79	35	0	5	45	8	0	11	33	3	0	5	64	25
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	45
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	24	24	24	24	24	24	24	24	21	21	21	21	21	21	21	21
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	10	10	10	10	6	6	6	6	10	10	10	10	10	10	10	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	C	C	R
C, Cycle Length [s]	45	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	2.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	18	18	18	18	15	15	15
g / C, Green / Cycle	0.40	0.40	0.40	0.40	0.33	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.00	0.06	0.00	0.03	0.03	0.04	0.02
s, saturation flow rate [veh/h]	1340	1760	1268	1807	1731	1842	1577
c, Capacity [veh/h]	612	704	558	723	676	700	526
d1, Uniform Delay [s]	9.90	8.66	10.63	8.34	10.26	10.39	10.16
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.49	0.03	0.20	0.20	0.28	0.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.16	0.01	0.07	0.07	0.10	0.05
d, Delay for Lane Group [s/veh]	9.91	9.15	10.66	8.54	10.46	10.67	10.33
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.02	0.66	0.03	0.29	0.30	0.45	0.16
50th-Percentile Queue Length [ft/ln]	0.47	16.48	0.83	7.29	7.51	11.13	4.08
95th-Percentile Queue Length [veh/ln]	0.03	1.19	0.06	0.52	0.54	0.80	0.29
95th-Percentile Queue Length [ft/ln]	0.84	29.66	1.49	13.12	13.51	20.03	7.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.91	9.91	9.15	9.15	10.66	10.66	8.54	8.54	10.46	10.46	10.46	10.46	10.67	10.67	10.67	10.33
Movement LOS	A	A	A	A	B	B	A	A	B	B	B	B	B	B	B	B
d_A, Approach Delay [s/veh]	9.17				8.72				10.46				10.58			
Approach LOS	A				A				B				B			
d_I, Intersection Delay [s/veh]	9.70															
Intersection LOS	A															
Intersection V/C	0.102															

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	12.84
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	1.968
Crosswalk LOS	F	F	F	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	800	667	667
d_b, Bicycle Delay [s]	8.10	8.10	10.00	10.00
l_b,int, Bicycle LOS Score for Intersection	1.864	1.758	1.730	1.817
Bicycle LOS	A	A	A	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 30: 450 S & 500 E

Control Type:	Two-way stop	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name	500 East			E 450 South			E 450 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	500 East			E 450 South			E 450 South		
Base Volume Input [veh/h]	0	18	55	0	61	16	0	5	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	7	0	25	9	0	3	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	20	62	0	86	25	0	8	16
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	17	0	23	7	0	2	4
Total Analysis Volume [veh/h]	0	22	67	0	93	27	0	9	17
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free	
Flared Lane	No							
Storage Area [veh]	0			0			0	
Two-Stage Gap Acceptance	No							
Number of Storage Spaces in Median	0			0			0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.06	0.00	0.06	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.46	10.46	8.80	8.58	7.39	0.00	8.26	0.00	0.00
Movement LOS	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.31	0.31	0.31	0.16	0.16	0.16	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	7.78	7.78	7.78	4.08	4.08	4.08	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.21			5.72			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	6.41								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 31: 450S & 575 E

Control Type:	Roundabout	Delay (sec / veh):	19.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	575 East		575 East		E 450 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	575 East		575 East		E 450 South	
Base Volume Input [veh/h]	6	61	22	4	23	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	1954	1771	21	58	83
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	2015	1793	25	81	90
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	548	487	7	22	24
Total Analysis Volume [veh/h]	21	2190	1949	27	88	98
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		2	
Circulating Flow Rate [veh/h]	91		22		2007	
Exiting Flow Rate [veh/h]	2108		2346		49	
Demand Flow Rate [veh/h]	19	2015	1793	25	81	90
Adjusted Demand Flow Rate [veh/h]	21	2190	1949	27	88	98

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1350.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	1071	1207	957	1079	91	101
Capacity of Entry and Bypass Lanes [veh/h]	1308	1308	1393	1393	213	258
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1270	1270	1352	1352	207	251
X, volume / capacity	0.82	0.92	0.69	0.77	0.43	0.39

Movement, Approach, & Intersection Results

Lane LOS	C	D	B	B	D	D
95th-Percentile Queue Length [veh]	10.04	15.73	5.92	8.44	1.96	1.77
95th-Percentile Queue Length [ft]	250.92	393.24	148.06	211.12	49.09	44.17
Approach Delay [s/veh]	23.69		13.45		28.41	
Approach LOS	C		B		D	
Intersection Delay [s/veh]	19.27					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 32: Anson Blvd & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.108

Intersection Setup

Name	East 500 South			Anson Boulevard			East 500 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	East 500 South			Anson Boulevard			East 500 South		
Base Volume Input [veh/h]	0	179	138	0	21	34	0	34	209
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	5	6	0	7	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	179	146	0	26	40	0	41	215
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	49	40	0	7	11	0	11	58
Total Analysis Volume [veh/h]	0	195	159	0	28	43	0	45	234
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.11	0.22
d_M, Delay for Movement [s/veh]	9.51	7.71	0.00	8.93	0.00	0.00	14.62	14.71	9.44
Movement LOS	A	A	A	A	A	A	B	B	A
95th-Percentile Queue Length [veh/ln]	0.44	0.44	0.00	0.00	0.00	0.00	0.36	0.36	0.86
95th-Percentile Queue Length [ft/ln]	10.98	10.98	0.00	0.00	0.00	0.00	9.03	9.03	21.48
d_A, Approach Delay [s/veh]	4.25			0.00			10.29		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	6.21								
Intersection LOS	B								

Intersection 33 removed intentionally

Intersection Level Of Service Report
Intersection 34: 500 S & 575 E

Control Type:	Roundabout	Delay (sec / veh):	74.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	575 East			575 East			East 500 South			East 500 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	600.00	100.00	100.00	100.00	200.00	100.00	100.00	300.00	100.00	300.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	575 East			575 East			East 500 South			East 500 South		
Base Volume Input [veh/h]	10	4	14	26	0	4	46	89	6	2	23	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1968	321	17	1948	14	46	31	3	290	7	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	1972	335	43	1948	18	92	120	9	292	30	36
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	536	91	12	529	5	25	33	2	79	8	10
Total Analysis Volume [veh/h]	11	2143	364	47	2117	20	100	130	10	317	33	39
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	285			372			2555			2322		
Exiting Flow Rate [veh/h]	2517			2310			66			182		
Demand Flow Rate [veh/h]	10	1972	335	43	1948	18	92	120	9	292	30	36
Adjusted Demand Flow Rate [veh/h]	11	2143	364	47	2117	20	100	130	10	317	33	39

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	1043	1176	0	1058	1193	117	132	192	170	0
Capacity of Entry and Bypass Lanes [veh/h]	1039	1115	1217	959	1036	129	162	160	198	200
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1009	1082	1181	931	1006	125	158	155	192	194
X, volume / capacity	1.00	1.06	0.31	1.10	1.15	0.90	0.81	1.20	0.86	0.20

Movement, Approach, & Intersection Results

Lane LOS	F	F	A	F	F	F	F	F	F	C
95th-Percentile Queue Length [veh]	19.75	24.77	1.32	26.48	32.44	5.79	5.29	10.47	6.34	0.73
95th-Percentile Queue Length [ft]	493.85	619.20	33.00	661.94	810.98	144.82	132.18	261.84	158.51	18.25
Approach Delay [s/veh]	49.15			90.06		102.44		129.36		
Approach LOS	E			F		F		F		
Intersection Delay [s/veh]	74.16									
Intersection LOS	F									

Intersection Level Of Service Report
Intersection 35: 500S & 650 E

Control Type:	Two-way stop	Delay (sec / veh):	9,986.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	21.461

Intersection Setup

Name	Main Street		Main Street		East 500 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		East 500 South	
Base Volume Input [veh/h]	64	568	426	16	19	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	547	558	180	216	64
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	1115	984	196	235	124
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	303	267	53	64	34
Total Analysis Volume [veh/h]	100	1212	1070	213	255	135
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.01	0.01	0.00	21.46	0.58
d_M, Delay for Movement [s/veh]	11.82	0.00	0.00	0.00	9986.13	9698.69
Movement LOS	B	A	A	A	F	F
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.00	0.00	49.49	49.49
95th-Percentile Queue Length [ft/ln]	4.41	4.41	0.00	0.00	1237.34	1237.34
d_A, Approach Delay [s/veh]	0.90		0.00		9886.63	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	1292.12					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 36: Perry Worth Road & 500 S

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

Intersection Setup

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Approach	Northbound			Southbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Thru	Right	U-turn	Left	Thru	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Perry Worth Road			Perry Worth Road			East 500 South		
Base Volume Input [veh/h]	0	46	228	0	0	299	0	184	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	5	10	0	2	22	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	51	238	0	2	321	0	190	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	14	65	0	1	87	0	52	0
Total Analysis Volume [veh/h]	0	55	259	0	2	349	0	207	0
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00
d_M, Delay for Movement [s/veh]	10.23	0.00	0.00	9.96	7.90	0.00	17.05	17.12	9.21
Movement LOS	B	A	A	A	A	A	C	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.08	0.08	0.08	49.97	49.97	0.00
d_A, Approach Delay [s/veh]	0.00			0.05			17.12		
Approach LOS	A			A			C		
d_I, Intersection Delay [s/veh]	4.08								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 37: 550 S & 475 E

Control Type:	Roundabout	Delay (sec / veh):	12.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	475 E				475 E				550 South				550 S			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0	0.00	0.00	0.00	100.0
Speed [mph]	45.00				45.00				45.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	475 E				475 E				550 South				550 S			
Base Volume Input [veh/h]	0	14	0	36	0	0	0	1	0	0	65	1	0	24	77	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	0	732	0	0	0	0	0	0	213	8	0	618	182	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	30	0	768	0	0	0	1	0	0	278	9	0	642	259	1
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	8	0	209	0	0	0	0	0	0	76	2	0	174	70	0
Total Analysis Volume [veh/h]	0	33	0	835	0	0	0	1	0	0	302	10	0	698	282	1
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	311				1043				719				34			
Exiting Flow Rate [veh/h]	729				1				325				1171			
Demand Flow Rate [veh/h]	0	30	0	768	0	0	0	1	0	0	278	9	0	642	259	1
Adjusted Demand Flow Rate [veh/h]	0	33	0	835	0	0	0	1	0	0	302	10	0	698	282	1

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	34	861	2	152	171	719	292
Capacity of Entry and Bypass Lanes [veh/h]	1070	1070	477	739	739	1377	1377
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1039	1039	463	717	717	1337	1337
X, volume / capacity	0.03	0.80	0.00	0.20	0.23	0.52	0.21

Movement, Approach, & Intersection Results

Lane LOS	A	C	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.10	9.07	0.01	0.76	0.89	3.15	0.80
95th-Percentile Queue Length [ft]	2.46	226.66	0.16	19.09	22.21	78.85	20.02
Approach Delay [s/veh]	19.32		7.82	7.52		7.13	
Approach LOS	C		A	A		A	
Intersection Delay [s/veh]	12.08						
Intersection LOS	B						

Intersection Level Of Service Report
Intersection 38: 550 S & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	235.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			550 S					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			550 S					
Base Volume Input [veh/h]	13	49	60	245	116	8	0	95	4	30	65	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	49	11	98	185	15	23	9	1064	37	45	729	77
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	60	158	430	131	31	9	1159	41	75	794	158
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	16	43	117	36	8	2	315	11	20	216	43
Total Analysis Volume [veh/h]	67	65	172	467	142	34	10	1260	45	82	863	172
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	1789			1042			712			146		
Exiting Flow Rate [veh/h]	277			77			993			1779		
Demand Flow Rate [veh/h]	62	60	158	430	131	31	9	1159	41	75	794	158
Adjusted Demand Flow Rate [veh/h]	67	65	172	467	142	34	10	1260	45	82	863	172

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	0.00	1380.00	1380.00	1380.00	0.00
B (coefficient)	0.00102	0.00000	0.00102	0.00102	0.00102	0.00000
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	136	0	663	1355	974	0
Capacity of Entry and Bypass Lanes [veh/h]	223	103001	477	668	1189	103001
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	217	100000	463	649	1155	100000
X, volume / capacity	0.61	0.00	1.39	2.03	0.82	0.00

Movement, Approach, & Intersection Results

Lane LOS	E	A	F	F	C	A
95th-Percentile Queue Length [veh]	3.53	0.00	30.46	88.89	9.85	0.00
95th-Percentile Queue Length [ft]	88.20	0.00	761.38	2222.21	246.18	0.00
Approach Delay [s/veh]	18.60		212.50	484.07	16.47	
Approach LOS	C		F	F	C	
Intersection Delay [s/veh]	235.94					
Intersection LOS	F					

Intersections 39 & 40 removed intentionally

Intersection Level Of Service Report
Intersection 41: Perry Worth Road & 550 S

Control Type:	Signalized	Delay (sec / veh):	404.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.910

Intersection Setup

Name	Perry Worth Road				Perry Worth Road				550 S							
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	12.00	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500.0
Speed [mph]	40.00				40.00				30.00				45.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	Perry Worth Road				Perry Worth Road				550 S							
Base Volume Input [veh/h]	0	79	33	0	0	0	28	424	0	248	0	152	0	0	0	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	103	20	271	0	2	53	147	0	53	2042	124	0	290	2032	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	182	53	271	0	2	81	571	0	301	2042	276	0	290	2032	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	49	14	74	0	1	22	155	0	82	555	75	0	79	552	0
Total Analysis Volume [veh/h]	0	198	58	295	0	2	88	621	0	327	2220	300	0	315	2209	0
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	55
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi
Signal Group	8	8	8	8	4	4	4	4	2	2	2	2	6	6	6	6
Auxiliary Signal Groups																
Lead / Lag	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-	Lag	Lag	-	-
Minimum Green [s]	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All red [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Split [s]	32	32	32	32	32	32	32	32	23	23	23	23	23	23	23	23
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Pedestrian Clearance [s]	15	15	15	15	15	15	15	15	9	9	9	9	9	9	9	9
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Recall			No				No				No				No	
Maximum Recall			No				No				No				No	
Pedestrian Recall			No				No				No				No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	R
C, Cycle Length [s]	55	55	55	55	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	26	26	26	26	17	17	17	17	17	17
g / C, Green / Cycle	0.47	0.47	0.47	0.47	0.31	0.31	0.31	0.31	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.27	0.22	0.00	0.44	1.88	0.63	0.19	2.47	0.63	0.00
s, saturation flow rate [veh/h]	734	1617	1020	1607	174	3532	1577	128	3532	1577
c, Capacity [veh/h]	146	764	426	760	131	1092	487	131	1092	487
d1, Uniform Delay [s]	27.45	9.78	13.93	13.68	27.50	19.00	16.21	27.50	19.00	0.00
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	200.17	2.01	0.02	19.96	696.26	468.34	5.72	655.53	463.82	0.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.36	0.46	0.00	0.93	2.50	2.03	0.62	2.41	2.02	0.00
d, Delay for Lane Group [s/veh]	227.62	11.79	13.95	33.64	723.76	487.34	21.94	683.03	482.82	0.00
Lane Group LOS	F	B	B	C	F	F	C	F	F	A
Critical Lane Group	No	No	No	Yes	No	No	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.83	2.56	0.02	10.20	26.94	77.07	3.62	25.37	75.85	0.00
50th-Percentile Queue Length [ft/ln]	245.71	63.91	0.44	254.94	673.53	1926.75	90.43	634.26	1896.17	0.00
95th-Percentile Queue Length [veh/ln]	17.63	4.60	0.03	15.43	47.19	122.34	6.51	44.57	120.42	0.00
95th-Percentile Queue Length [ft/ln]	440.87	115.04	0.78	385.87	1179.78	3058.49	162.77	1114.19	3010.56	0.00

Movement, Approach, & Intersection Results

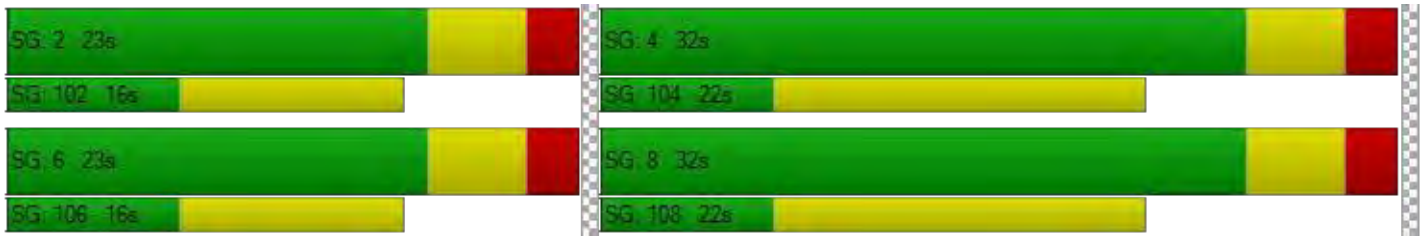
d_M, Delay for Movement [s/veh]	227.6	227.6	11.79	11.79	13.95	13.95	33.64	33.64	723.7	723.7	487.3	21.94	683.0	683.0	482.8	0.00
Movement LOS	F	F	B	B	B	B	C	C	F	F	F	C	F	F	F	A
d_A, Approach Delay [s/veh]	89.35				33.59				465.45				507.80			
Approach LOS	F				C				F				F			
d_I, Intersection Delay [s/veh]	404.03															
Intersection LOS	F															
Intersection V/C	2.910															

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	17.60	17.60	17.60	17.60
l_p,int, Pedestrian LOS Score for Intersectio	3.186	2.855	4.127	4.105
Crosswalk LOS	C	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	945	945	618	618
d_b, Bicycle Delay [s]	7.65	7.65	13.13	13.13
l_b,int, Bicycle LOS Score for Intersection	2.253	2.840	3.639	3.753
Bicycle LOS	B	C	D	D

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 42: Indianapolis Road & Commerce Drive

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.095

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			Commerce Drive		
Base Volume Input [veh/h]	0	9	123	0	164	12	0	16	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	73	0	134	22	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	9	196	0	298	34	0	42	40
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	53	0	81	9	0	11	11
Total Analysis Volume [veh/h]	0	10	213	0	324	37	0	46	43
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.09	0.06
d_M, Delay for Movement [s/veh]	10.38	8.05	0.00	9.26	0.00	0.00	13.48	13.56	11.18
Movement LOS	B	A	A	A	A	A	B	B	B
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.00	0.00	0.54	0.54	0.54
95th-Percentile Queue Length [ft/ln]	0.63	0.63	0.00	0.00	0.00	0.00	13.62	13.62	13.62
d_A, Approach Delay [s/veh]	0.36			0.00			12.41		
Approach LOS	A			A			B		
d_I, Intersection Delay [s/veh]	1.76								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 43: Perry Worth Road & Juniors Way

Control Type:	Roundabout	Delay (sec / veh):	6.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Perry Worth Road		Perry Worth Road		Juniors Way	
Base Volume Input [veh/h]	82	98	84	103	61	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	316	0	26	320	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	398	98	110	423	61	37
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	27	30	115	17	10
Total Analysis Volume [veh/h]	433	107	120	460	66	40
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	124		68		446	
Exiting Flow Rate [veh/h]	542		487		124	
Demand Flow Rate [veh/h]	398	98	110	423	61	37
Adjusted Demand Flow Rate [veh/h]	433	107	120	460	66	40

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	446	0	598	110
Capacity of Entry and Bypass Lanes [veh/h]	1217	1217	1288	876
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1182	1182	1251	851
X, volume / capacity	0.37	0.09	0.46	0.12

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	1.71	0.30	2.52	0.43
95th-Percentile Queue Length [ft]	42.63	7.45	63.02	10.64
Approach Delay [s/veh]	6.07		7.67	5.46
Approach LOS	A		A	A
Intersection Delay [s/veh]	6.77			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 44: 650 E & Central Blvd

Control Type:	Roundabout	Delay (sec / veh):	16.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	94	791	48	117	526	8	17	1	28	68	16	136
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	25	407	0	12	578	0	13	0	8	3	0	173
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	1198	48	129	1104	8	30	1	36	71	16	309
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	326	13	35	300	2	8	0	10	19	4	84
Total Analysis Volume [veh/h]	129	1302	52	140	1200	9	33	1	39	77	17	336
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	179			230			1460			1508		
Exiting Flow Rate [veh/h]	1355			1721			160			199		
Demand Flow Rate [veh/h]	119	1198	48	129	1104	8	30	1	36	71	16	309
Adjusted Demand Flow Rate [veh/h]	129	1302	52	140	1200	9	33	1	39	77	17	336

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	718	810	654	737	36	41	97	347
Capacity of Entry and Bypass Lanes [veh/h]	1145	1220	1093	1169	353	411	338	395
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1112	1184	1062	1135	343	399	328	383
X, volume / capacity	0.63	0.66	0.60	0.63	0.10	0.10	0.29	0.88

Movement, Approach, & Intersection Results

Lane LOS	B	B	B	B	B	B	C	F
95th-Percentile Queue Length [veh]	4.63	5.35	4.13	4.70	0.33	0.32	1.16	8.68
95th-Percentile Queue Length [ft]	115.79	133.78	103.36	117.41	8.20	8.07	29.06	217.05
Approach Delay [s/veh]	11.92		11.44		11.28		45.26	
Approach LOS	B		B		B		E	
Intersection Delay [s/veh]	16.01							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 45: Central Blvd & Heartland Drive

Control Type:	All-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

Intersection Setup

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Approach	Northbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes		

Volumes

Name	Heartland Drive			Central Boulevard			Central Boulevard		
Base Volume Input [veh/h]	0	65	66	0	131	23	0	40	141
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	150	11	0	4	0	0	100	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	215	77	0	135	23	0	140	149
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	58	21	0	37	6	0	38	40
Total Analysis Volume [veh/h]	0	234	84	0	147	25	0	152	162
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	566	699	637	577	628
Degree of Utilization, x	0.41	0.12	0.27	0.26	0.26

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	2.02	0.41	1.09	1.05	1.03
95th-Percentile Queue Length [ft]	50.42	10.20	27.20	26.30	25.64
Approach Delay [s/veh]	12.17		10.72	10.77	
Approach LOS	B		B	B	
Intersection Delay [s/veh]	11.32				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 46: Veterans Drive & Central Boulevard

Control Type:	Two-way stop	Delay (sec / veh):	685.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.245

Intersection Setup

Name				South 700 East			Central Boulevard		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			Yes		

Volumes

Name				South 700 East			Central Boulevard		
Base Volume Input [veh/h]	0	66	286	0	167	106	0	157	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	715	0	269	92	0	4	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	68	1001	0	436	198	0	161	70
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	18	272	0	118	54	0	44	19
Total Analysis Volume [veh/h]	0	74	1088	0	474	215	0	175	76
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.08	0.01	0.00	0.00	0.00	0.00	2.24	0.15
d_M, Delay for Movement [s/veh]	15.77	9.35	0.00	21.43	0.00	0.00	684.99	684.99	13.27
Movement LOS	C	A	A	C	A	A	F	F	B
95th-Percentile Queue Length [veh/ln]	0.27	0.27	0.00	0.00	0.00	0.00	16.19	16.19	0.52
95th-Percentile Queue Length [ft/ln]	6.70	6.70	0.00	0.00	0.00	0.00	404.63	404.63	12.97
d_A, Approach Delay [s/veh]	0.60			0.00			481.60		
Approach LOS	A			A			F		
d_I, Intersection Delay [s/veh]	57.84								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 47: Perry Worth Road & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Approach	Northbound				Southbound				Eastbound			
Lane Configuration												
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	2000.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2000.00
Speed [mph]	25.00				25.00				40.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	No				Yes				Yes			

Volumes

Name	Perry Worth Road				Retail Access				Perry Worth Road			
Base Volume Input [veh/h]	106	183	111	183	30	122	19	10	8	85	125	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	268	6	416	6	6	0	10	12	19	275	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	451	117	599	36	128	19	20	20	104	400	9
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	123	32	163	10	35	5	5	5	28	109	2
Total Analysis Volume [veh/h]	115	490	127	651	39	139	21	22	22	113	435	10
Pedestrian Volume [ped/h]	0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1			
Circulating Flow Rate [veh/h]	237				899				432			
Exiting Flow Rate [veh/h]	771				196				695			
Demand Flow Rate [veh/h]	106	451	117	599	36	128	19	20	20	104	400	9
Adjusted Demand Flow Rate [veh/h]	115	490	127	651	39	139	21	22	22	113	435	10

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1380.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00102	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	624	802	228	281	317
Capacity of Entry and Bypass Lanes [veh/h]	1145	1145	552	959	959
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1112	1112	536	931	931
X, volume / capacity	0.54	0.70	0.41	0.29	0.33

Movement, Approach, & Intersection Results

Lane LOS	A	B	B	A	A
95th-Percentile Queue Length [veh]	3.40	6.11	2.01	1.22	1.45
95th-Percentile Queue Length [ft]	85.05	152.69	50.15	30.60	36.30
Approach Delay [s/veh]	12.10		13.43	7.18	
Approach LOS	B		B	A	
Intersection Delay [s/veh]	10.87				
Intersection LOS	B				

Intersection Setup

Name	Mills Drive				Chick-fil-A Access			
Approach	Westbound				Northeastbound			
Lane Configuration								
Turning Movement	Left2	Left	Thru	Right	Left	Thru	Right	Right2
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name	Mills Drive				Chick-fil-A Access			
Base Volume Input [veh/h]	76	20	128	30	10	4	38	85
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00							
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	4	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	20	140	34	10	4	38	85
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	5	38	9	3	1	10	23
Total Analysis Volume [veh/h]	83	22	152	37	11	4	41	92
Pedestrian Volume [ped/h]	0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	2				1			
Circulating Flow Rate [veh/h]	792				856			
Exiting Flow Rate [veh/h]	869				173			
Demand Flow Rate [veh/h]	76	20	140	34	10	4	38	85
Adjusted Demand Flow Rate [veh/h]	83	22	152	37	11	4	41	92

Lanes

Overwrite Calculated Critical Headway	No	No
User-Defined Critical Headway [s]	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No
User-Defined Follow-Up Time [s]	3.00	3.00
A (intercept)	1420.00	1380.00
B (coefficient)	0.00085	0.00102
HV Adjustment Factor	0.97	0.97
Entry Flow Rate [veh/h]	303	153
Capacity of Entry and Bypass Lanes [veh/h]	725	577
Pedestrian Impedance	1.00	1.00
Capacity per Entry Lane [veh/h]	704	560
X, volume / capacity	0.42	0.26

Movement, Approach, & Intersection Results

Lane LOS	B	B
95th-Percentile Queue Length [veh]	2.07	1.06
95th-Percentile Queue Length [ft]	51.79	26.42
Approach Delay [s/veh]	10.84	10.05
Approach LOS	B	B
Intersection Delay [s/veh]	10.87	
Intersection LOS	B	

Intersection Level Of Service Report
Intersection 48: 650 E & Mills Drive

Control Type:	Roundabout	Delay (sec / veh):	140.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	650 East			650 East			Mills Drive			Mills Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	650 East			650 East			Mills Drive			Mills Drive		
Base Volume Input [veh/h]	190	592	88	79	343	213	268	84	70	80	13	94
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	0	1	583	5	420	22	0	13	10	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	190	603	88	80	926	218	688	106	70	93	23	95
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	164	24	22	252	59	187	29	19	25	6	26
Total Analysis Volume [veh/h]	207	655	96	87	1007	237	748	115	76	101	25	103
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	979			343			1231			1658		
Exiting Flow Rate [veh/h]	1220			1551			483			307		
Demand Flow Rate [veh/h]	190	603	88	80	926	218	688	106	70	93	23	95
Adjusted Demand Flow Rate [veh/h]	207	655	96	87	1007	237	748	115	76	101	25	103

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	464	523	645	727	968	236
Capacity of Entry and Bypass Lanes [veh/h]	583	583	1040	1040	499	347
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	566	566	1010	1010	485	337
X, volume / capacity	0.80	0.90	0.62	0.70	1.94	0.68

Movement, Approach, & Intersection Results

Lane LOS	D	E	B	B	F	D
95th-Percentile Queue Length [veh]	7.64	10.63	4.48	6.02	62.48	4.72
95th-Percentile Queue Length [ft]	191.03	265.86	111.91	150.42	1561.95	118.04
Approach Delay [s/veh]	37.41		13.68		449.82	34.05
Approach LOS	E		B		F	D
Intersection Delay [s/veh]	140.07					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 49: Whitestown Parkway & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	425 East		Whitestown Parkway		Whitestown Parkway	
Base Volume Input [veh/h]	1	3	199	3	11	179
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	92	0	0	85
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	3	291	3	11	264
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	79	1	3	72
Total Analysis Volume [veh/h]	1	3	316	3	12	287
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	13.22	10.03	0.00	0.00	7.93	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.49	0.49	0.00	0.00	0.50	0.50
d_A, Approach Delay [s/veh]	10.83		0.00		0.32	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.22					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	All-way stop	Delay (sec / veh):	202.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.731

Intersection Setup

Name	475 East				475 E				Whitestown Parkway				Whitestown Parkway		
Approach	Northbound				Southbound				Eastbound				Westbound		
Lane Configuration															
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2500.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				45.00				45.00		
Grade [%]	0.00				0.00				0.00				0.00		
Crosswalk	No				No				No				No		

Volumes

Name	475 East				475 E				Whitestown Parkway				Whitestown Parkway		
Base Volume Input [veh/h]	0	0	5	29	0	5	12	1	0	2	231	1	77	344	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	48	59	0	236	51	56	0	14	483	0	35	155	37
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	53	88	0	241	63	57	0	16	714	1	112	499	43
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	14	24	0	65	17	15	0	4	194	0	30	136	12
Total Analysis Volume [veh/h]	0	0	58	96	0	262	68	62	0	17	776	1	122	542	47
Pedestrian Volume [ped/h]	0				0				0				0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	405	448	794	416	589
Degree of Utilization, x	0.38	0.87	1.73	0.29	1.32

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.74	9.11	48.09	1.20	26.39
95th-Percentile Queue Length [ft]	43.60	227.77	1202.37	30.12	659.82
Approach Delay [s/veh]	17.24	45.73	357.31	155.35	
Approach LOS	C	E	F	F	
Intersection Delay [s/veh]	202.21				
Intersection LOS	F				

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Roundabout	Delay (sec / veh):	22.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	3	1	39	17	2	3	0	262	4	46	424	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	38	0	74	32	0	8	9	723	46	0	181	27
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	1	113	49	2	11	9	985	50	46	605	34
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	31	13	1	3	2	268	14	13	164	9
Total Analysis Volume [veh/h]	45	1	123	53	2	12	10	1071	54	50	658	37
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	1168			776			108			58		
Exiting Flow Rate [veh/h]	109			49			736			1284		
Demand Flow Rate [veh/h]	41	1	113	49	2	11	9	985	50	46	605	34
Adjusted Demand Flow Rate [veh/h]	45	1	123	53	2	12	10	1071	54	50	658	37

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	175	70	1170	768
Capacity of Entry and Bypass Lanes [veh/h]	420	626	1236	1302
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	408	608	1200	1264
X, volume / capacity	0.42	0.11	0.95	0.59

Movement, Approach, & Intersection Results

Lane LOS	C	A	D	A
95th-Percentile Queue Length [veh]	2.00	0.37	16.97	4.06
95th-Percentile Queue Length [ft]	49.90	9.25	424.28	101.46
Approach Delay [s/veh]	17.06	7.21	33.32	9.81
Approach LOS	C	A	D	A
Intersection Delay [s/veh]	22.91			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 52: Whitestown Parkway & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	566.7
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	20	58	293	170	78	9	7	250	40	278	248	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	42	39	939	87	56	0	0	896	103	1057	435	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	97	1232	257	134	9	7	1146	143	1335	683	132
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	26	335	70	36	2	2	311	39	363	186	36
Total Analysis Volume [veh/h]	67	105	1339	279	146	10	8	1246	155	1451	742	143
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	1579			2328			1932			185		
Exiting Flow Rate [veh/h]	1805			264			844			1571		
Demand Flow Rate [veh/h]	62	97	1232	257	134	9	7	1146	143	1335	683	132
Adjusted Demand Flow Rate [veh/h]	67	105	1339	279	146	10	8	1246	155	1451	742	143

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	178	0	238	211	683	770	1495	912
Capacity of Entry and Bypass Lanes [veh/h]	372	374	159	197	229	275	1200	1200
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	361	363	154	191	222	267	1165	1165
X, volume / capacity	0.48	3.69	1.50	1.07	2.99	2.80	1.25	0.76

Movement, Approach, & Intersection Results

Lane LOS	C	F	F	F	F	F	F	C
95th-Percentile Queue Length [veh]	2.48	126.02	15.24	9.66	59.28	64.35	47.30	7.77
95th-Percentile Queue Length [ft]	62.00	3150.39	381.11	241.59	1481.89	1608.77	1182.56	194.22
Approach Delay [s/veh]	1100.77		227.92		891.65		88.44	
Approach LOS	F		F		F		F	
Intersection Delay [s/veh]	566.74							
Intersection LOS	F							

Intersections 53 & 54 removed intentionally

Intersection Level Of Service Report
Intersection 55: Whitestown Parkway & Perry Worth Road

Control Type:	Signalized	Delay (sec / veh):	208.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.015

Intersection Setup

Name				Perry Worth Road			Whitestown Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Perry Worth Road			Whitestown Parkway					
Base Volume Input [veh/h]	86	44	19	110	29	304	431	1210	24	29	785	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	21	0	242	18	21	431	1083	12	1	978	237
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	98	65	19	352	47	325	862	2293	36	30	1763	333
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	18	5	96	13	88	234	623	10	8	479	90
Total Analysis Volume [veh/h]	107	71	21	383	51	353	937	2492	39	33	1916	362
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2,3						4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	16	16	9	16	16	22	56	56	9	43	43
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No	No	No	Yes		No	Yes	Yes
Maximum Recall	No	No		No	No	No	No	No		No	No	No
Pedestrian Recall	No	No		No	No	No	No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	4.00	6.00	6.00	6.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	19	10	19	10	34	59	52	52	59	37	48
g / C, Green / Cycle	0.21	0.11	0.21	0.11	0.38	0.66	0.58	0.58	0.66	0.41	0.53
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.29	0.03	0.14	1.47	0.76	0.76	0.14	0.60	0.26
s, saturation flow rate [veh/h]	1139	1605	1321	1669	2512	636	1669	1660	237	3179	1419
c, Capacity [veh/h]	331	178	332	185	949	472	966	960	205	1307	757
d1, Uniform Delay [s]	30.07	37.72	47.80	36.68	20.27	31.45	18.97	18.97	21.60	26.50	13.16
k, delay calibration	0.11	0.11	0.32	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.56	2.30	89.42	0.79	0.24	451.44	147.24	150.37	1.67	214.03	2.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.52	1.15	0.27	0.37	1.99	1.31	1.32	0.16	1.47	0.48
d, Delay for Lane Group [s/veh]	30.63	40.02	137.22	37.47	20.51	482.89	166.21	169.34	23.27	240.53	15.32
Lane Group LOS	C	D	F	D	C	F	F	F	C	F	B
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.01	2.02	15.40	1.07	2.68	62.54	55.42	55.96	0.27	51.23	4.39
50th-Percentile Queue Length [ft/ln]	50.23	50.58	384.94	26.75	67.01	1563.41	1385.57	1398.97	6.63	1280.64	109.78
95th-Percentile Queue Length [veh/ln]	3.62	3.64	23.49	1.93	4.83	107.15	82.10	83.08	0.48	78.61	7.83
95th-Percentile Queue Length [ft/ln]	90.41	91.05	587.14	48.15	120.63	2678.75	2052.51	2076.88	11.94	1965.37	195.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.63	40.02	40.02	137.22	37.47	20.51	482.89	167.75	169.34	23.27	240.53	15.32
Movement LOS	C	D	D	F	D	C	F	F	F	C	F	B
d_A, Approach Delay [s/veh]	34.97			78.41			252.91			202.15		
Approach LOS	C			E			F			F		
d_I, Intersection Delay [s/veh]	208.86											
Intersection LOS	F											
Intersection V/C	1.015											

Other Modes

g_Walk,mi, Effective Walk Time [s]	50.0	37.0	10.0	10.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	8.89	15.61	35.56	35.56
l_p,int, Pedestrian LOS Score for Intersectio	2.170	3.492	4.030	4.041
Crosswalk LOS	B	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	222	1111	822
d_b, Bicycle Delay [s]	35.56	35.56	8.89	15.61
l_b,int, Bicycle LOS Score for Intersection	1.888	2.858	4.421	3.466
Bicycle LOS	A	C	E	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 56: Whitestown Parkway & 650 E

Control Type:	Signalized	Delay (sec / veh):	331.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.987

Intersection Setup

Name	650 East			650 East						Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	350.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East						Whitestown Parkway		
Base Volume Input [veh/h]	149	196	39	169	131	273	451	596	253	68	489	164
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	11	13	115	8	472	0	1256	69	2	713	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	180	207	52	284	139	745	451	1852	322	70	1202	164
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	56	14	77	38	202	123	503	88	19	327	45
Total Analysis Volume [veh/h]	196	225	57	309	151	810	490	2013	350	76	1307	178
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	46.3
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	Protecte	Permiss	Overlap	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	11	49	49	9	47	47	15	23	23	9	17	17
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	4.00	6.00	6.00	4.00	4.00	6.00	4.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	0.00	4.00	0.00	2.00	4.00	0.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	40	31	41	40	29	56	21	30	43	38	13	24
g / C, Green / Cycle	0.44	0.34	0.46	0.44	0.32	0.62	0.23	0.33	0.48	0.42	0.15	0.27
(v / s)_i Volume / Saturation Flow Rate	0.26	0.13	0.04	0.28	0.09	0.32	0.16	0.63	0.25	0.20	0.41	0.13
s, saturation flow rate [veh/h]	762	1669	1419	1086	1669	2512	3088	3179	1419	373	3179	1419
c, Capacity [veh/h]	418	574	649	496	537	1550	707	1053	675	229	475	386
d1, Uniform Delay [s]	16.22	22.40	13.79	21.71	22.78	9.73	31.79	30.09	16.42	21.32	38.27	27.29
k, delay calibration	0.28	0.11	0.11	0.16	0.11	0.11	0.11	0.50	0.26	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.13	0.44	0.06	1.92	0.28	0.27	1.23	413.77	1.48	3.87	793.85	3.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.39	0.09	0.62	0.28	0.52	0.69	1.91	0.52	0.33	2.75	0.46
d, Delay for Lane Group [s/veh]	18.36	22.84	13.85	23.63	23.06	10.01	33.02	443.87	17.90	25.19	832.12	31.23
Lane Group LOS	B	C	B	C	C	B	C	F	B	C	F	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.71	3.58	0.64	4.49	2.38	4.05	4.70	70.89	4.72	1.11	57.33	3.40
50th-Percentile Queue Length [ft/ln]	67.71	89.55	16.08	112.15	59.42	101.37	117.50	1772.16	117.97	27.85	1433.17	85.06
95th-Percentile Queue Length [veh/ln]	4.87	6.45	1.16	7.96	4.28	7.30	8.26	112.56	8.28	2.01	89.80	6.12
95th-Percentile Queue Length [ft/ln]	121.87	161.19	28.95	198.99	106.96	182.47	206.38	2814.12	207.03	50.13	2245.11	153.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.36	22.84	13.85	23.63	23.06	10.01	33.02	443.87	17.90	25.19	832.12	31.23
Movement LOS	B	C	B	C	C	B	C	F	B	C	F	C
d_A, Approach Delay [s/veh]	19.93			14.87			321.05			701.51		
Approach LOS	B			B			F			F		
d_I, Intersection Delay [s/veh]	330.97											
Intersection LOS	F											
Intersection V/C	0.987											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	956	911	378	244
d_b, Bicycle Delay [s]	12.27	13.34	29.61	34.67
l_b,int, Bicycle LOS Score for Intersection	2.348	3.655	3.913	2.847
Bicycle LOS	B	D	D	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Intersection Level Of Service Report
Intersection 57: Whitestown Parkway & Heartland Drive

Control Type:	Two-way stop	Delay (sec / veh):	32.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.340

Intersection Setup

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Heartland Drive			Heartland Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	0	61	0	0	70	108	719	8	67	582	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	0.00	0.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	100	11	1373	0	0	616	150
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	61	0	0	170	119	2092	8	67	1198	262
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	17	0	0	46	32	568	2	18	326	71
Total Analysis Volume [veh/h]	0	0	66	0	0	185	129	2274	9	73	1302	285
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.34	0.00	0.00	0.56	0.32	0.02	0.00	0.34	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	32.84	0.00	0.00	29.11	17.98	0.00	0.00	30.00	0.00	0.00
Movement LOS			D			D	C	A	A	D	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	1.42	0.00	0.00	3.26	1.35	0.00	0.00	1.42	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	35.52	0.00	0.00	81.54	33.71	0.00	0.00	35.55	0.00	0.00
d_A, Approach Delay [s/veh]	32.84			29.11			0.96			1.32		
Approach LOS	D			D			A			A		
d_I, Intersection Delay [s/veh]	2.79											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 58: Whitestown Parkway & Veterans Drive/700 E

Control Type:	Signalized	Delay (sec / veh):	165.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.865

Intersection Setup

Name							Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name							Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	114	39	60	190	44	93	114	569	41	127	546	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	17	0	246	28	0	457	916	0	0	755	242
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	125	56	60	436	72	93	571	1485	41	127	1301	338
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	15	16	118	20	25	155	404	11	35	354	92
Total Analysis Volume [veh/h]	136	61	65	474	78	101	621	1614	45	138	1414	367
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	7.2
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	22	22	10	23	23	9	49	49	9	49	49
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	26	16	26	17	17	52	43	43	52	43	43
g / C, Green / Cycle	0.29	0.18	0.29	0.19	0.19	0.58	0.48	0.48	0.58	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.11	0.08	0.37	0.05	0.07	1.48	0.50	0.50	0.31	0.53	0.57
s, saturation flow rate [veh/h]	1214	1530	1271	1669	1419	420	1669	1654	446	1669	1556
c, Capacity [veh/h]	423	272	405	315	268	246	798	790	244	798	743
d1, Uniform Delay [s]	24.97	33.15	43.00	31.06	31.87	33.69	23.50	23.50	20.01	23.50	23.50
k, delay calibration	0.11	0.11	0.49	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.43	1.23	99.50	0.40	0.87	695.91	42.71	45.90	9.19	69.69	100.85
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.46	1.17	0.25	0.38	2.52	1.04	1.05	0.57	1.12	1.20
d, Delay for Lane Group [s/veh]	25.40	34.38	142.50	31.46	32.75	729.60	66.21	69.40	29.20	93.19	124.35
Lane Group LOS	C	C	F	C	C	F	F	F	C	F	F
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.27	2.52	19.05	1.42	1.91	49.68	23.96	24.43	1.68	29.94	34.34
50th-Percentile Queue Length [ft/ln]	56.65	62.98	476.23	35.54	47.68	1241.88	598.94	610.81	41.97	748.41	858.43
95th-Percentile Queue Length [veh/ln]	4.08	4.53	28.67	2.56	3.43	87.90	32.96	33.77	3.02	42.26	49.83
95th-Percentile Queue Length [ft/ln]	101.97	113.36	716.71	63.97	85.82	2197.48	823.97	844.20	75.55	1056.44	1245.72

Movement, Approach, & Intersection Results

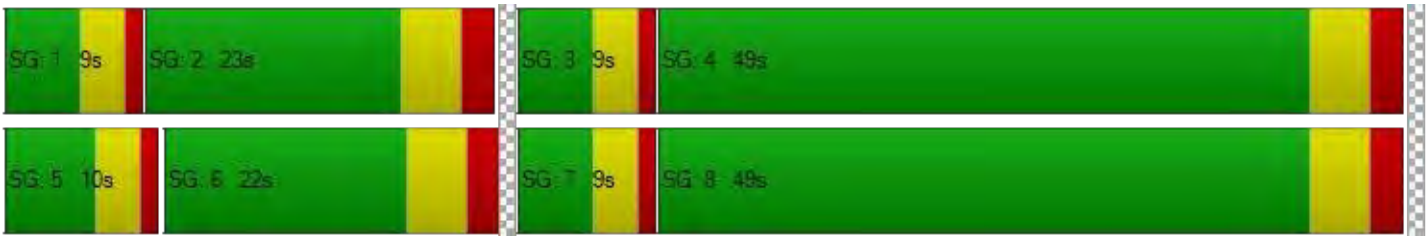
d_M, Delay for Movement [s/veh]	25.40	34.38	34.38	142.50	31.46	32.75	729.60	67.76	69.40	29.20	104.68	124.35
Movement LOS	C	C	C	F	C	C	F	F	E	C	F	F
d_A, Approach Delay [s/veh]	29.72			112.26			248.06			103.02		
Approach LOS	C			F			F			F		
d_I, Intersection Delay [s/veh]	165.11											
Intersection LOS	F											
Intersection V/C	0.865											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	43.0	0.0	16.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	12.27	0.00	30.42
l_p,int, Pedestrian LOS Score for Intersectio	0.000	3.299	0.000	3.908
Crosswalk LOS	F	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	356	378	956	956
d_b, Bicycle Delay [s]	30.42	29.61	12.27	12.27
l_b,int, Bicycle LOS Score for Intersection	1.992	2.637	3.441	3.143
Bicycle LOS	A	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Intersection Level Of Service Report
Intersection 59: Indianapolis Road & Future Minor Collector

Control Type:	Roundabout	Delay (sec / veh):	8.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road		Indianapolis Road		Future Minor Collector	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Indianapolis Road		Indianapolis Road		Future Minor Collector	
Base Volume Input [veh/h]	0	567	341	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	584	784	0	122	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1151	1125	0	122	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	313	306	0	33	4
Total Analysis Volume [veh/h]	0	1251	1223	0	133	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		2	
Circulating Flow Rate [veh/h]	137		0		1260	
Exiting Flow Rate [veh/h]	1275		1426		0	
Demand Flow Rate [veh/h]	0	1151	1125	0	122	14
Adjusted Demand Flow Rate [veh/h]	0	1251	1223	0	133	15

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	606	683	593	668	153
Capacity of Entry and Bypass Lanes [veh/h]	1254	1254	1420	1420	487
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1218	1218	1379	1379	473
X, volume / capacity	0.48	0.54	0.42	0.47	0.31

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	B
95th-Percentile Queue Length [veh]	2.71	3.42	2.10	2.59	1.32
95th-Percentile Queue Length [ft]	67.76	85.53	52.53	64.72	33.12
Approach Delay [s/veh]	8.67		6.92		12.62
Approach LOS	A		A		B
Intersection Delay [s/veh]	8.08				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 60: 750 S & 425 E

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	425 East						750 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	425 East						750 South		
Base Volume Input [veh/h]	0	0	7	0	4	54	0	55	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	46	0	96	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	7	0	4	100	0	151	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	1	27	0	41	0
Total Analysis Volume [veh/h]	0	0	8	0	4	109	0	164	0
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free	
Flared Lane	No							
Storage Area [veh]	0			0			0	
Two-Stage Gap Acceptance	No							
Number of Storage Spaces in Median	0			0			0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.10	10.15	9.14	9.00	7.56	0.00	8.65	0.00	0.00
Movement LOS	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.69	0.69	0.69	0.17	0.17	0.17	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.14			0.27			0.00		
Approach LOS	A			A			A		
d_I, Intersection Delay [s/veh]	0.36								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 61: 750 S & 475 E

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.241

Intersection Setup

Name	475 East			750 South			750 South		
Approach	Southbound			Eastbound			Westbound		
Lane Configuration									
Turning Movement	U-turn	Left	Right	U-turn	Left	Thru	U-turn	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	475 East			750 South			750 South		
Base Volume Input [veh/h]	0	15	19	0	33	35	0	36	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	87	0	0	0	182	0	150	108
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	102	19	0	33	217	0	186	124
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	28	5	0	9	59	0	51	34
Total Analysis Volume [veh/h]	0	111	21	0	36	236	0	202	135
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Stop			Free			Free	
Flared Lane	No							
Storage Area [veh]	0			0			0	
Two-Stage Gap Acceptance	No							
Number of Storage Spaces in Median	0			0			0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.24	0.03	0.00	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.41	15.49	12.36	10.32	8.00	0.00	9.41	0.00	0.00
Movement LOS	C	C	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.08	1.08	1.08	0.06	0.06	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	26.90	26.90	26.90	1.53	1.53	1.53	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.99			1.06			0.00		
Approach LOS	B			A			A		
d_I, Intersection Delay [s/veh]	3.06								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 62: County Road 750 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	South 600 East		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	South 600 East		750 South		750 South	
Base Volume Input [veh/h]	1	24	64	1	32	143
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	42	103	9	18	238
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	66	167	10	50	381
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	18	45	3	14	104
Total Analysis Volume [veh/h]	12	72	182	11	54	414
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.08	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	15.17	9.88	0.00	0.00	7.68	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	9.81	9.81	0.00	0.00	2.32	2.32
d_A, Approach Delay [s/veh]	10.63		0.00		0.89	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.76					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 63: Indianapolis Road & 750 S

Control Type:	Two-way stop	Delay (sec / veh):	1,462.5
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.701

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			750 South		
Approach	Northbound			Southbound			Eastbound		
Lane Configuration									
Turning Movement	U-turn	Left	Thru	U-turn	Thru	Right	U-turn	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00		
Crosswalk	No			No			No		

Volumes

Name	Indianapolis Road			Indianapolis Road			750 South		
Base Volume Input [veh/h]	0	118	242	0	239	92	0	57	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	0.00	3.00	3.00	0.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	332	0	377	268	0	133	29
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	142	574	0	616	360	0	190	84
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	39	156	0	167	98	0	52	23
Total Analysis Volume [veh/h]	0	154	624	0	670	391	0	207	91
Pedestrian Volume [ped/h]	0			0			0		

Intersection Settings

Priority Scheme	Free			Free			Stop		
Flared Lane							No		
Storage Area [veh]	0			0			0		
Two-Stage Gap Acceptance							No		
Number of Storage Spaces in Median	0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.24	0.01	0.00	0.01	0.00	0.00	3.70	0.26
d_M, Delay for Movement [s/veh]	26.14	10.70	0.00	12.93	0.00	0.00	1461.34	1462.48	1408.35
Movement LOS	D	B	A	B	A	A	F	F	F
95th-Percentile Queue Length [veh/ln]	0.28	0.28	0.28	0.00	0.00	0.00	31.40	31.40	31.40
95th-Percentile Queue Length [ft/ln]	7.01	7.01	7.01	0.00	0.00	0.00	785.04	785.04	785.04
d_A, Approach Delay [s/veh]	2.12			0.00			1445.95		
Approach LOS	A			A			F		
d_I, Intersection Delay [s/veh]	202.41								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 64: SR 267 & Proposed Ronald Reagan Corridor

Control Type:	Roundabout	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	State Road 267		State Road 267		Proposed Ronald Reagan Corridor	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	60.00		60.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	State Road 267		State Road 267		Proposed Ronald Reagan Corridor	
Base Volume Input [veh/h]	188	60	278	240	60	216
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	425	11	197	434	33	255
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	613	71	475	674	93	471
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	167	19	129	183	25	128
Total Analysis Volume [veh/h]	666	77	516	733	101	512
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	531		104		686	
Exiting Flow Rate [veh/h]	859		686		611	
Demand Flow Rate [veh/h]	613	71	475	674	93	471
Adjusted Demand Flow Rate [veh/h]	666	77	516	733	101	512

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1380.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00102	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	360	406	532	755	105	0
Capacity of Entry and Bypass Lanes [veh/h]	876	876	1292	1292	686	793
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	850	850	1255	1255	666	770
X, volume / capacity	0.41	0.46	0.41	0.58	0.15	0.67

Movement, Approach, & Intersection Results

Lane LOS	A	B	A	A	A	C
95th-Percentile Queue Length [veh]	2.03	2.48	2.05	3.98	0.53	5.14
95th-Percentile Queue Length [ft]	50.66	62.04	51.29	99.42	13.32	128.57
Approach Delay [s/veh]	9.71		8.58		15.20	
Approach LOS	A		A		C	
Intersection Delay [s/veh]	10.46					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 65: Proposed Ronald Reagan Spur & 475 E

Control Type:	Roundabout	Delay (sec / veh):	12.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	475 E		475 E		Proposed Ronald Reagan Spur	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	475 E		475 E		Proposed Ronald Reagan Spur	
Base Volume Input [veh/h]	0	50	25	337	276	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	215	142	450	463	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	265	167	787	739	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	72	45	214	201	1
Total Analysis Volume [veh/h]	18	288	182	855	803	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	827		19		187	
Exiting Flow Rate [veh/h]	187		1124		899	
Demand Flow Rate [veh/h]	17	265	167	787	739	4
Adjusted Demand Flow Rate [veh/h]	18	288	182	855	803	4

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1420.00	1420.00	1380.00	1380.00
B (coefficient)	0.00102	0.00091	0.00091	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	316	188	881	828	0
Capacity of Entry and Bypass Lanes [veh/h]	594	1397	1397	1140	1140
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	577	1356	1356	1107	1107
X, volume / capacity	0.53	0.13	0.63	0.73	0.00

Movement, Approach, & Intersection Results

Lane LOS	C	A	B	B	A
95th-Percentile Queue Length [veh]	3.11	0.46	4.76	6.74	0.01
95th-Percentile Queue Length [ft]	77.75	11.59	119.04	168.45	0.27
Approach Delay [s/veh]	15.75	9.09		14.90	
Approach LOS	C	A		B	
Intersection Delay [s/veh]	12.22				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 66: Proposed Ronald Reagan Corridor & Proposed Ronald Reagan Spur

Control Type:	Roundabout	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Spur	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Corridor		Proposed Ronald Reagan Spur	
Base Volume Input [veh/h]	276	276	0	338	337	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	196	399	68	271	357	110
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	472	675	68	609	694	110
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	128	183	18	165	189	30
Total Analysis Volume [veh/h]	513	734	74	662	754	120
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		2		2	
Circulating Flow Rate [veh/h]	76		777		528	
Exiting Flow Rate [veh/h]	1458		652		76	
Demand Flow Rate [veh/h]	472	675	68	609	694	110
Adjusted Demand Flow Rate [veh/h]	513	734	74	662	754	120

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00091	0.00091	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	249	281	0	357	402	478	424
Capacity of Entry and Bypass Lanes [veh/h]	1325	1325	1331	661	734	831	907
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1287	1287	1293	642	713	807	880
X, volume / capacity	0.19	0.21	0.57	0.54	0.55	0.57	0.47

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	B	B	B	A
95th-Percentile Queue Length [veh]	0.69	0.80	3.74	3.23	3.35	3.73	2.52
95th-Percentile Queue Length [ft]	17.21	19.98	93.61	80.72	83.78	93.22	62.98
Approach Delay [s/veh]	7.28			14.18		11.67	
Approach LOS	A			B		B	
Intersection Delay [s/veh]	10.40						
Intersection LOS	B						

Intersection Level Of Service Report
Intersection 67: Proposed Ronald Reagan Corridor & Whitestown Parkway

Control Type:	Roundabout	Delay (sec / veh):	29.9
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes		

Intersection Setup

Name	Pr Ro			Pr Ro			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Pr Ro			Pr Ro			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	80	392	80	100	475	100	80	54	100	100	165	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	534	206	141	563	0	8	150	17	118	68	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	926	286	241	1038	100	88	204	117	218	233	105
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	252	78	65	282	27	24	55	32	59	63	29
Total Analysis Volume [veh/h]	87	1007	311	262	1128	109	96	222	127	237	253	114
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	597			594			1676			1226		
Exiting Flow Rate [veh/h]	1537			1254			462			499		
Demand Flow Rate [veh/h]	80	926	286	241	1038	100	88	204	117	218	233	105
Adjusted Demand Flow Rate [veh/h]	87	1007	311	262	1128	109	96	222	127	237	253	114

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	530	598	0	726	819	216	243	293	330
Capacity of Entry and Bypass Lanes [veh/h]	780	855	930	782	857	289	342	438	501
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	757	830	903	759	832	281	332	425	487
X, volume / capacity	0.68	0.70	0.34	0.93	0.96	0.75	0.71	0.67	0.66

Movement, Approach, & Intersection Results

Lane LOS	C	C	A	E	E	E	E	D	C
95th-Percentile Queue Length [veh]	5.40	5.86	1.55	13.22	15.08	5.46	5.16	4.77	4.71
95th-Percentile Queue Length [ft]	135.06	146.53	38.63	330.50	377.00	136.41	128.95	119.18	117.73
Approach Delay [s/veh]	15.30			42.06		41.49		25.48	
Approach LOS	C			E		E		D	
Intersection Delay [s/veh]	29.95								
Intersection LOS	D								

Intersection Level Of Service Report
Intersection 68: Proposed Ronald Reagan Corridor & 750 S

Control Type:	Roundabout	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	Pr Ro			Pr Ro			750 South			750 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			50.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Pr Ro			Pr Ro			750 South			750 South		
Base Volume Input [veh/h]	25	502	25	25	625	25	25	18	25	25	5	25
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	475	50	83	528	86	222	49	19	57	50	43
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	977	75	108	1153	111	247	67	44	82	55	68
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	265	20	29	313	30	67	18	12	22	15	18
Total Analysis Volume [veh/h]	35	1062	82	117	1253	121	268	73	48	89	60	74
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2			2		
Circulating Flow Rate [veh/h]	472			190			1503			1406		
Exiting Flow Rate [veh/h]	1432			1446			222			280		
Demand Flow Rate [veh/h]	32	977	75	108	1153	111	247	67	44	82	55	68
Adjusted Demand Flow Rate [veh/h]	35	1062	82	117	1253	121	268	73	48	89	60	74

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	571	644	722	814	213	189	230
Capacity of Entry and Bypass Lanes [veh/h]	925	925	1196	1196	339	396	430
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	898	898	1161	1161	329	385	418
X, volume / capacity	0.62	0.70	0.60	0.68	0.63	0.48	0.53

Movement, Approach, & Intersection Results

Lane LOS	B	C	B	B	D	C	C
95th-Percentile Queue Length [veh]	4.39	5.87	4.26	5.70	4.00	2.48	3.06
95th-Percentile Queue Length [ft]	109.81	146.67	106.49	142.59	99.95	61.96	76.45
Approach Delay [s/veh]	14.83		11.86		25.71		20.77
Approach LOS	B		B		D		C
Intersection Delay [s/veh]	15.17						
Intersection LOS	C						

Intersection Level Of Service Report
Intersection 69: 100 S & 600 E

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.146

Intersection Setup

Name	600 E		100 South		100 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	600 E		100 South		100 South	
Base Volume Input [veh/h]	0	1	50	0	0	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	110	198	69	92	195
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	111	248	69	92	219
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	30	67	19	25	60
Total Analysis Volume [veh/h]	50	121	270	75	100	238
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.17	0.00	0.00	0.08	0.00
d_M, Delay for Movement [s/veh]	18.41	12.86	0.00	0.00	8.10	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.32	1.32	0.00	0.00	0.18	0.18
95th-Percentile Queue Length [ft/ln]	32.97	32.97	0.00	0.00	4.41	4.41
d_A, Approach Delay [s/veh]	14.49		0.00		2.40	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	3.85					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 70: 300 S & 400 E

Control Type:	All-way stop	Delay (sec / veh):	28.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.930

Intersection Setup

Name	South 400 East			South 400 East			300 South			300 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	South 400 East			South 400 East			300 South			300 South		
Base Volume Input [veh/h]	7	142	5	8	68	1	1	26	8	8	40	53
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	469	0	21	172	0	0	0	0	0	0	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	611	5	29	240	1	1	26	8	8	40	77
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	166	1	8	65	0	0	7	2	2	11	21
Total Analysis Volume [veh/h]	8	664	5	32	261	1	1	28	9	9	43	84
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	728	662	545	591
Degree of Utilization, x	0.93	0.44	0.07	0.23

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	13.06	2.28	0.22	0.88
95th-Percentile Queue Length [ft]	326.40	57.09	5.60	22.07
Approach Delay [s/veh]	40.30	12.71	10.10	10.90
Approach LOS	E	B	B	B
Intersection Delay [s/veh]	28.72			
Intersection LOS	D			

Intersection Level Of Service Report
Intersection 71: SR 267 & 550 S

Control Type:	Roundabout	Delay (sec / veh):	11.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	State Road 267			State Road 267			550 South				550 South			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00			60.00			45.00				45.00			
Grade [%]	0.00			0.00			0.00				0.00			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	State Road 267			State Road 267			550 South				550 South			
Base Volume Input [veh/h]	17	283	15	7	409	61	0	15	30	12	0	35	88	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	34	590	56	10	528	108	0	113	39	21	0	82	50	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	873	71	17	937	169	0	128	69	33	0	117	138	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	14	237	19	5	255	46	0	35	19	9	0	32	38	1
Total Analysis Volume [veh/h]	55	949	77	18	1018	184	0	139	75	36	0	127	150	5
Pedestrian Volume [ped/h]	0			0			0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			2				2			
Circulating Flow Rate [veh/h]	239			342			1198				1177			
Exiting Flow Rate [veh/h]	1216			1126			401				175			
Demand Flow Rate [veh/h]	51	873	71	17	937	169	0	128	69	33	0	117	138	5
Adjusted Demand Flow Rate [veh/h]	55	949	77	18	1018	184	0	139	75	36	0	127	150	5

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	524	591	591	666	258	291
Capacity of Entry and Bypass Lanes [veh/h]	1143	1143	1041	1041	513	523
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1110	1110	1010	1010	499	507
X, volume / capacity	0.46	0.52	0.57	0.64	0.50	0.56

Movement, Approach, & Intersection Results

Lane LOS	A	A	B	B	C	C
95th-Percentile Queue Length [veh]	2.46	3.06	3.69	4.83	2.78	3.36
95th-Percentile Queue Length [ft]	61.38	76.62	92.27	120.64	69.39	84.03
Approach Delay [s/veh]	8.78		11.98		16.80	18.43
Approach LOS	A		B		C	C
Intersection Delay [s/veh]	11.83					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 72: 750 S & 450 E

Control Type:	Two-way stop	Delay (sec / veh):	16.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.141

Intersection Setup

Name	450 E		750 South		750 South	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	450 E		750 South		750 South	
Base Volume Input [veh/h]	6	20	59	9	32	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	54	260	30	17	101	42
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	280	89	26	133	106
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	76	24	7	36	29
Total Analysis Volume [veh/h]	65	304	97	28	145	115
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.32	0.00	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	16.65	12.69	0.00	0.00	7.65	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.48	2.48	0.00	0.00	0.26	0.26
95th-Percentile Queue Length [ft/ln]	62.07	62.07	0.00	0.00	6.56	6.56
d_A, Approach Delay [s/veh]	13.39		0.00		4.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.02					
Intersection LOS	C					

10-Year - Improved

AM Peak Hour

Intersection Level Of Service Report
Intersection 2: 100 S & 500 E

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.353

Intersection Setup

Name	500 East			500 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	500 East			500 East			100 South			100 South		
Base Volume Input [veh/h]	10	29	1	0	85	3	0	4	3	1	28	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	19	0	56	25	70	36	79	4	0	114	83
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	48	1	56	110	73	36	83	7	1	142	83
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	0	15	30	20	10	23	2	0	39	23
Total Analysis Volume [veh/h]	17	52	1	61	120	79	39	90	8	1	154	90
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	674	737	698	753
Degree of Utilization, x	0.10	0.35	0.20	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.35	1.59	0.73	1.42
95th-Percentile Queue Length [ft]	8.64	39.81	18.15	35.41
Approach Delay [s/veh]	8.95	10.52	9.42	10.07
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	10.00			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 3: 100 S & 650 E

Control Type:	All-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.360

Intersection Setup

Name	650 East				650 East				100 South				100 South			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				40.00				40.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	No				No				No				No			

Volumes

Name	650 East				650 East				100 South				100 South			
Base Volume Input [veh/h]	0	11	74	0	0	0	38	1	0	0	4	4	0	2	10	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00	0.00	3.00	3.00	3.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	96	48	0	0	0	39	110	0	88	0	153	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	107	122	0	0	0	77	111	0	88	4	157	0	2	10	0
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	29	33	0	0	0	21	30	0	24	1	43	0	1	3	0
Total Analysis Volume [veh/h]	0	116	133	0	0	0	84	121	0	96	4	171	0	2	11	0
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	716	773	754	653
Degree of Utilization, x	0.35	0.27	0.36	0.02

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.56	1.07	1.64	0.06
95th-Percentile Queue Length [ft]	38.95	26.68	40.99	1.52
Approach Delay [s/veh]	10.68	9.33	10.43	8.63
Approach LOS	B	A	B	A
Intersection Delay [s/veh]	10.18			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 5: 650 E & 200 S

Control Type:	All-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.360

Intersection Setup

Name	650 East			650 East			200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			200 South			200 South		
Base Volume Input [veh/h]	4	72	8	8	35	0	3	3	1	4	22	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	41	0	132	57	4	0	59	1	5	82	103
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	113	8	140	92	4	3	62	2	9	104	110
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	31	2	38	25	1	1	17	1	2	28	30
Total Analysis Volume [veh/h]	4	123	9	152	100	4	3	67	2	10	113	120
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	707	712	678	752
Degree of Utilization, x	0.19	0.36	0.11	0.32

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.71	1.64	0.36	1.40
95th-Percentile Queue Length [ft]	17.67	40.95	8.88	35.04
Approach Delay [s/veh]	9.29	10.87	8.94	10.06
Approach LOS	A	B	A	B
Intersection Delay [s/veh]	10.09			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 12: Main & Pierce

Control Type:	Roundabout	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				25.00				20.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Base Volume Input [veh/h]	0	12	76	14	0	9	127	19	0	18	22	17	0	25	14	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	63	10	0	64	112	0	0	1	312	12	0	8	147	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	24	139	24	0	73	239	19	0	19	334	29	0	33	161	9
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270
Total 15-Minute Volume [veh/h]	0	8	48	8	0	25	82	7	0	7	115	10	0	11	56	3
Total Analysis Volume [veh/h]	0	33	192	33	0	101	330	26	0	26	461	40	0	46	222	12
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	606				310				491				259			
Exiting Flow Rate [veh/h]	428				237				289				613			
Demand Flow Rate [veh/h]	0	31	177	31	0	93	304	25	0	25	425	37	0	42	205	12
Adjusted Demand Flow Rate [veh/h]	0	33	192	33	0	101	330	26	0	26	461	40	0	46	222	12

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	266	471	543	289
Capacity of Entry and Bypass Lanes [veh/h]	745	1006	837	1061
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	723	977	812	1030
X, volume / capacity	0.36	0.47	0.65	0.27

Movement, Approach, & Intersection Results

Lane LOS	A	A	C	A
95th-Percentile Queue Length [veh]	1.62	2.54	4.88	1.11
95th-Percentile Queue Length [ft]	40.54	63.49	122.08	27.70
Approach Delay [s/veh]	9.51	9.23	15.50	6.16
Approach LOS	A	A	C	A
Intersection Delay [s/veh]	10.88			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 13: Pierce Street & 700 E

Control Type:	Roundabout	Delay (sec / veh):	11.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	700 East		East Pierce Street		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	700 East		East Pierce Street		East 300 South	
Base Volume Input [veh/h]	147	15	8	70	53	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	331	9	175	211	152	203
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	478	24	183	281	205	265
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	130	7	50	76	56	72
Total Analysis Volume [veh/h]	520	26	199	305	223	288
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	230		536		205	
Exiting Flow Rate [veh/h]	502		256		850	
Demand Flow Rate [veh/h]	478	24	183	281	205	265
Adjusted Demand Flow Rate [veh/h]	520	26	199	305	223	288

Lanes

Overwrite Calculated Critical Headway	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97
Entry Flow Rate [veh/h]	563	520	527
Capacity of Entry and Bypass Lanes [veh/h]	1092	800	1120
Pedestrian Impedance	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1060	776	1088
X, volume / capacity	0.52	0.65	0.47

Movement, Approach, & Intersection Results

Lane LOS	A	C	A
95th-Percentile Queue Length [veh]	3.04	4.87	2.57
95th-Percentile Queue Length [ft]	76.07	121.63	64.24
Approach Delay [s/veh]	9.52	16.07	8.56
Approach LOS	A	C	A
Intersection Delay [s/veh]	11.32		
Intersection LOS	B		

Intersection Level Of Service Report
Intersection 14: Pierce Street & 300 S & Albert South White Drive

Control Type:	Roundabout	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	East 300 South		Albert S. White Drive		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	200.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	East 300 South		Albert S. White Drive		East 300 South	
Base Volume Input [veh/h]	105	107	44	134	156	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	332	210	133	524	751	222
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	437	317	177	658	907	264
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	86	48	179	246	72
Total Analysis Volume [veh/h]	475	345	192	715	986	287
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	2		2		1	
Circulating Flow Rate [veh/h]	1016		489		198	
Exiting Flow Rate [veh/h]	493		1016		1226	
Demand Flow Rate [veh/h]	437	317	177	658	907	264
Adjusted Demand Flow Rate [veh/h]	475	345	192	715	986	287

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	0.00	1350.00	1420.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00000	0.00092	0.00085	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	260	230	0	440	496	617	695
Capacity of Entry and Bypass Lanes [veh/h]	531	599	103001	861	937	1187	1187
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	515	582	100000	836	910	1152	1152
X, volume / capacity	0.49	0.38	0.00	0.51	0.53	0.52	0.59

Movement, Approach, & Intersection Results

Lane LOS	C	B	A	B	B	A	B
95th-Percentile Queue Length [veh]	2.66	1.80	0.00	2.95	3.17	3.10	3.98
95th-Percentile Queue Length [ft]	66.39	44.93	0.00	73.84	79.36	77.62	99.47
Approach Delay [s/veh]	8.14			11.09		9.76	
Approach LOS	A			B		A	
Intersection Delay [s/veh]	9.72						
Intersection LOS	A						

Intersection Level Of Service Report
Intersection 20: Albert S. White Dr. (400 S) & 400 E

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.600

Intersection Setup

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	200.00	300.00	100.00	100.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Base Volume Input [veh/h]	0	0	0	16	0	91	53	724	0	1	449	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	5	9	2	18	302	458	799	96	21	1123	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	118	0	0	0	0	0	8
Total Hourly Volume [veh/h]	46	5	9	18	18	275	511	1523	96	22	1572	12
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	1	2	5	5	75	139	414	26	6	427	3
Total Analysis Volume [veh/h]	50	5	10	20	20	299	555	1655	104	24	1709	13
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	2	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2						
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	10	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	32	32	23	23	23	20	69	69	9	58	58
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No			No	No	No	No		No	No	
Maximum Recall	No	No			No	No	No	No		No	No	
Pedestrian Recall	No	No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	2.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	26	26	17	17	72	63	63	72	52	52
g / C, Green / Cycle	0.24	0.24	0.15	0.15	0.65	0.57	0.57	0.65	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.02	0.01	0.03	0.12	0.49	0.37	0.37	0.06	0.38	0.01
s, saturation flow rate [veh/h]	2192	1506	1385	2512	1139	3179	1620	374	4548	1419
c, Capacity [veh/h]	586	356	263	388	712	1821	928	278	2150	671
d1, Uniform Delay [s]	32.64	32.40	40.38	44.63	24.65	15.82	15.91	10.48	24.50	15.43
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.29	0.22	1.22	13.73	8.26	1.72	3.44	0.61	3.14	0.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.09	0.04	0.15	0.77	0.78	0.64	0.64	0.09	0.79	0.02
d, Delay for Lane Group [s/veh]	32.93	32.62	41.60	58.35	32.91	17.54	19.36	11.09	27.64	15.49
Lane Group LOS	C	C	D	E	C	B	B	B	C	B
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.54	0.33	1.04	4.63	3.26	9.33	10.09	0.22	12.28	0.18
50th-Percentile Queue Length [ft/ln]	13.57	8.30	25.99	115.86	81.47	233.13	252.37	5.57	307.06	4.44
95th-Percentile Queue Length [veh/ln]	0.98	0.60	1.87	8.17	5.87	14.33	15.31	0.40	18.03	0.32
95th-Percentile Queue Length [ft/ln]	24.43	14.93	46.78	204.13	146.65	358.33	382.64	10.03	450.75	7.99

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.93	32.62	32.62	41.60	41.60	58.35	32.91	18.08	19.36	11.09	27.64	15.49
Movement LOS	C	C	C	D	D	E	C	B	B	B	C	B
d_A, Approach Delay [s/veh]	32.86			56.37			21.70			27.32		
Approach LOS	C			E			C			C		
d_I, Intersection Delay [s/veh]	26.69											
Intersection LOS	C											
Intersection V/C	0.600											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	52.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	15.29	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	3.024	0.000	0.000
Crosswalk LOS	F	C	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	473	309	1145	945
d_b, Bicycle Delay [s]	32.07	39.31	10.04	15.29
l_b,int, Bicycle LOS Score for Intersection	1.667	2.314	2.832	2.524
Bicycle LOS	A	B	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: Albert S. White Dr. (400 S) & 450 E/Anson Blvd

Control Type:	Signalized	Delay (sec / veh):	32.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

Intersection Setup

Name	Anson Boulevard			450 East			Albert S. White Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	250.00	100.00	100.00	200.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Anson Boulevard			450 East			Albert S. White Drive					
Base Volume Input [veh/h]	69	2	23	8	4	5	22	586	115	26	397	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	1	0	2	4	151	306	491	14	22	997	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	47	0	0	0	0	0	0
Total Hourly Volume [veh/h]	75	3	23	10	8	109	328	1077	129	48	1394	25
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	1	6	3	2	30	89	293	35	13	379	7
Total Analysis Volume [veh/h]	82	3	25	11	9	118	357	1171	140	52	1515	27
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	11	18	18	9	16	16	21	74	74	9	62	62
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	No		No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	6.00	4.00	6.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	21	12	21	10	33	77	68	68	77	56	56
g / C, Green / Cycle	0.19	0.11	0.19	0.09	0.30	0.70	0.62	0.62	0.70	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.06	0.02	0.01	0.01	0.05	0.58	0.40	0.40	0.11	0.46	0.46
s, saturation flow rate [veh/h]	1326	1442	1352	1669	2512	618	1669	1608	485	1669	1659
c, Capacity [veh/h]	342	157	331	152	754	400	1032	994	337	850	845
d1, Uniform Delay [s]	37.96	44.52	36.27	45.70	28.28	33.21	13.28	13.45	9.39	24.67	24.72
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.65	2.46	0.19	0.75	0.44	24.80	3.06	3.34	0.97	15.36	15.69
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.18	0.03	0.06	0.16	0.89	0.64	0.65	0.15	0.91	0.91
d, Delay for Lane Group [s/veh]	39.62	46.98	36.46	46.45	28.72	58.02	16.34	16.79	10.36	40.03	40.41
Lane Group LOS	D	D	D	D	C	E	B	B	B	D	D
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.05	0.80	0.25	0.25	1.16	5.44	10.00	10.00	0.40	20.39	20.42
50th-Percentile Queue Length [ft/ln]	51.13	20.06	6.35	6.32	29.10	135.95	250.07	249.88	10.11	509.76	510.50
95th-Percentile Queue Length [veh/ln]	3.68	1.44	0.46	0.45	2.09	9.26	15.19	15.18	0.73	27.80	27.83
95th-Percentile Queue Length [ft/ln]	92.03	36.11	11.43	11.37	52.37	231.56	379.74	379.50	18.20	694.90	695.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	39.62	46.98	46.98	36.46	46.45	28.72	58.02	16.53	16.79	10.36	40.21	40.41
Movement LOS	D	D	D	D	D	C	E	B	B	B	D	D
d_A, Approach Delay [s/veh]	41.49			30.49			25.43			39.24		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	32.41											
Intersection LOS	C											
Intersection V/C	0.655											

Other Modes

g_Walk,mi, Effective Walk Time [s]	68.0	56.0	0.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	8.02	13.25	0.00	43.65
l_p,int, Pedestrian LOS Score for Intersectio	2.029	2.744	0.000	3.039
Crosswalk LOS	B	B	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	218	182	1236	1018
d_b, Bicycle Delay [s]	43.65	45.45	8.02	13.25
l_b,int, Bicycle LOS Score for Intersection	1.741	1.865	2.936	2.875
Bicycle LOS	A	A	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 22: Albert S. White Dr. (400 S) & 500 E

Control Type:	Signalized	Delay (sec / veh):	31.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.740

Intersection Setup

Name	500 East			500 East								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			No			Yes		

Volumes

Name	500 East			500 East								
Base Volume Input [veh/h]	15	3	3	10	30	130	137	136	45	20	336	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	24	12	10	42	461	175	315	3	10	584	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	225	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	27	15	20	72	366	312	451	48	30	920	17
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	7	4	5	20	99	85	123	13	8	250	5
Total Analysis Volume [veh/h]	26	29	16	22	78	398	339	490	52	33	1000	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	38	0	0	38	0	17	62	0	0	45	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No		No	No			No	
Maximum Recall		No			No		No	No			No	
Pedestrian Recall		No			No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	58	58	58	41	41
g / C, Green / Cycle	0.34	0.34	0.34	0.58	0.58	0.58	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.28	0.44	0.17	0.17	0.34	0.34
s, saturation flow rate [veh/h]	1125	1573	1419	778	1669	1614	1603	1510
c, Capacity [veh/h]	432	579	482	407	968	936	695	619
d1, Uniform Delay [s]	22.83	23.17	30.27	20.72	10.56	10.56	25.94	26.25
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.82	0.65	14.80	17.91	0.74	0.76	8.45	11.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.17	0.82	0.83	0.28	0.28	0.78	0.82
d, Delay for Lane Group [s/veh]	23.65	23.82	45.07	38.64	11.30	11.33	34.39	37.97
Lane Group LOS	C	C	D	D	B	B	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.25	1.75	10.53	5.61	2.95	2.86	12.22	12.03
50th-Percentile Queue Length [ft/ln]	31.15	43.69	263.22	140.30	73.68	71.42	305.38	300.81
95th-Percentile Queue Length [veh/ln]	2.24	3.15	15.85	9.50	5.30	5.14	17.95	17.72
95th-Percentile Queue Length [ft/ln]	56.06	78.64	396.25	237.43	132.62	128.55	448.67	443.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.65	23.65	23.65	23.82	23.82	45.07	38.64	11.31	11.33	34.39	36.15	37.97
Movement LOS	C	C	C	C	C	D	D	B	B	C	D	D
d_A, Approach Delay [s/veh]	23.65			40.80			21.83			36.13		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	31.67											
Intersection LOS	C											
Intersection V/C	0.740											

Other Modes

g_Walk,mi, Effective Walk Time [s]	58.0	0.0	0.0	34.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	8.82	0.00	0.00	21.78
l_p,int, Pedestrian LOS Score for Intersectio	1.820	0.000	0.000	2.656
Crosswalk LOS	A	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	680	680	1160	820
d_b, Bicycle Delay [s]	21.78	21.78	8.82	17.41
l_b,int, Bicycle LOS Score for Intersection	1.677	2.753	2.286	2.427
Bicycle LOS	A	C	B	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 24: 400 S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	27.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street			South Main Street			400 S			400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	200.00	0.00	0.00	200.00	0.00	0.00	200.00	0.00	0.00	200.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Main Street			South Main Street			400 S			400 S		
Base Volume Input [veh/h]	54	103	82	37	178	43	29	98	67	125	166	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	73	372	18	111	128	32	636	14	440	864	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	176	454	55	289	171	61	734	81	565	1030	27
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	48	123	15	79	46	17	199	22	154	280	7
Total Analysis Volume [veh/h]	87	191	493	60	314	186	66	798	88	614	1120	29
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	952			1876			1018			354		
Exiting Flow Rate [veh/h]	956			265			1243			884		
Demand Flow Rate [veh/h]	80	176	454	55	289	171	61	734	81	565	1030	27
Adjusted Demand Flow Rate [veh/h]	87	191	493	60	314	186	66	798	88	614	1120	29

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
A (intercept)	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00085	0.00092	0.00085	0.00085	0.00092	0.00085	0.00085	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	135	152	0	182	205	0	419	472	0	840	947	0
Capacity of Entry and Bypass Lanes [veh/h]	563	633	670	241	289	494	530	598	631	975	1051	1134
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	547	614	651	234	280	480	514	581	612	947	1021	1101
X, volume / capacity	0.24	0.24	0.76	0.75	0.71	0.39	0.79	0.79	0.14	0.86	0.90	0.03

Movement, Approach, & Intersection Results

Lane LOS	A	A	C	F	E	B	D	D	A	D	D	A
95th-Percentile Queue Length [veh]	0.93	0.93	6.94	5.28	4.91	1.81	7.32	7.52	0.50	11.11	13.29	0.08
95th-Percentile Queue Length [ft]	23.18	23.31	173.59	132.02	122.84	45.33	183.02	187.97	12.50	277.83	332.28	2.03
Approach Delay [s/veh]	19.06			36.92			28.69			27.71		
Approach LOS	C			E			D			D		
Intersection Delay [s/veh]	27.57											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 25: 400 S/Albert S. White Drive & 400 S/Ginger Way

Control Type:	Roundabout	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	300.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Base Volume Input [veh/h]	3	162	60	34	205	2	12	7	8	74	2	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	46	940	21	189	1265	0	0	6	13	15	0	51
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	1102	81	223	1470	2	12	13	21	89	2	71
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	299	22	61	399	1	3	4	6	24	1	19
Total Analysis Volume [veh/h]	53	1198	88	242	1598	2	13	14	23	97	2	77
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	277			157			1995			1302		
Exiting Flow Rate [veh/h]	1770			1247			59			354		
Demand Flow Rate [veh/h]	49	1102	81	223	1470	2	12	13	21	89	2	71
Adjusted Demand Flow Rate [veh/h]	53	1198	88	242	1598	2	13	14	23	97	2	77

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	649	731	892	1006	28	24	55	48	0
Capacity of Entry and Bypass Lanes [veh/h]	1047	1123	1169	1244	216	261	408	470	492
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1016	1090	1135	1207	210	253	396	456	478
X, volume / capacity	0.62	0.65	0.76	0.81	0.13	0.09	0.13	0.10	0.16

Movement, Approach, & Intersection Results

Lane LOS	B	B	C	C	C	C	B	A	A
95th-Percentile Queue Length [veh]	4.47	5.07	7.83	9.54	0.44	0.30	0.45	0.34	0.57
95th-Percentile Queue Length [ft]	111.79	126.66	195.72	238.55	10.91	7.43	11.35	8.47	14.26
Approach Delay [s/veh]	12.38		17.34		18.43		10.07		
Approach LOS	B		C		C		B		
Intersection Delay [s/veh]	15.03								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 26: 700 E & 425 S

Control Type:	Roundabout	Delay (sec / veh):	4.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	South 700 East		South 700 East		East 425 South	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Left	Thru	Left	Right	Thru	Right
Lane Width [ft]	11.48	11.48	12.00	12.00	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	South 700 East		South 700 East		East 425 South	
Base Volume Input [veh/h]	32	7	63	46	9	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	66	0	216	0	66
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	73	63	262	9	121
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	20	17	71	2	33
Total Analysis Volume [veh/h]	35	79	68	285	10	132
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	70		10		36	
Exiting Flow Rate [veh/h]	304		172		151	
Demand Flow Rate [veh/h]	32	73	63	262	9	121
Adjusted Demand Flow Rate [veh/h]	35	79	68	285	10	132

Lanes

Overwrite Calculated Critical Headway	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97
Entry Flow Rate [veh/h]	118	364	147
Capacity of Entry and Bypass Lanes [veh/h]	1285	1366	1331
Pedestrian Impedance	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1248	1326	1292
X, volume / capacity	0.09	0.27	0.11

Movement, Approach, & Intersection Results

Lane LOS	A	A	A
95th-Percentile Queue Length [veh]	0.30	1.08	0.37
95th-Percentile Queue Length [ft]	7.53	26.98	9.24
Approach Delay [s/veh]	3.63	5.03	3.68
Approach LOS	A	A	A
Intersection Delay [s/veh]	4.45		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 27: SR 267 & Indianapolis Road

Control Type:	Signalized	Delay (sec / veh):	20.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.441

Intersection Setup

Name	State Road 267			SR267			Indianapolis Road			Indianapolis Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	State Road 267			SR267			Indianapolis Road			Indianapolis Road		
Base Volume Input [veh/h]	26	260	33	142	284	79	72	34	26	12	28	146
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	457	14	83	676	21	14	0	2	1	1	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	18	0	0	0	0	0	11	0	0	64
Total Hourly Volume [veh/h]	30	717	29	225	960	100	86	34	17	13	29	105
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	195	8	61	261	27	23	9	5	4	8	29
Total Analysis Volume [veh/h]	33	779	32	245	1043	109	93	37	18	14	32	114
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	47	47	25	63	63	9	19	19	9	19	19
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	66	41	41	66	57	57	22	13	13	22	13	13
g / C, Green / Cycle	0.66	0.41	0.41	0.66	0.57	0.57	0.22	0.13	0.13	0.22	0.13	0.13
(v / s)_i Volume / Saturation Flow Rate	0.05	0.22	0.02	0.23	0.31	0.32	0.07	0.02	0.01	0.01	0.02	0.07
s, saturation flow rate [veh/h]	620	3532	1577	1050	1855	1794	1402	1855	1577	1474	1855	1577
c, Capacity [veh/h]	420	1448	646	689	1057	1023	397	241	205	408	241	205
d1, Uniform Delay [s]	8.02	22.33	17.77	8.91	13.49	13.53	32.12	38.62	38.28	30.68	38.51	40.79
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	1.44	0.14	1.43	2.08	2.18	1.38	1.35	0.84	0.16	1.14	10.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.08	0.54	0.05	0.36	0.55	0.56	0.23	0.15	0.09	0.03	0.13	0.56
d, Delay for Lane Group [s/veh]	8.39	23.77	17.91	10.35	15.57	15.71	33.50	39.96	39.13	30.84	39.65	51.25
Lane Group LOS	A	C	B	B	B	B	C	D	D	C	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.22	6.36	0.42	2.01	7.94	7.78	1.95	0.88	0.43	0.28	0.75	3.15
50th-Percentile Queue Length [ft/ln]	5.43	158.89	10.56	50.29	198.55	194.38	48.79	21.92	10.68	6.91	18.86	78.87
95th-Percentile Queue Length [veh/ln]	0.39	10.49	0.76	3.62	12.56	12.35	3.51	1.58	0.77	0.50	1.36	5.68
95th-Percentile Queue Length [ft/ln]	9.78	262.25	19.01	90.52	314.10	308.71	87.83	39.45	19.23	12.44	33.95	141.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.39	23.77	17.91	10.35	15.63	15.71	33.50	39.96	39.13	30.84	39.65	51.25
Movement LOS	A	C	B	B	B	B	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	22.94			14.71			35.80			47.14		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	20.70											
Intersection LOS	C											
Intersection V/C	0.441											

Other Modes

g_Walk,mi, Effective Walk Time [s]	13.0	13.0	57.0	41.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	37.85	37.85	9.25	17.41
l_p,int, Pedestrian LOS Score for Intersectio	3.118	2.959	2.229	2.525
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	820	1140	260	260
d_b, Bicycle Delay [s]	17.41	9.25	37.85	37.85
l_b,int, Bicycle LOS Score for Intersection	2.271	2.712	1.822	1.929
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 35: 500S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	7.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street		Main Street		East 500 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Main Street		Main Street		East 500 South	
Base Volume Input [veh/h]	61	234	441	17	13	77
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	63	432	413	199	14	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	124	666	854	216	27	105
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	181	232	59	7	29
Total Analysis Volume [veh/h]	135	724	928	235	29	114
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		2	
Circulating Flow Rate [veh/h]	30		139		956	
Exiting Flow Rate [veh/h]	1073		776		381	
Demand Flow Rate [veh/h]	124	666	854	216	27	105
Adjusted Demand Flow Rate [veh/h]	135	724	928	235	29	114

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	416	469	564	635	148
Capacity of Entry and Bypass Lanes [veh/h]	1382	1382	1252	1252	631
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1342	1342	1215	1215	612
X, volume / capacity	0.30	0.34	0.45	0.51	0.23

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.28	1.52	2.39	2.97	0.90
95th-Percentile Queue Length [ft]	31.94	38.00	59.65	74.30	22.53
Approach Delay [s/veh]	5.56		8.09		8.84
Approach LOS	A		A		A
Intersection Delay [s/veh]	7.13				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 38: 550 S & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			550 S					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	150.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			550 S					
Base Volume Input [veh/h]	6	138	46	48	22	1	4	118	7	29	52	177
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	16	27	43	4	7	21	489	39	100	1144	178
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	154	73	91	26	8	25	607	46	129	1196	355
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	42	20	25	7	2	7	165	13	35	325	96
Total Analysis Volume [veh/h]	24	167	79	99	28	9	27	660	50	140	1300	386
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	810			1508			275			225		
Exiting Flow Rate [veh/h]	225			200			1373			782		
Demand Flow Rate [veh/h]	22	154	73	91	26	8	25	607	46	129	1196	355
Adjusted Demand Flow Rate [veh/h]	24	167	79	99	28	9	27	660	50	140	1300	386

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	0.00	1350.00	1420.00	1350.00	1420.00	1420.00	1420.00	0.00
B (coefficient)	0.00085	0.00000	0.00092	0.00085	0.00092	0.00085	0.00091	0.00091	0.00000
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	197	0	75	66	357	403	698	787	0
Capacity of Entry and Bypass Lanes [veh/h]	714	103001	338	395	1049	1125	1158	1158	103000
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	693	100000	328	383	1018	1092	1124	1124	100000
X, volume / capacity	0.28	0.00	0.22	0.17	0.34	0.36	0.60	0.68	0.00

Movement, Approach, & Intersection Results

Lane LOS	A	A	C	B	A	A	B	B	A
95th-Percentile Queue Length [veh]	1.12	0.00	0.83	0.59	1.52	1.64	4.22	5.64	0.00
95th-Percentile Queue Length [ft]	28.05	0.00	20.64	14.82	38.01	41.04	105.57	141.06	0.00
Approach Delay [s/veh]	6.04		13.74		6.98		9.52		
Approach LOS	A		B		A		A		
Intersection Delay [s/veh]	8.77								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 41: Perry Worth Road & 550 S

Control Type:	Signalized	Delay (sec / veh):	23.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.626

Intersection Setup

Name	Perry Worth Road			Perry Worth Road			550 S					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	250.00	100.00	100.00	200.00	100.00	450.00	150.00	100.00	150.00	500.00	100.00	500.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1000.00
Speed [mph]	40.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perry Worth Road			Perry Worth Road			550 S					
Base Volume Input [veh/h]	142	37	0	0	11	96	265	0	36	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	39	30	145	1	21	59	127	1388	55	298	2073	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	55	0	0	59	0	0	35	0	0	0
Total Hourly Volume [veh/h]	181	67	90	1	32	96	392	1388	56	298	2073	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	18	24	0	9	26	107	377	15	81	563	0
Total Analysis Volume [veh/h]	197	73	98	1	35	104	426	1509	61	324	2253	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	8	4	4	4	5	2	2	1	6	6
Auxiliary Signal Groups						4,5						
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	10	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	12	28	28	16	16	16	16	74	74	18	76	76
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No			No	No	No	No		No	No	
Maximum Recall	No	No			No	No	No	No		No	No	
Pedestrian Recall	No	No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	22	22	10	10	28	86	68	68	86	70	70
g / C, Green / Cycle	0.18	0.18	0.08	0.08	0.23	0.72	0.57	0.57	0.72	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.13	0.10	0.00	0.02	0.07	0.51	0.30	0.04	0.55	0.42	0.42
s, saturation flow rate [veh/h]	1479	1685	1204	1855	1577	829	5053	1577	593	3532	1855
c, Capacity [veh/h]	339	309	60	155	368	615	2863	893	454	2060	1082
d1, Uniform Delay [s]	45.53	44.54	60.00	51.39	37.76	26.57	16.06	11.72	16.76	17.91	17.91
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.11	6.99	0.51	3.38	1.92	6.33	0.70	0.15	9.19	2.18	4.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.55	0.02	0.23	0.28	0.69	0.53	0.07	0.71	0.72	0.72
d, Delay for Lane Group [s/veh]	52.65	51.52	60.51	54.76	39.67	32.90	16.76	11.87	25.95	20.08	21.99
Lane Group LOS	D	D	E	D	D	C	B	B	C	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.97	5.15	0.04	1.12	2.67	2.14	8.48	0.77	3.49	13.73	15.00
50th-Percentile Queue Length [ft/ln]	149.13	128.63	0.96	27.90	66.74	53.39	211.90	19.25	87.32	343.24	374.88
95th-Percentile Queue Length [veh/ln]	9.97	8.87	0.07	2.01	4.81	3.84	13.25	1.39	6.29	19.81	21.35
95th-Percentile Queue Length [ft/ln]	249.27	221.63	1.73	50.21	120.14	96.10	331.26	34.66	157.17	495.16	533.64

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.65	51.52	51.52	60.51	54.76	39.67	32.90	16.76	11.87	25.95	20.74	21.99
Movement LOS	D	D	D	E	D	D	C	B	B	C	C	C
d_A, Approach Delay [s/veh]	52.13			43.59			20.06			21.39		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	23.71											
Intersection LOS	C											
Intersection V/C	0.626											

Other Modes

g_Walk,mi, Effective Walk Time [s]	68.0	70.0	10.0	22.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	11.27	10.42	50.42	40.02
l_p,int, Pedestrian LOS Score for Intersectio	2.622	2.880	3.446	3.486
Crosswalk LOS	B	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	367	167	1133	1167
d_b, Bicycle Delay [s]	40.02	50.42	11.27	10.42
l_b,int, Bicycle LOS Score for Intersection	2.368	1.999	2.677	3.088
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 46: Veterans Drive & Central Boulevard

Control Type:	Roundabout	Delay (sec / veh):	5.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name			South 700 East		Central Boulevard	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	450.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	450.00	0.00	0.00
Speed [mph]	40.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			South 700 East		Central Boulevard	
Base Volume Input [veh/h]	34	229	217	71	75	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	63	337	10	1	3
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	35	292	554	81	76	52
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500
Total 15-Minute Volume [veh/h]	12	99	188	28	26	18
Total Analysis Volume [veh/h]	48	397	753	110	103	71
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	106		49		776	
Exiting Flow Rate [veh/h]	849		515		163	
Demand Flow Rate [veh/h]	44	365	693	102	95	65
Adjusted Demand Flow Rate [veh/h]	48	397	753	110	103	71

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1380.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	216	243	418	472	180
Capacity of Entry and Bypass Lanes [veh/h]	1290	1290	1358	1358	626
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1252	1252	1318	1318	608
X, volume / capacity	0.17	0.19	0.31	0.35	0.29

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.60	0.69	1.32	1.57	1.18
95th-Percentile Queue Length [ft]	14.98	17.32	32.96	39.29	29.47
Approach Delay [s/veh]	4.39		5.71		9.72
Approach LOS	A		A		A
Intersection Delay [s/veh]	5.78				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	Roundabout	Delay (sec / veh):	5.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	475 East				475 E				Whitestown Parkway			Whitestown Parkway		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2500.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				45.00			45.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	475 East				475 E				Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	3	9	48	0	2	4	1	1	357	3	13	144	3
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	83	0	23	0	10	52	150	0	0	463	161
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	9	131	0	25	4	11	53	507	3	13	607	164
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	2	36	0	7	1	3	14	138	1	4	165	45
Total Analysis Volume [veh/h]	0	3	10	142	0	27	4	12	58	551	3	14	660	178
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2				2				1			1		
Circulating Flow Rate [veh/h]	655				697				46			73		
Exiting Flow Rate [veh/h]	22				253				695			742		
Demand Flow Rate [veh/h]	0	3	9	131	0	25	4	11	53	507	3	13	607	164
Adjusted Demand Flow Rate [veh/h]	0	3	10	142	0	27	4	12	58	551	3	14	660	178

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	160	45	297	335	413	466
Capacity of Entry and Bypass Lanes [veh/h]	814	786	1362	1362	1329	1329
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	791	763	1322	1322	1290	1290
X, volume / capacity	0.20	0.06	0.22	0.25	0.31	0.35

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.73	0.18	0.83	0.97	1.33	1.59
95th-Percentile Queue Length [ft]	18.14	4.48	20.73	24.20	33.37	39.79
Approach Delay [s/veh]	6.65	5.29	4.71		5.83	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	5.48					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Roundabout	Delay (sec / veh):	6.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	2	0	33	6	1	0	4	402	4	65	156	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	60	12	0	7	5	228	23	44	587	22
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	0	93	18	1	7	9	630	27	109	743	48
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	25	5	0	2	2	171	7	30	202	13
Total Analysis Volume [veh/h]	36	0	101	20	1	8	10	685	29	118	808	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			1			1		
Circulating Flow Rate [veh/h]	736			991			143			47		
Exiting Flow Rate [veh/h]	152			64			878			830		
Demand Flow Rate [veh/h]	33	0	93	18	1	7	9	630	27	109	743	48
Adjusted Demand Flow Rate [veh/h]	36	0	101	20	1	8	10	685	29	118	808	52

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	142	30	351	396	474	534
Capacity of Entry and Bypass Lanes [veh/h]	760	612	1247	1247	1361	1361
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	738	594	1211	1211	1321	1321
X, volume / capacity	0.19	0.05	0.28	0.32	0.35	0.39

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.68	0.15	1.16	1.37	1.58	1.90
95th-Percentile Queue Length [ft]	16.97	3.84	29.03	34.36	39.47	47.56
Approach Delay [s/veh]	6.92	6.62	5.75		6.19	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	6.08					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 52: Whitestown Parkway & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	44.7
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	300.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	38	76	453	87	12	11	11	387	38	291	264	84
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	74	38	624	15	16	0	0	377	45	618	692	96
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	112	114	1077	102	28	11	11	764	83	909	956	180
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	31	293	28	8	3	3	208	23	247	260	49
Total Analysis Volume [veh/h]	122	124	1171	111	30	12	12	830	90	988	1039	196
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	982			2213			1163			266		
Exiting Flow Rate [veh/h]	1141			342			1196			969		
Demand Flow Rate [veh/h]	112	114	1077	102	28	11	11	764	83	909	956	180
Adjusted Demand Flow Rate [veh/h]	122	124	1171	111	30	12	12	830	90	988	1039	196

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	0.00	1350.00	1420.00	1420.00	1350.00	1420.00	1350.00	1420.00
B (coefficient)	0.00092	0.00085	0.00000	0.00092	0.00085	0.00085	0.00092	0.00085	0.00092	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	254	0	0	77	69	0	452	509	1018	1273
Capacity of Entry and Bypass Lanes [veh/h]	548	617	103000	177	217	514	464	529	1058	1133
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	532	599	100000	172	211	499	450	514	1027	1100
X, volume / capacity	0.46	0.00	0.01	0.44	0.32	0.02	0.97	0.96	0.96	1.12

Movement, Approach, & Intersection Results

Lane LOS	B	A	A	E	D	A	F	F	E	F
95th-Percentile Queue Length [veh]	2.42	0.00	0.00	2.00	1.29	0.07	12.11	12.47	17.00	31.56
95th-Percentile Queue Length [ft]	60.56	0.00	0.00	49.92	32.25	1.85	302.79	311.70	424.93	789.03
Approach Delay [s/veh]	2.57			30.90			62.69		64.94	
Approach LOS	A			D			F		F	
Intersection Delay [s/veh]	44.69									
Intersection LOS	E									

Intersection Level Of Service Report
Intersection 55: Whitestown Parkway & Perry Worth Road

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

Intersection Setup

Name				Perry Worth Road			Whitestown Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	2	0	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	550.00	100.00	100.00	600.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Perry Worth Road			Whitestown Parkway					
Base Volume Input [veh/h]	49	7	15	58	17	211	252	700	14	26	1031	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	225	21	15	254	321	8	3	1040	161
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	68	0	0	0	0	0	74
Total Hourly Volume [veh/h]	67	7	15	283	38	158	506	1021	22	29	2071	121
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	2	4	77	10	43	138	277	6	8	563	33
Total Analysis Volume [veh/h]	73	8	16	308	41	172	550	1110	24	32	2251	132
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2,3						4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	16	16	9	16	16	21	84	84	11	74	74
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No	No	No	Yes		No	Yes	Yes
Maximum Recall	No	No		No	No	No	No	No		No	No	No
Pedestrian Recall	No	No		No	No	No	No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	4.00	6.00	6.00	6.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	19	10	19	10	32	89	82	82	89	69	80
g / C, Green / Cycle	0.16	0.08	0.16	0.08	0.27	0.74	0.68	0.68	0.74	0.57	0.66
(v / s)_i Volume / Saturation Flow Rate	0.06	0.02	0.12	0.02	0.07	0.65	0.23	0.23	0.06	0.49	0.09
s, saturation flow rate [veh/h]	1245	1494	2656	1669	2512	844	3179	1651	513	4548	1419
c, Capacity [veh/h]	259	124	496	139	680	630	2162	1123	421	2596	940
d1, Uniform Delay [s]	44.59	51.25	48.10	51.69	34.25	36.89	8.02	8.02	4.76	21.88	7.53
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	0.75	1.27	1.17	0.19	15.41	0.44	0.84	0.35	4.22	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.28	0.19	0.62	0.29	0.25	0.87	0.35	0.35	0.08	0.87	0.14
d, Delay for Lane Group [s/veh]	45.18	51.99	49.37	52.86	34.45	52.30	8.46	8.87	5.11	26.10	7.84
Lane Group LOS	D	D	D	D	C	D	A	A	A	C	A
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.99	0.71	4.43	1.22	2.02	3.04	3.58	3.85	0.21	16.97	1.20
50th-Percentile Queue Length [ft/ln]	49.64	17.66	110.82	30.44	50.42	75.91	89.61	96.30	5.14	424.29	30.00
95th-Percentile Queue Length [veh/ln]	3.57	1.27	7.89	2.19	3.63	5.47	6.45	6.93	0.37	23.73	2.16
95th-Percentile Queue Length [ft/ln]	89.35	31.78	197.14	54.80	90.76	136.65	161.30	173.34	9.26	593.19	54.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.18	51.99	51.99	49.37	52.86	34.45	52.30	8.59	8.87	5.11	26.10	7.84
Movement LOS	D	D	D	D	D	C	D	A	A	A	C	A
d_A, Approach Delay [s/veh]	46.86			44.72			22.87			24.82		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	26.78											
Intersection LOS	C											
Intersection V/C	0.668											

Other Modes

g_Walk,mi, Effective Walk Time [s]	78.0	68.0	10.0	10.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	7.35	11.27	50.42	50.42
l_p,int, Pedestrian LOS Score for Intersectio	2.140	3.262	3.527	3.671
Crosswalk LOS	B	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	167	167	1300	1133
d_b, Bicycle Delay [s]	50.42	50.42	7.35	11.27
l_b,int, Bicycle LOS Score for Intersection	1.720	2.531	2.486	2.929
Bicycle LOS	A	B	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 56: Whitestown Parkway & 650 E

Control Type:	Signalized	Delay (sec / veh):	29.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.942

Intersection Setup

Name	650 East			650 East						Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	1	2	0	0	2	0	1	1	0	1
Entry Pocket Length [ft]	300.00	100.00	100.00	200.00	100.00	100.00	500.00	100.00	500.00	500.00	100.00	500.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East						Whitestown Parkway		
Base Volume Input [veh/h]	168	39	23	98	47	419	266	506	82	23	526	57
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	44	17	1	107	7	340	0	518	29	3	821	205
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	212	56	24	205	54	759	266	1024	111	26	1347	262
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	15	7	56	15	206	72	278	30	7	366	71
Total Analysis Volume [veh/h]	230	61	26	223	59	825	289	1113	121	28	1464	285
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	10.3
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	Protecte	Permiss	Overlap	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	10	31	31	10	31	31	22	70	70	9	57	57
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
l2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	4.00	6.00	6.00	6.00	4.00	6.00	4.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	0.00	4.00	0.00	2.00	4.00	0.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	25	15	24	25	15	45	15	76	88	63	63	95
g / C, Green / Cycle	0.21	0.13	0.20	0.21	0.13	0.37	0.13	0.63	0.73	0.53	0.53	0.79
(v / s)_i Volume / Saturation Flow Rate	0.21	0.04	0.02	0.09	0.04	0.33	0.09	0.24	0.09	0.06	0.46	0.20
s, saturation flow rate [veh/h]	1089	1669	1419	2530	1669	2512	3088	4548	1419	498	3179	1419
c, Capacity [veh/h]	260	212	287	567	212	952	417	2869	1037	300	1656	1109
d1, Uniform Delay [s]	46.22	47.45	38.88	40.39	47.39	34.47	49.52	10.82	4.75	14.85	25.51	3.58
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.17	0.11	0.50	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.54	0.74	0.13	0.44	0.70	3.94	2.07	0.40	0.05	0.62	7.26	0.56
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.29	0.09	0.39	0.28	0.87	0.69	0.39	0.12	0.09	0.88	0.26
d, Delay for Lane Group [s/veh]	55.75	48.18	39.01	40.83	48.09	38.40	51.59	11.22	4.80	15.46	32.77	4.14
Lane Group LOS	E	D	D	D	D	D	D	B	A	B	C	A
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	1.63	1.71	0.64	2.86	1.65	11.62	4.18	4.38	0.72	0.40	18.16	1.42
50th-Percentile Queue Length [ft/ln]	40.71	42.65	15.99	71.41	41.18	290.50	104.51	109.39	18.08	9.94	453.88	35.61
95th-Percentile Queue Length [veh/ln]	2.93	3.07	1.15	5.14	2.97	17.21	7.53	7.81	1.30	0.72	25.14	2.56
95th-Percentile Queue Length [ft/ln]	73.28	76.76	28.79	128.54	74.13	430.26	188.13	195.16	32.55	17.89	628.58	64.10

Movement, Approach, & Intersection Results

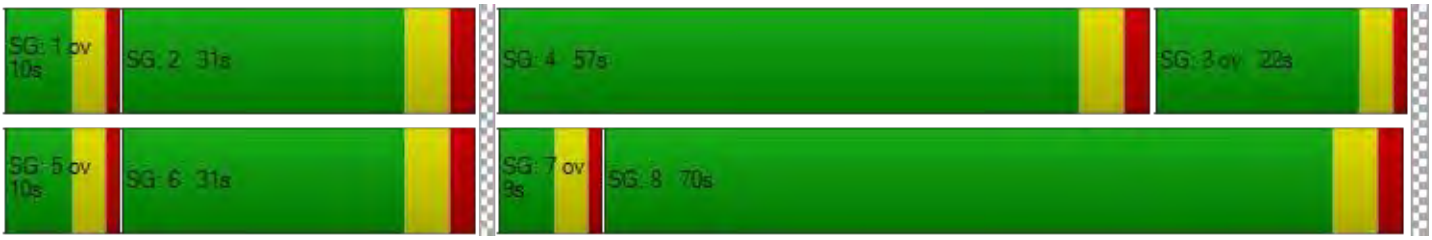
d_M, Delay for Movement [s/veh]	55.75	48.18	39.01	40.83	48.09	38.40	51.59	11.22	4.80	15.46	32.77	4.14
Movement LOS	E	D	D	D	D	D	D	B	A	B	C	A
d_A, Approach Delay [s/veh]	52.92			39.41			18.37			27.91		
Approach LOS	D			D			B			C		
d_I, Intersection Delay [s/veh]	29.21											
Intersection LOS	C											
Intersection V/C	0.942											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	417	1067	850
d_b, Bicycle Delay [s]	37.60	37.60	13.07	19.84
l_b,int, Bicycle LOS Score for Intersection	2.083	3.386	2.397	3.026
Bicycle LOS	B	C	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 58: Whitestown Parkway & Veterans Drive/700 E

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.691

Intersection Setup

Name							Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	200.00	500.00	100.00	100.00	500.00	100.00	500.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name							Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	94	58	144	189	46	106	91	370	16	57	367	156
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	25	0	0	182	18	141	51	562	0	0	858	14
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	94	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	58	144	371	64	153	142	932	16	57	1225	170
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	16	39	101	17	42	39	253	4	15	333	46
Total Analysis Volume [veh/h]	129	63	157	403	70	166	154	1013	17	62	1332	185
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	66.3
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	10	58	58	12	60	60	9	41	41	9	41	41
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	38	26	38	28	28	70	62	62	70	61	61
g / C, Green / Cycle	0.32	0.22	0.32	0.23	0.23	0.58	0.51	0.51	0.58	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.11	0.15	0.18	0.04	0.12	0.18	0.31	0.31	0.11	0.42	0.13
s, saturation flow rate [veh/h]	1142	1483	2297	1669	1419	845	1669	1660	589	3179	1419
c, Capacity [veh/h]	413	319	564	387	329	393	860	855	323	1622	724
d1, Uniform Delay [s]	30.72	43.43	36.48	36.98	40.13	21.18	20.40	20.40	14.07	24.77	16.55
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.43	2.67	1.71	0.22	1.20	0.64	3.09	3.11	1.32	4.81	0.85
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.69	0.72	0.18	0.51	0.39	0.60	0.60	0.19	0.82	0.26
d, Delay for Lane Group [s/veh]	31.15	46.10	38.19	37.21	41.33	21.82	23.49	23.51	15.39	29.59	17.40
Lane Group LOS	C	D	D	D	D	C	C	C	B	C	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.85	6.25	4.65	1.65	4.30	0.87	10.16	10.11	0.78	15.73	2.89
50th-Percentile Queue Length [ft/ln]	71.21	156.21	116.24	41.26	107.38	21.69	254.02	252.76	19.53	393.16	72.21
95th-Percentile Queue Length [veh/ln]	5.13	10.35	8.19	2.97	7.69	1.56	15.39	15.32	1.41	22.23	5.20
95th-Percentile Queue Length [ft/ln]	128.17	258.70	204.65	74.27	192.35	39.05	384.72	383.12	35.16	555.75	129.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.15	46.10	46.10	38.19	37.21	41.33	21.82	23.50	23.51	15.39	29.59	17.40
Movement LOS	C	D	D	D	D	D	C	C	C	B	C	B
d_A, Approach Delay [s/veh]	40.58			38.90			23.28			27.60		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	29.37											
Intersection LOS	C											
Intersection V/C	0.691											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	35.0	0.0	52.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	30.10	0.00	19.27
l_p,int, Pedestrian LOS Score for Intersectio	0.000	2.942	0.000	3.331
Crosswalk LOS	F	C	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	867	900	583	583
d_b, Bicycle Delay [s]	19.27	18.15	30.10	30.10
l_b,int, Bicycle LOS Score for Intersection	2.135	2.769	2.536	2.862
Bicycle LOS	B	C	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 63: Indianapolis Road & 750 S

Control Type:	Roundabout	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road		Indianapolis Road		750 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Indianapolis Road		Indianapolis Road		750 South	
Base Volume Input [veh/h]	30	300	196	60	96	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	272	251	118	121	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	58	572	447	178	217	129
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	155	121	48	59	35
Total Analysis Volume [veh/h]	63	622	486	193	236	140
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	243		65		501	
Exiting Flow Rate [veh/h]	645		884		65	
Demand Flow Rate [veh/h]	58	572	447	178	217	129
Adjusted Demand Flow Rate [veh/h]	63	622	486	193	236	140

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	706	501	0	388
Capacity of Entry and Bypass Lanes [veh/h]	1077	1292	1292	829
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1046	1254	1254	805
X, volume / capacity	0.66	0.39	0.15	0.47

Movement, Approach, & Intersection Results

Lane LOS	B	A	A	B
95th-Percentile Queue Length [veh]	5.12	1.86	0.54	2.52
95th-Percentile Queue Length [ft]	127.95	46.56	13.59	62.92
Approach Delay [s/veh]	13.00	5.92		10.69
Approach LOS	B	A		B
Intersection Delay [s/veh]	9.74			
Intersection LOS	A			

PM Peak Hour

Intersection Level Of Service Report
Intersection 2: 100 S & 500 E

Control Type:	All-way stop	Delay (sec / veh):	23.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.860

Intersection Setup

Name	500 East			500 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	500 East			500 East			100 South			100 South		
Base Volume Input [veh/h]	6	77	3	0	29	2	4	40	8	2	22	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	20	0	105	28	48	93	350	9	0	120	91
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	97	3	105	57	50	97	390	17	2	142	92
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	26	1	29	15	14	26	106	5	1	39	25
Total Analysis Volume [veh/h]	12	105	3	114	62	54	105	424	18	2	154	100
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	521	551	636	607
Degree of Utilization, x	0.23	0.42	0.86	0.42

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.88	2.05	9.81	2.09
95th-Percentile Queue Length [ft]	22.09	51.26	245.34	52.27
Approach Delay [s/veh]	11.98	14.16	33.64	13.20
Approach LOS	B	B	D	B
Intersection Delay [s/veh]	22.96			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 3: 100 S & 650 E

Control Type:	All-way stop	Delay (sec / veh):	14.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

Intersection Setup

Name	650 East			650 East			100 South			100 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			100 South			100 South		
Base Volume Input [veh/h]	24	71	0	4	78	1	4	15	20	0	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	168	63	0	0	61	119	136	0	171	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	134	0	4	139	120	140	15	191	0	4	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	36	0	1	38	33	38	4	52	0	1	0
Total Analysis Volume [veh/h]	209	146	0	4	151	130	152	16	208	0	4	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	639	670	662	551
Degree of Utilization, x	0.56	0.43	0.57	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.42	2.13	3.59	0.02
95th-Percentile Queue Length [ft]	85.48	53.26	89.66	0.55
Approach Delay [s/veh]	15.44	12.31	15.35	9.57
Approach LOS	C	B	C	A
Intersection Delay [s/veh]	14.51			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 5: 650 E & 200 S

Control Type:	All-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.599

Intersection Setup

Name	650 East			650 East			200 South			200 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East			200 South			200 South		
Base Volume Input [veh/h]	5	86	14	14	82	1	0	18	3	11	8	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	65	0	153	72	8	3	68	1	8	161	162
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	151	14	167	154	9	3	86	4	19	169	172
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	41	4	45	42	2	1	23	1	5	46	47
Total Analysis Volume [veh/h]	5	164	15	182	167	10	3	93	4	21	184	187
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	594	616	567	654
Degree of Utilization, x	0.31	0.58	0.18	0.60

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.31	3.75	0.64	4.00
95th-Percentile Queue Length [ft]	32.78	93.72	15.89	100.01
Approach Delay [s/veh]	11.75	16.67	10.71	16.40
Approach LOS	B	C	B	C
Intersection Delay [s/veh]	15.11			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 12: Main & Pierce

Control Type:	Roundabout	Delay (sec / veh):	54.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00				25.00				25.00				20.00			
Grade [%]	0.00				0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	South Main Street				North Main Street				West Pierce Street				East Pierce Street			
Base Volume Input [veh/h]	0	19	173	25	0	8	124	17	0	26	22	29	0	53	27	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	133	90	0	72	139	0	0	3	391	32	0	145	187	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	29	306	115	0	80	263	17	0	29	413	61	0	198	214	13
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920
Other Adjustment Factor	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270	1.270
Total 15-Minute Volume [veh/h]	0	10	106	40	0	28	91	6	0	10	143	21	0	68	74	4
Total Analysis Volume [veh/h]	0	40	422	159	0	110	363	23	0	40	570	84	0	273	295	18
Pedestrian Volume [ped/h]	0				0				0				0			

Intersection Settings

Number of Conflicting Circulating Lanes	1				1				1				1			
Circulating Flow Rate [veh/h]	742				626				768				517			
Exiting Flow Rate [veh/h]	742				494				369				864			
Demand Flow Rate [veh/h]	0	37	389	147	0	102	335	22	0	37	525	78	0	252	272	17
Adjusted Demand Flow Rate [veh/h]	0	40	422	159	0	110	363	23	0	40	570	84	0	273	295	18

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	640	511	715	604
Capacity of Entry and Bypass Lanes [veh/h]	648	729	631	815
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	629	708	612	791
X, volume / capacity	0.99	0.70	1.13	0.74

Movement, Approach, & Intersection Results

Lane LOS	F	C	F	C
95th-Percentile Queue Length [veh]	14.78	5.78	22.06	6.79
95th-Percentile Queue Length [ft]	369.48	144.43	551.54	169.71
Approach Delay [s/veh]	58.38	19.63	103.65	20.09
Approach LOS	F	C	F	C
Intersection Delay [s/veh]	54.11			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 13: Pierce Street & 700 E

Control Type:	Roundabout	Delay (sec / veh):	18.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	700 East		East Pierce Street		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	700 East		East Pierce Street		East 300 South	
Base Volume Input [veh/h]	104	11	13	48	80	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	257	154	261	292	190	337
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	361	165	274	340	270	472
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	98	45	74	92	73	128
Total Analysis Volume [veh/h]	392	179	298	370	293	513
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	302		404		307	
Exiting Flow Rate [veh/h]	835		486		785	
Demand Flow Rate [veh/h]	361	165	274	340	270	472
Adjusted Demand Flow Rate [veh/h]	392	179	298	370	293	513

Lanes

Overwrite Calculated Critical Headway	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97
Entry Flow Rate [veh/h]	589	689	831
Capacity of Entry and Bypass Lanes [veh/h]	1015	915	1010
Pedestrian Impedance	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	985	888	980
X, volume / capacity	0.58	0.75	0.82

Movement, Approach, & Intersection Results

Lane LOS	B	C	C
95th-Percentile Queue Length [veh]	3.85	7.23	9.64
95th-Percentile Queue Length [ft]	96.31	180.65	241.04
Approach Delay [s/veh]	11.47	19.03	22.23
Approach LOS	B	C	C
Intersection Delay [s/veh]	18.18		
Intersection LOS	C		

Intersection Level Of Service Report
Intersection 14: Pierce Street & 300 S & Albert South White Drive

Control Type:	Roundabout	Delay (sec / veh):	17.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	East 300 South		Albert S. White Drive		East 300 South	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	1	0	0	0	0
Entry Pocket Length [ft]	200.00	200.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	East 300 South		Albert S. White Drive		East 300 South	
Base Volume Input [veh/h]	72	85	144	176	201	135
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	388	161	168	838	901	359
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	460	246	312	1014	1102	494
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	67	85	276	299	134
Total Analysis Volume [veh/h]	500	267	339	1102	1198	537
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	2		2		1	
Circulating Flow Rate [veh/h]	1234		515		349	
Exiting Flow Rate [veh/h]	349		1234		1650	
Demand Flow Rate [veh/h]	460	246	312	1014	1102	494
Adjusted Demand Flow Rate [veh/h]	500	267	339	1102	1198	537

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	0.00	1350.00	1420.00	1420.00	1420.00	1380.00
B (coefficient)	0.00092	0.00085	0.00000	0.00092	0.00085	0.00091	0.00091	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	273	243	0	698	787	580	654	0
Capacity of Entry and Bypass Lanes [veh/h]	434	498	103000	841	917	1034	1034	967
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	422	483	100000	817	890	1004	1004	939
X, volume / capacity	0.63	0.49	0.00	0.83	0.86	0.56	0.63	0.57

Movement, Approach, & Intersection Results

Lane LOS	D	C	A	D	D	B	B	B
95th-Percentile Queue Length [veh]	4.19	2.62	0.00	9.47	10.78	3.60	4.69	3.74
95th-Percentile Queue Length [ft]	104.76	65.53	0.00	236.74	269.62	90.02	117.30	93.39
Approach Delay [s/veh]	13.81			26.69		11.81		
Approach LOS	B			D		B		
Intersection Delay [s/veh]	17.63							
Intersection LOS	C							

Intersection Level Of Service Report
Intersection 20: Albert S. White Dr. (400 S) & 400 E

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	0	0	0	2	2	0	0	1	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	200.00	300.00	100.00	100.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name				South 400 East			Albert S. White Drive			Albert S. White Drive		
Base Volume Input [veh/h]	0	0	0	17	0	79	120	461	1	1	672	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	227	25	49	5	36	470	495	1357	213	45	1242	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	165	0	0	0	0	0	16
Total Hourly Volume [veh/h]	227	25	49	22	36	384	615	1818	214	46	1914	25
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	7	13	6	10	104	167	494	58	13	520	7
Total Analysis Volume [veh/h]	247	27	53	24	39	417	668	1976	233	50	2080	27
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	2	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2						4
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	10	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	33	33	24	24	24	21	68	68	9	56	56
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No			No	No	No	No		No	No	No
Maximum Recall	No	No			No	No	No	No		No	No	No
Pedestrian Recall	No	No			No	No	No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	6.00	6.00	6.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	2.00	0.00	4.00	4.00	0.00	4.00	2.00
g_i, Effective Green Time [s]	27	27	18	18	71	62	62	71	50	50
g / C, Green / Cycle	0.25	0.25	0.16	0.16	0.65	0.56	0.56	0.65	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.12	0.05	0.05	0.17	0.62	0.46	0.48	0.17	0.46	0.02
s, saturation flow rate [veh/h]	2018	1507	1205	2512	1072	3179	1584	298	4548	1419
c, Capacity [veh/h]	509	370	242	411	661	1792	893	224	2067	645
d1, Uniform Delay [s]	34.44	33.07	40.38	46.00	35.31	19.26	20.11	20.18	30.00	16.68
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.28	1.34	2.59	48.12	37.64	4.07	9.99	2.30	21.31	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.22	0.26	1.01	1.01	0.81	0.85	0.22	1.01	0.04
d, Delay for Lane Group [s/veh]	37.72	34.41	42.96	94.12	72.95	23.32	30.10	22.48	51.31	16.80
Lane Group LOS	D	C	D	F	F	C	C	C	F	B
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.94	1.84	1.66	8.32	6.61	14.34	17.05	0.53	20.92	0.39
50th-Percentile Queue Length [ft/ln]	73.45	46.04	41.46	207.93	165.20	358.39	426.27	13.25	522.90	9.72
95th-Percentile Queue Length [veh/ln]	5.29	3.31	2.99	13.14	10.90	20.54	23.82	0.95	28.55	0.70
95th-Percentile Queue Length [ft/ln]	132.22	82.87	74.63	328.40	272.60	513.62	595.57	23.85	713.79	17.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	37.72	34.41	34.41	42.96	42.96	94.12	72.95	25.13	30.10	22.48	51.31	16.80
Movement LOS	D	C	C	D	D	F	F	C	C	C	F	B
d_A, Approach Delay [s/veh]	36.91			87.40			36.63			50.21		
Approach LOS	D			F			D			D		
d_I, Intersection Delay [s/veh]	45.83											
Intersection LOS	D											
Intersection V/C	0.802											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	50.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	16.36	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	3.223	0.000	0.000
Crosswalk LOS	F	C	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	491	327	1127	909
d_b, Bicycle Delay [s]	31.31	38.47	10.47	16.36
l_b,int, Bicycle LOS Score for Intersection	2.099	2.624	3.142	2.755
Bicycle LOS	B	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 21: Albert S. White Dr. (400 S) & 450 E/Anson Blvd

Control Type:	Signalized	Delay (sec / veh):	34.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	Anson Boulevard			450 East			Albert S. White Drive					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	0	0	0	1	0	0
Entry Pocket Length [ft]	250.00	100.00	100.00	200.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			Yes		

Volumes

Name	Anson Boulevard			450 East			Albert S. White Drive					
Base Volume Input [veh/h]	168	1	40	13	7	27	14	437	97	22	404	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	5	14	5	18	693	307	1095	9	6	600	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	216	0	0	0	0	0	0
Total Hourly Volume [veh/h]	176	6	54	18	25	504	321	1532	106	28	1004	17
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	2	15	5	7	137	87	416	29	8	273	5
Total Analysis Volume [veh/h]	191	7	59	20	27	548	349	1665	115	30	1091	18
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2,3						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	11	18	18	9	16	16	27	64	64	9	46	46
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	No		No	No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	6.00	4.00	6.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	21	12	21	10	39	67	58	58	67	40	40
g / C, Green / Cycle	0.21	0.12	0.21	0.10	0.39	0.67	0.58	0.58	0.67	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.17	0.05	0.02	0.02	0.22	0.40	0.53	0.55	0.08	0.33	0.33
s, saturation flow rate [veh/h]	1109	1442	1325	1669	2512	878	1669	1632	379	1669	1660
c, Capacity [veh/h]	326	173	332	167	980	556	968	947	238	668	664
d1, Uniform Delay [s]	35.92	40.58	31.69	41.17	23.80	17.33	18.89	19.40	20.06	26.99	26.99
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.54	6.27	0.35	2.07	2.31	5.30	14.97	17.92	1.09	11.62	11.69
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.38	0.06	0.16	0.56	0.63	0.92	0.94	0.13	0.83	0.83
d, Delay for Lane Group [s/veh]	43.46	46.85	32.04	43.23	26.10	22.62	33.86	37.32	21.14	38.61	38.68
Lane Group LOS	D	D	C	D	C	C	C	D	C	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.82	1.79	0.41	0.69	5.08	3.42	19.90	21.01	0.25	13.27	13.21
50th-Percentile Queue Length [ft/ln]	120.49	44.82	10.22	17.26	127.06	85.60	497.59	525.36	6.25	331.70	330.19
95th-Percentile Queue Length [veh/ln]	8.42	3.23	0.74	1.24	8.78	6.16	27.22	28.53	0.45	19.24	19.17
95th-Percentile Queue Length [ft/ln]	210.50	80.67	18.40	31.07	219.49	154.09	680.50	713.31	11.26	481.05	479.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.46	46.85	46.85	32.04	43.23	26.10	22.62	35.47	37.32	21.14	38.64	38.68
Movement LOS	D	D	D	C	D	C	C	D	D	C	D	D
d_A, Approach Delay [s/veh]	44.33			27.08			33.46			38.18		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	34.52											
Intersection LOS	C											
Intersection V/C	0.819											

Other Modes

g_Walk,mi, Effective Walk Time [s]	58.0	40.0	0.0	12.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	8.82	18.00	0.00	38.72
l_p,int, Pedestrian LOS Score for Intersectio	2.050	3.097	0.000	3.057
Crosswalk LOS	B	C	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	240	200	1160	800
d_b, Bicycle Delay [s]	38.72	40.50	8.82	18.00
l_b,int, Bicycle LOS Score for Intersection	1.984	2.898	3.316	2.499
Bicycle LOS	A	C	C	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Intersection Level Of Service Report
Intersection 22: Albert S. White Dr. (400 S) & 500 E

Control Type:	Signalized	Delay (sec / veh):	24.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	500 East			500 East								
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			No			No			Yes		

Volumes

Name	500 East			500 East								
Base Volume Input [veh/h]	99	22	5	13	11	81	91	205	70	6	230	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	45	21	9	27	56	430	688	7	5	562	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	52	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	67	26	22	38	85	521	893	77	11	792	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	18	7	6	10	23	142	243	21	3	215	4
Total Analysis Volume [veh/h]	115	73	28	24	41	92	566	971	84	12	861	15
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	ProtPer	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	30	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	22	0	0	22	0	32	68	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
l2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No		No	No			No	
Maximum Recall		No			No		No	No			No	
Pedestrian Recall		No			No		No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	18	18	64	64	64	32	32
g / C, Green / Cycle	0.20	0.20	0.20	0.71	0.71	0.71	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.20	0.05	0.06	0.54	0.32	0.32	0.28	0.28
s, saturation flow rate [veh/h]	1071	1362	1419	1045	1669	1623	1629	1510
c, Capacity [veh/h]	276	327	284	715	1187	1154	620	537
d1, Uniform Delay [s]	37.26	29.97	30.80	16.43	5.51	5.54	25.84	26.05
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	19.69	1.36	3.01	8.73	1.22	1.29	7.88	11.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.20	0.32	0.79	0.45	0.45	0.74	0.79
d, Delay for Lane Group [s/veh]	56.95	31.33	33.81	25.16	6.73	6.83	33.72	37.59
Lane Group LOS	E	C	C	C	A	A	C	D
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.17	1.28	1.92	5.15	3.43	3.41	9.50	9.32
50th-Percentile Queue Length [ft/ln]	154.22	32.03	48.03	128.69	85.84	85.32	237.52	232.95
95th-Percentile Queue Length [veh/ln]	10.24	2.31	3.46	8.87	6.18	6.14	14.56	14.32
95th-Percentile Queue Length [ft/ln]	256.05	57.65	86.46	221.72	154.50	153.57	363.90	358.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.95	56.95	56.95	31.33	31.33	33.81	25.16	6.78	6.83	33.72	35.57	37.59
Movement LOS	E	E	E	C	C	C	C	A	A	C	D	D
d_A, Approach Delay [s/veh]	56.95			32.78			13.20			35.58		
Approach LOS	E			C			B			D		
d_I, Intersection Delay [s/veh]	24.44											
Intersection LOS	C											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	64.0	0.0	0.0	18.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	3.76	0.00	0.00	28.80
l_p,int, Pedestrian LOS Score for Intersectio	1.814	0.000	0.000	2.778
Crosswalk LOS	A	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	400	1422	711
d_b, Bicycle Delay [s]	28.80	28.80	3.76	18.69
l_b,int, Bicycle LOS Score for Intersection	1.916	1.904	2.897	2.292
Bicycle LOS	A	A	C	B

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 24: 400 S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	189.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street			South Main Street			400 S			400 S		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	1	0	0	1	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	200.00	0.00	0.00	200.00	0.00	0.00	200.00	0.00	0.00	200.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Main Street			South Main Street			400 S			400 S		
Base Volume Input [veh/h]	101	273	132	21	181	36	28	160	109	143	140	14
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	35	292	412	41	277	85	109	736	19	459	1016	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	136	565	544	62	458	121	137	896	128	602	1156	31
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	154	148	17	124	33	37	243	35	164	314	8
Total Analysis Volume [veh/h]	148	614	591	67	498	132	149	974	139	654	1257	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	1226			2121			1256			938		
Exiting Flow Rate [veh/h]	1187			786			1447			1072		
Demand Flow Rate [veh/h]	136	565	544	62	458	121	137	896	128	602	1156	31
Adjusted Demand Flow Rate [veh/h]	148	614	591	67	498	132	149	974	139	654	1257	34

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45	4.45
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
A (intercept)	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00085	0.00092	0.00085	0.00085	0.00092	0.00085	0.00085	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	369	416	0	274	309	0	544	614	0	926	1044	0
Capacity of Entry and Bypass Lanes [veh/h]	438	501	571	192	235	416	426	489	518	570	640	729
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	425	487	555	187	228	403	413	475	503	553	621	707
X, volume / capacity	0.84	0.83	1.07	1.43	1.32	0.33	1.28	1.26	0.28	1.62	1.63	0.05

Movement, Approach, & Intersection Results

Lane LOS	E	E	F	F	F	B	F	F	B	F	F	A
95th-Percentile Queue Length [veh]	8.17	8.19	17.37	16.10	16.03	1.40	22.98	24.31	1.12	49.92	55.79	0.15
95th-Percentile Queue Length [ft]	204.14	204.64	434.16	402.41	400.68	35.09	574.47	607.67	27.96	1247.90	1394.78	3.78
Approach Delay [s/veh]	59.99			195.89			146.80			303.56		
Approach LOS	F			F			F			F		
Intersection Delay [s/veh]	188.96											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 25: 400 S/Albert S. White Drive & 400 S/Ginger Way

Control Type:	Roundabout	Delay (sec / veh):	69.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	300.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	400 S			Albert S. White Drive			Ginger Way			East 400 South		
Base Volume Input [veh/h]	14	257	70	40	207	3	8	5	3	69	5	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	79	1061	56	283	1315	0	0	29	46	46	71	508
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	93	1318	126	323	1522	3	8	34	49	115	76	551
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	358	34	88	414	1	2	9	13	31	21	150
Total Analysis Volume [veh/h]	101	1433	137	351	1654	3	9	37	53	125	83	599
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			2		
Circulating Flow Rate [veh/h]	409			318			2194			1589		
Exiting Flow Rate [veh/h]	1887			1485			193			541		
Demand Flow Rate [veh/h]	93	1318	126	323	1522	3	8	34	49	115	76	551
Adjusted Demand Flow Rate [veh/h]	101	1433	137	351	1654	3	9	37	53	125	83	599

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1350.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00092	0.00085	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	809	913	973	1097	48	55	114	101	0
Capacity of Entry and Bypass Lanes [veh/h]	927	1004	1008	1084	180	220	313	368	402
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	900	974	978	1052	175	214	304	358	391
X, volume / capacity	0.87	0.91	0.97	1.01	0.26	0.25	0.36	0.27	1.54

Movement, Approach, & Intersection Results

Lane LOS	D	D	E	F	D	C	C	C	F
95th-Percentile Queue Length [veh]	11.44	13.53	16.79	20.77	1.01	0.95	1.60	1.09	32.93
95th-Percentile Queue Length [ft]	286.06	338.13	419.87	519.13	25.32	23.64	40.07	27.35	823.35
Approach Delay [s/veh]	30.30		46.28		26.21		211.91		
Approach LOS	D		F		D		F		
Intersection Delay [s/veh]	69.18								
Intersection LOS	F								

Intersection Level Of Service Report
Intersection 26: 700 E & 425 S

Control Type:	Roundabout	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	South 700 East		South 700 East		East 425 South	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Left	Thru	Left	Right	Thru	Right
Lane Width [ft]	11.48	11.48	12.00	12.00	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	South 700 East		South 700 East		East 425 South	
Base Volume Input [veh/h]	63	11	59	38	8	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	625	0	0	368	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	688	11	59	406	8	83
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	187	3	16	110	2	23
Total Analysis Volume [veh/h]	748	12	64	441	9	90
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	66		9		770	
Exiting Flow Rate [veh/h]	464		863		78	
Demand Flow Rate [veh/h]	688	11	59	406	8	83
Adjusted Demand Flow Rate [veh/h]	748	12	64	441	9	90

Lanes

Overwrite Calculated Critical Headway	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97
Entry Flow Rate [veh/h]	783	521	102
Capacity of Entry and Bypass Lanes [veh/h]	1291	1368	629
Pedestrian Impedance	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1253	1328	611
X, volume / capacity	0.61	0.38	0.16

Movement, Approach, & Intersection Results

Lane LOS	B	A	A
95th-Percentile Queue Length [veh]	4.32	1.81	0.58
95th-Percentile Queue Length [ft]	108.10	45.27	14.38
Approach Delay [s/veh]	10.23	6.27	7.84
Approach LOS	B	A	A
Intersection Delay [s/veh]	8.59		
Intersection LOS	A		

Intersection Level Of Service Report
Intersection 27: SR 267 & Indianapolis Road

Control Type:	Signalized	Delay (sec / veh):	22.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	State Road 267			SR267			Indianapolis Road			Indianapolis Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	60.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	State Road 267			SR267			Indianapolis Road			Indianapolis Road		
Base Volume Input [veh/h]	31	265	14	139	319	93	118	40	40	16	27	173
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	799	7	46	678	59	69	1	12	15	7	71
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	8	0	0	0	0	0	20	0	0	93
Total Hourly Volume [veh/h]	43	1064	13	185	997	152	187	41	32	31	34	151
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	289	4	50	271	41	51	11	9	8	9	41
Total Analysis Volume [veh/h]	47	1157	14	201	1084	165	203	45	35	34	37	164
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	8	7	4	4	5	2	2	1	6	6
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	67	67	9	67	67	9	25	25	9	25	25
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	70	61	61	70	61	61	28	19	19	28	19	19
g / C, Green / Cycle	0.64	0.55	0.55	0.64	0.55	0.55	0.25	0.17	0.17	0.25	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.08	0.33	0.01	0.33	0.34	0.35	0.15	0.02	0.02	0.02	0.02	0.10
s, saturation flow rate [veh/h]	574	3532	1577	604	1855	1771	1320	1855	1577	1422	1855	1577
c, Capacity [veh/h]	359	1959	874	379	1029	982	414	320	272	433	320	272
d1, Uniform Delay [s]	10.90	16.23	11.01	12.70	16.60	16.70	35.41	38.58	38.50	31.19	38.41	42.01
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.76	1.32	0.03	5.23	2.78	3.00	4.11	0.92	0.97	0.35	0.73	9.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.59	0.02	0.53	0.62	0.62	0.49	0.14	0.13	0.08	0.12	0.60
d, Delay for Lane Group [s/veh]	11.66	17.55	11.04	17.93	19.39	19.69	39.52	39.49	39.47	31.54	39.14	51.51
Lane Group LOS	B	B	B	B	B	B	D	D	D	C	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.41	8.41	0.14	2.31	10.73	10.46	4.93	1.09	0.86	0.72	0.89	4.73
50th-Percentile Queue Length [ft/ln]	10.17	210.32	3.51	57.85	268.20	261.49	123.28	27.33	21.47	17.91	22.34	118.36
95th-Percentile Queue Length [veh/ln]	0.73	13.17	0.25	4.16	16.10	15.76	8.57	1.97	1.55	1.29	1.61	8.30
95th-Percentile Queue Length [ft/ln]	18.30	329.24	6.32	104.12	402.49	394.09	214.33	49.20	38.65	32.24	40.21	207.58

Movement, Approach, & Intersection Results

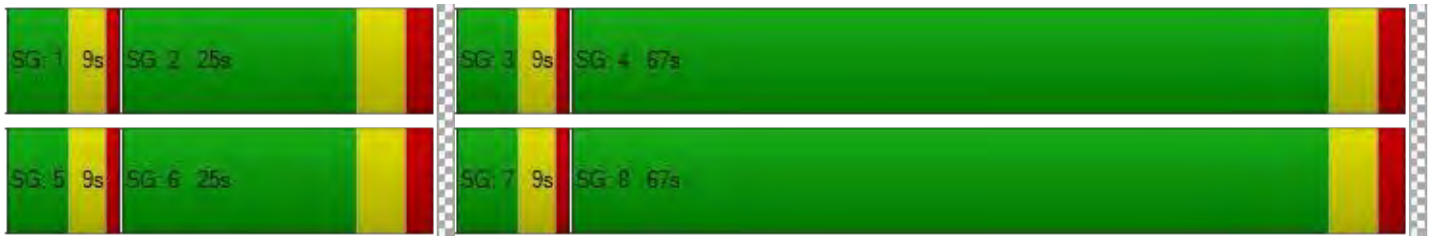
d_M, Delay for Movement [s/veh]	11.66	17.55	11.04	17.93	19.51	19.69	39.52	39.49	39.47	31.54	39.14	51.51
Movement LOS	B	B	B	B	B	B	D	D	D	C	D	D
d_A, Approach Delay [s/veh]	17.25			19.31			39.51			46.67		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	22.34											
Intersection LOS	C											
Intersection V/C	0.562											

Other Modes

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	61.0	61.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	37.64	37.64	10.91	10.91
l_p,int, Pedestrian LOS Score for Intersectio	3.256	3.183	2.330	2.574
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1109	1109	345	345
d_b, Bicycle Delay [s]	10.91	10.91	37.64	37.64
l_b,int, Bicycle LOS Score for Intersection	2.571	2.756	2.060	2.101
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Intersection Level Of Service Report
Intersection 35: 500S & 650 E

Control Type:	Roundabout	Delay (sec / veh):	12.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Main Street		Main Street		East 500 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Main Street		Main Street		East 500 South	
Base Volume Input [veh/h]	64	568	426	16	19	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	547	558	180	216	64
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	1115	984	196	235	124
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	303	267	53	64	34
Total Analysis Volume [veh/h]	100	1212	1070	213	255	135
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		2	
Circulating Flow Rate [veh/h]	263		103		1102	
Exiting Flow Rate [veh/h]	1241		1511		322	
Demand Flow Rate [veh/h]	92	1115	984	196	235	124
Adjusted Demand Flow Rate [veh/h]	100	1212	1070	213	255	135

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00085
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	636	717	622	701	402
Capacity of Entry and Bypass Lanes [veh/h]	1119	1119	1293	1293	557
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1086	1086	1256	1256	541
X, volume / capacity	0.57	0.64	0.48	0.54	0.72

Movement, Approach, & Intersection Results

Lane LOS	B	B	A	A	D
95th-Percentile Queue Length [veh]	3.71	4.86	2.68	3.39	5.92
95th-Percentile Queue Length [ft]	92.76	121.54	67.12	84.66	148.00
Approach Delay [s/veh]	11.38		8.43		25.67
Approach LOS	B		A		D
Intersection Delay [s/veh]	11.98				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 38: 550 S & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	22.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			550 S					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	150.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			550 S					
Base Volume Input [veh/h]	13	49	60	245	116	8	0	95	4	30	65	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	49	11	98	185	15	23	9	1064	37	45	729	77
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	60	158	430	131	31	9	1159	41	75	794	158
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	16	43	117	36	8	2	315	11	20	216	43
Total Analysis Volume [veh/h]	67	65	172	467	142	34	10	1260	45	82	863	172
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	1789			1042			712			146		
Exiting Flow Rate [veh/h]	277			77			993			1779		
Demand Flow Rate [veh/h]	62	60	158	430	131	31	9	1159	41	75	794	158
Adjusted Demand Flow Rate [veh/h]	67	65	172	467	142	34	10	1260	45	82	863	172

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	0.00	1350.00	1420.00	1350.00	1420.00	1420.00	1420.00	0.00
B (coefficient)	0.00085	0.00000	0.00092	0.00085	0.00092	0.00085	0.00091	0.00091	0.00000
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	136	0	352	312	637	718	458	516	0
Capacity of Entry and Bypass Lanes [veh/h]	311	103001	518	586	702	776	1244	1244	103001
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	302	100000	503	569	681	753	1207	1207	100000
X, volume / capacity	0.44	0.00	0.68	0.53	0.91	0.93	0.37	0.42	0.00

Movement, Approach, & Intersection Results

Lane LOS	C	A	C	C	E	E	A	A	A
95th-Percentile Queue Length [veh]	2.13	0.00	5.06	3.11	11.79	13.05	1.72	2.08	0.00
95th-Percentile Queue Length [ft]	53.14	0.00	126.50	77.86	294.79	326.13	42.90	51.98	0.00
Approach Delay [s/veh]	10.05		20.41		40.16		5.81		
Approach LOS	B		C		E		A		
Intersection Delay [s/veh]	22.34								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 41: Perry Worth Road & 550 S

Control Type:	Signalized	Delay (sec / veh):	30.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.824

Intersection Setup

Name	Perry Worth Road			Perry Worth Road			550 S					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	12.00	12.00	12.00	11.48	11.48	11.48
No. of Lanes in Entry Pocket	1	0	0	1	0	1	2	0	1	1	0	1
Entry Pocket Length [ft]	250.00	100.00	100.00	200.00	100.00	450.00	150.00	100.00	150.00	500.00	100.00	500.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1000.00
Speed [mph]	40.00			40.00			30.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perry Worth Road			Perry Worth Road			550 S					
Base Volume Input [veh/h]	79	33	0	0	28	424	248	0	152	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	103	20	271	2	53	147	53	2042	124	290	2032	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	217	0	0	105	0	0	0
Total Hourly Volume [veh/h]	182	53	271	2	81	354	301	2042	171	290	2032	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	14	74	1	22	96	82	555	46	79	552	0
Total Analysis Volume [veh/h]	198	58	295	2	88	385	327	2220	186	315	2209	0
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	80
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	Permiss	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	3	8	8	4	4	4	5	2	2	1	6	6
Auxiliary Signal Groups						4,5						
Lead / Lag	Lead	-	-	Lag	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	10	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	25	25	16	16	16	10	44	44	11	45	45
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No			No	No	No	No		No	No	
Maximum Recall	No	No			No	No	No	No		No	No	
Pedestrian Recall	No	No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	R	L	C	C
C, Cycle Length [s]	80	80	80	80	80	80	80	80	80	80	80
L, Total Lost Time per Cycle [s]	4.00	6.00	6.00	6.00	4.00	4.00	6.00	6.00	4.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	4.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	19	19	10	10	22	49	38	38	49	39	39
g / C, Green / Cycle	0.24	0.24	0.13	0.13	0.28	0.61	0.48	0.48	0.61	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.16	0.22	0.00	0.05	0.24	0.39	0.44	0.12	0.71	0.41	0.41
s, saturation flow rate [veh/h]	1228	1617	1020	1855	1577	843	5053	1577	441	3532	1855
c, Capacity [veh/h]	386	384	90	232	434	572	2400	749	346	1722	904
d1, Uniform Delay [s]	26.63	29.75	40.00	32.15	27.82	16.14	19.66	12.50	25.71	17.81	17.81
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.81	29.50	0.45	4.67	22.68	4.12	7.55	0.79	30.42	5.16	9.33
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.92	0.02	0.38	0.89	0.57	0.92	0.25	0.91	0.84	0.84
d, Delay for Lane Group [s/veh]	31.43	59.25	40.45	36.82	50.50	20.26	27.22	13.29	56.13	22.97	27.13
Lane Group LOS	C	E	D	D	D	C	C	B	E	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.55	9.29	0.05	1.79	9.24	1.36	13.27	2.02	4.85	10.84	12.43
50th-Percentile Queue Length [ft/ln]	88.74	232.28	1.23	44.72	230.97	34.06	331.76	50.42	121.36	270.97	310.77
95th-Percentile Queue Length [veh/ln]	6.39	14.29	0.09	3.22	14.22	2.45	19.24	3.63	8.47	16.24	18.21
95th-Percentile Queue Length [ft/ln]	159.74	357.25	2.21	80.50	355.59	61.30	481.12	90.76	211.69	405.96	455.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.43	59.25	59.25	40.45	36.82	50.50	20.26	27.22	13.29	56.13	24.41	27.13
Movement LOS	C	E	E	D	D	D	C	C	B	E	C	C
d_A, Approach Delay [s/veh]	49.26			47.92			25.44			28.36		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	30.40											
Intersection LOS	C											
Intersection V/C	0.824											

Other Modes

g_Walk,mi, Effective Walk Time [s]	38.0	39.0	10.0	19.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	11.03	10.51	30.63	23.26
l_p,int, Pedestrian LOS Score for Intersectio	2.657	3.079	3.669	3.633
Crosswalk LOS	B	C	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	475	250	950	975
d_b, Bicycle Delay [s]	23.26	30.63	11.03	10.51
l_b,int, Bicycle LOS Score for Intersection	2.580	2.812	3.121	3.059
Bicycle LOS	B	C	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 46: Veterans Drive & Central Boulevard

Control Type:	Roundabout	Delay (sec / veh):	10.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name			South 700 East		Central Boulevard	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	450.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	450.00	0.00	0.00
Speed [mph]	40.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			South 700 East		Central Boulevard	
Base Volume Input [veh/h]	66	286	167	106	157	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	715	269	92	4	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	1001	436	198	161	70
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500
Total 15-Minute Volume [veh/h]	23	340	148	67	55	24
Total Analysis Volume [veh/h]	92	1360	592	269	219	95
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	226		95		610	
Exiting Flow Rate [veh/h]	708		1626		372	
Demand Flow Rate [veh/h]	85	1252	545	248	202	88
Adjusted Demand Flow Rate [veh/h]	92	1360	592	269	219	95

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1380.00
B (coefficient)	0.00091	0.00091	0.00091	0.00091	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	703	793	417	471	324
Capacity of Entry and Bypass Lanes [veh/h]	1157	1157	1303	1303	741
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1123	1123	1265	1265	720
X, volume / capacity	0.61	0.69	0.32	0.36	0.44

Movement, Approach, & Intersection Results

Lane LOS	B	B	A	A	B
95th-Percentile Queue Length [veh]	4.31	5.78	1.39	1.67	2.23
95th-Percentile Queue Length [ft]	107.79	144.48	34.84	41.65	55.65
Approach Delay [s/veh]	12.26		6.03		11.01
Approach LOS	B		A		B
Intersection Delay [s/veh]	10.07				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 50: Whitestown Parkway & 475 E

Control Type:	Roundabout	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	475 East				475 E				Whitestown Parkway			Whitestown Parkway		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2500.	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00				40.00				45.00			45.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	475 East				475 E				Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	0	0	5	29	0	5	12	1	2	231	1	77	344	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	48	59	0	236	51	56	14	483	0	35	155	37
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	53	88	0	241	63	57	16	714	1	112	499	43
Peak Hour Factor	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.920	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	14	24	0	65	17	15	4	194	0	30	136	12
Total Analysis Volume [veh/h]	0	0	58	96	0	262	68	62	17	776	1	122	542	47
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2				2				1			1		
Circulating Flow Rate [veh/h]	1087				684				466			77		
Exiting Flow Rate [veh/h]	197				126				622			1168		
Demand Flow Rate [veh/h]	0	0	53	88	0	241	63	57	16	714	1	112	499	43
Adjusted Demand Flow Rate [veh/h]	0	0	58	96	0	262	68	62	17	776	1	122	542	47

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	159	404	385	434	345	389
Capacity of Entry and Bypass Lanes [veh/h]	564	794	930	930	1324	1324
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	548	771	903	903	1286	1286
X, volume / capacity	0.28	0.51	0.41	0.47	0.26	0.29

Movement, Approach, & Intersection Results

Lane LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh]	1.15	2.92	2.05	2.52	1.05	1.23
95th-Percentile Queue Length [ft]	28.69	73.09	51.28	62.89	26.13	30.78
Approach Delay [s/veh]	10.54	11.94	9.32		5.26	
Approach LOS	B	B	A		A	
Intersection Delay [s/veh]	8.51					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 51: Whitestown parkway & 525 E/Commerce Drive

Control Type:	Roundabout	Delay (sec / veh):	7.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	525 E			Commerce Drive			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	3	1	39	17	2	3	0	262	4	46	424	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	38	0	74	32	0	8	9	723	46	0	181	27
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	1	113	49	2	11	9	985	50	46	605	34
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	31	13	1	3	2	268	14	13	164	9
Total Analysis Volume [veh/h]	45	1	123	53	2	12	10	1071	54	50	658	37
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			1			1		
Circulating Flow Rate [veh/h]	1168			776			108			58		
Exiting Flow Rate [veh/h]	109			49			736			1284		
Demand Flow Rate [veh/h]	41	1	113	49	2	11	9	985	50	46	605	34
Adjusted Demand Flow Rate [veh/h]	45	1	123	53	2	12	10	1071	54	50	658	37

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00085	0.00085	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	175	70	550	620	361	407
Capacity of Entry and Bypass Lanes [veh/h]	527	735	1287	1287	1348	1348
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	511	714	1250	1250	1309	1309
X, volume / capacity	0.33	0.09	0.43	0.48	0.27	0.30

Movement, Approach, & Intersection Results

Lane LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh]	1.44	0.31	2.18	2.70	1.09	1.28
95th-Percentile Queue Length [ft]	35.88	7.75	54.55	67.39	27.17	32.06
Approach Delay [s/veh]	12.15	6.04	7.56		5.28	
Approach LOS	B	A	A		A	
Intersection Delay [s/veh]	7.08					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 52: Whitestown Parkway & Indianapolis Road

Control Type:	Roundabout	Delay (sec / veh):	258.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	1	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	300.00	300.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indianapolis Road			Indianapolis Road			Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	20	58	293	170	78	9	7	250	40	278	248	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	42	39	939	87	56	0	0	896	103	1057	435	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	97	1232	257	134	9	7	1146	143	1335	683	132
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	26	335	70	36	2	2	311	39	363	186	36
Total Analysis Volume [veh/h]	67	105	1339	279	146	10	8	1246	155	1451	742	143
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	2			2			2			1		
Circulating Flow Rate [veh/h]	1579			2328			1932			185		
Exiting Flow Rate [veh/h]	1805			264			833			1571		
Demand Flow Rate [veh/h]	62	97	1232	257	134	9	7	1146	143	1335	683	132
Adjusted Demand Flow Rate [veh/h]	67	105	1339	279	146	10	8	1246	155	1451	742	143

Lanes

Overwrite Calculated Critical Headway	No	No	No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)	1350.00	1420.00	0.00	1350.00	1420.00	1420.00	1350.00	1420.00	1420.00	1420.00
B (coefficient)	0.00092	0.00085	0.00000	0.00092	0.00085	0.00085	0.00092	0.00085	0.00091	0.00091
HV Adjustment Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	178	0	0	233	206	0	683	770	1276	1131
Capacity of Entry and Bypass Lanes [veh/h]	316	372	103000	159	197	700	229	275	1200	1200
Pedestrian Impedance	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	307	361	100000	154	191	679	222	267	1165	1165
X, volume / capacity	0.56	0.00	0.01	1.46	1.05	0.01	2.99	2.80	1.06	0.94

Movement, Approach, & Intersection Results

Lane LOS	D	A	A	F	F	A	F	F	F	D
95th-Percentile Queue Length [veh]	3.22	0.00	0.00	14.67	9.24	0.04	59.28	64.35	26.62	16.55
95th-Percentile Queue Length [ft]	80.44	0.00	0.00	366.72	231.12	1.12	1481.89	1608.77	665.58	413.66
Approach Delay [s/veh]	3.25			212.20			891.65		49.21	
Approach LOS	A			F			F		F	
Intersection Delay [s/veh]	258.04									
Intersection LOS	F									

Intersection Level Of Service Report
Intersection 55: Whitestown Parkway & Perry Worth Road

Control Type:	Signalized	Delay (sec / veh):	35.4
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.729

Intersection Setup

Name				Perry Worth Road			Whitestown Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	2	0	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	550.00	100.00	100.00	600.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Perry Worth Road			Whitestown Parkway					
Base Volume Input [veh/h]	86	44	19	110	29	304	431	1210	24	29	785	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	21	0	242	18	21	431	1083	12	1	978	237
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	98	0	0	0	0	0	127
Total Hourly Volume [veh/h]	98	65	19	352	47	227	862	2293	36	30	1763	206
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	18	5	96	13	62	234	623	10	8	479	56
Total Analysis Volume [veh/h]	107	71	21	383	51	247	937	2492	39	33	1916	224
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups						2,3						4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	16	16	9	16	16	32	76	76	9	53	53
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No	No	No	Yes		No	Yes	Yes
Maximum Recall	No	No		No	No	No	No	No		No	No	No
Pedestrian Recall	No	No		No	No	No	No	No		No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	4.00	6.00	6.00	6.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	0.00	0.00	4.00	4.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	19	10	19	10	44	79	72	72	79	47	58
g / C, Green / Cycle	0.17	0.09	0.17	0.09	0.40	0.72	0.65	0.65	0.72	0.43	0.53
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.15	0.03	0.10	0.68	0.52	0.53	0.16	0.42	0.16
s, saturation flow rate [veh/h]	1195	1605	2566	1669	2512	1374	3179	1656	212	4548	1419
c, Capacity [veh/h]	273	146	441	152	1005	974	2072	1080	202	1943	748
d1, Uniform Delay [s]	40.41	48.22	46.09	46.89	21.96	32.39	13.94	14.06	16.36	31.18	14.59
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.91	4.43	5.36	1.29	0.13	21.08	3.37	6.49	1.72	17.38	1.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.63	0.87	0.34	0.25	0.96	0.80	0.81	0.16	0.99	0.30
d, Delay for Lane Group [s/veh]	41.32	52.65	51.45	48.18	22.09	53.47	17.31	20.56	18.08	48.56	15.62
Lane Group LOS	D	D	D	D	C	D	B	C	B	D	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.66	2.63	5.27	1.38	2.16	6.24	13.22	14.92	0.27	18.51	3.11
50th-Percentile Queue Length [ft/ln]	66.61	65.78	131.83	34.40	54.12	156.10	330.41	373.11	6.67	462.65	77.67
95th-Percentile Queue Length [veh/ln]	4.80	4.74	9.04	2.48	3.90	10.34	19.18	21.26	0.48	25.56	5.59
95th-Percentile Queue Length [ft/ln]	119.89	118.40	225.98	61.92	97.41	258.55	479.47	531.50	12.01	639.03	139.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.32	52.65	52.65	51.45	48.18	22.09	53.47	18.39	20.56	18.08	48.56	15.62
Movement LOS	D	D	D	D	D	C	D	B	C	B	D	B
d_A, Approach Delay [s/veh]	46.56			40.56			27.89			44.70		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	35.39											
Intersection LOS	D											
Intersection V/C	0.729											

Other Modes

g_Walk,mi, Effective Walk Time [s]	70.0	47.0	10.0	10.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	7.27	18.04	45.45	45.45
l_p,int, Pedestrian LOS Score for Intersectio	2.165	3.549	3.819	4.052
Crosswalk LOS	B	D	D	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	182	182	1273	855
d_b, Bicycle Delay [s]	45.45	45.45	7.27	18.04
l_b,int, Bicycle LOS Score for Intersection	1.888	2.845	3.467	2.825
Bicycle LOS	A	C	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Intersection Level Of Service Report
Intersection 56: Whitestown Parkway & 650 E

Control Type:	Signalized	Delay (sec / veh):	31.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.806

Intersection Setup

Name	650 East			650 East						Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	1	2	0	0	2	0	1	1	0	1
Entry Pocket Length [ft]	300.00	100.00	100.00	200.00	100.00	100.00	500.00	100.00	500.00	500.00	100.00	500.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	600.00
Speed [mph]	30.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	650 East			650 East						Whitestown Parkway		
Base Volume Input [veh/h]	149	196	39	169	131	273	451	596	253	68	489	164
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	11	13	115	8	472	0	1256	69	2	713	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	20	0	0	224	0	0	122	0	0	62
Total Hourly Volume [veh/h]	180	207	32	284	139	521	451	1852	200	70	1202	102
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	56	9	77	38	142	123	503	54	19	327	28
Total Analysis Volume [veh/h]	196	225	35	309	151	566	490	2013	217	76	1307	111
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	15.1
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Overlap	ProtPer	Permiss	Overlap	Protecte	Permiss	Overlap	ProtPer	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	12	23	23	9	20	20	23	69	69	9	55	55
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	6.00	6.00	4.00	6.00	6.00	4.00	4.00	6.00	4.00	6.00	6.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	0.00	4.00	0.00	2.00	4.00	0.00	0.00	4.00	0.00
g_i, Effective Green Time [s]	26	17	28	26	14	39	19	63	77	72	49	60
g / C, Green / Cycle	0.24	0.15	0.25	0.24	0.13	0.36	0.17	0.58	0.70	0.65	0.45	0.55
(v / s)_i Volume / Saturation Flow Rate	0.10	0.13	0.02	0.14	0.09	0.23	0.16	0.44	0.15	0.27	0.41	0.08
s, saturation flow rate [veh/h]	1968	1669	1419	2250	1669	2512	3088	4548	1419	285	3179	1419
c, Capacity [veh/h]	475	257	356	397	213	891	534	2622	998	230	1417	774
d1, Uniform Delay [s]	34.77	45.48	31.65	40.15	46.04	29.56	44.73	17.70	5.72	18.74	28.69	12.31
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.13	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.57	9.07	0.12	3.32	4.33	0.76	6.88	2.22	0.13	3.80	11.39	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.87	0.10	0.78	0.71	0.64	0.92	0.77	0.22	0.33	0.92	0.14
d, Delay for Lane Group [s/veh]	35.35	54.55	31.77	43.47	50.38	30.31	51.61	19.92	5.85	22.54	40.08	12.70
Lane Group LOS	D	D	C	D	D	C	D	B	A	C	D	B
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.18	6.62	0.73	3.70	4.20	6.24	6.83	11.81	1.44	0.80	17.09	1.33
50th-Percentile Queue Length [ft/ln]	54.48	165.49	18.26	92.41	105.06	155.95	170.77	295.15	36.07	20.00	427.13	33.15
95th-Percentile Queue Length [veh/ln]	3.92	10.84	1.31	6.65	7.56	10.33	11.12	17.44	2.60	1.44	23.86	2.39
95th-Percentile Queue Length [ft/ln]	98.06	270.98	32.87	166.33	189.11	258.35	277.92	436.02	64.92	36.00	596.60	59.68

Movement, Approach, & Intersection Results

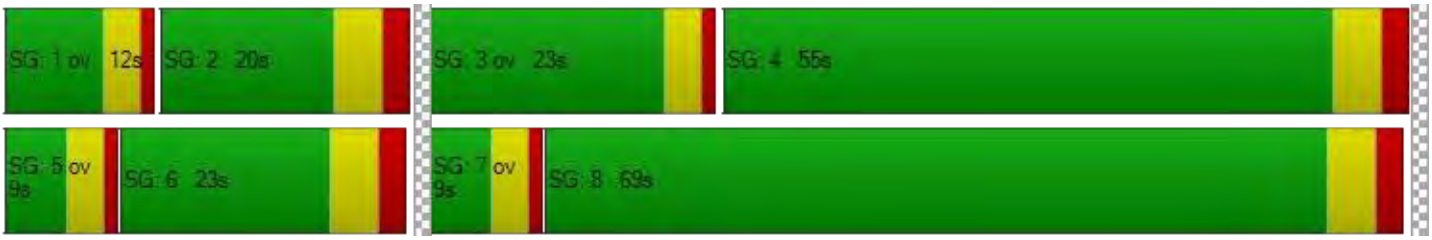
d_M, Delay for Movement [s/veh]	35.35	54.55	31.77	43.47	50.38	30.31	51.61	19.92	5.85	22.54	40.08	12.70
Movement LOS	D	D	C	D	D	C	D	B	A	C	D	B
d_A, Approach Delay [s/veh]	44.55			37.23			24.51			37.16		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	31.72											
Intersection LOS	C											
Intersection V/C	0.806											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	309	255	1145	891
d_b, Bicycle Delay [s]	39.31	41.89	10.04	16.91
l_b,int, Bicycle LOS Score for Intersection	2.345	3.622	3.123	2.843
Bicycle LOS	B	D	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 58: Whitestown Parkway & Veterans Drive/700 E

Control Type:	Signalized	Delay (sec / veh):	33.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name							Whitestown Parkway			Whitestown Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	1	2	0	0	1	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	200.00	500.00	100.00	100.00	500.00	100.00	500.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name							Whitestown Parkway			Whitestown Parkway		
Base Volume Input [veh/h]	114	39	60	190	44	93	114	569	41	127	546	96
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	17	0	246	28	0	457	916	0	0	755	242
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	35	0	0	0	0	0	128
Total Hourly Volume [veh/h]	125	56	60	436	72	58	571	1485	41	127	1301	210
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	15	16	118	20	16	155	404	11	35	354	57
Total Analysis Volume [veh/h]	136	61	65	474	78	63	621	1614	45	138	1414	228
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	4 - Whitestown Parkway Corridor
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	48.4
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All red [s]	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Split [s]	9	16	16	9	16	16	16	56	56	9	49	49
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	4.0
Minimum Recall	No	No		No	No		No	Yes		No	Yes	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	R	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00	0.00	4.00	4.00
g_i, Effective Green Time [s]	19	10	19	10	10	59	50	50	59	43	43
g / C, Green / Cycle	0.21	0.11	0.21	0.11	0.11	0.66	0.56	0.56	0.66	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.11	0.08	0.19	0.05	0.04	0.55	0.50	0.50	0.33	0.44	0.16
s, saturation flow rate [veh/h]	1289	1530	2522	1669	1419	1136	1669	1654	422	3179	1419
c, Capacity [veh/h]	339	170	519	185	158	674	930	921	273	1519	678
d1, Uniform Delay [s]	30.72	38.75	36.41	37.30	37.21	24.54	17.56	17.73	19.33	22.11	14.62
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.32	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.77	6.22	6.75	1.51	1.63	14.16	12.70	13.60	6.53	11.64	1.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.74	0.91	0.42	0.40	0.92	0.89	0.90	0.51	0.93	0.34
d, Delay for Lane Group [s/veh]	31.49	44.96	43.17	38.81	38.84	38.70	30.26	31.33	25.86	33.75	15.96
Lane Group LOS	C	D	D	D	D	D	C	C	C	C	B
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.58	2.95	5.07	1.62	1.32	3.29	15.66	15.97	1.26	14.54	2.83
50th-Percentile Queue Length [ft/ln]	64.41	73.72	126.85	40.58	32.91	82.19	391.44	399.36	31.45	363.53	70.76
95th-Percentile Queue Length [veh/ln]	4.64	5.31	8.77	2.92	2.37	5.92	22.15	22.53	2.26	20.80	5.09
95th-Percentile Queue Length [ft/ln]	115.94	132.70	219.20	73.04	59.24	147.95	553.67	563.23	56.62	519.88	127.36

Movement, Approach, & Intersection Results

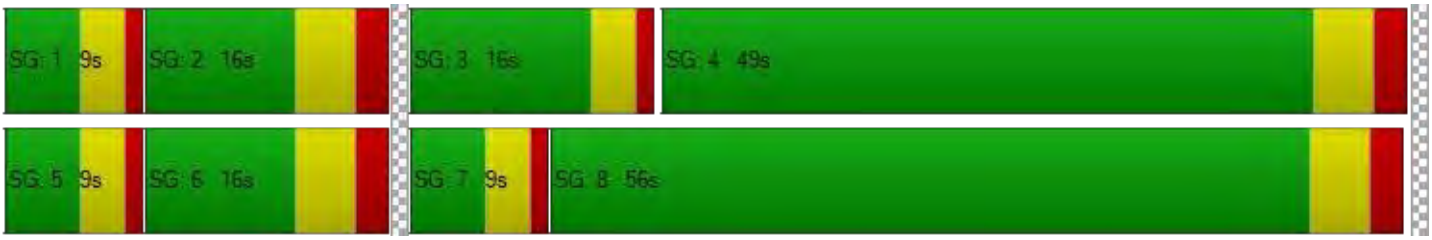
d_M, Delay for Movement [s/veh]	31.49	44.96	44.96	43.17	38.81	38.84	38.70	30.78	31.33	25.86	33.75	15.96
Movement LOS	C	D	D	D	D	D	D	C	C	C	C	B
d_A, Approach Delay [s/veh]	37.97			42.17			32.95			30.86		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	33.61											
Intersection LOS	C											
Intersection V/C	0.728											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	43.0	0.0	10.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	12.27	0.00	35.56
l_p,int, Pedestrian LOS Score for Intersectio	0.000	3.268	0.000	3.860
Crosswalk LOS	F	C	F	D
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	222	1111	956
d_b, Bicycle Delay [s]	35.56	35.56	8.89	12.27
l_b,int, Bicycle LOS Score for Intersection	1.992	2.632	3.441	3.134
Bicycle LOS	A	B	C	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 63: Indianapolis Road & 750 S

Control Type:	Roundabout	Delay (sec / veh):	11.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name	Indianapolis Road		Indianapolis Road		750 South	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	11.48	11.48	11.48	11.48	11.48	11.48
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00		40.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Indianapolis Road		Indianapolis Road		750 South	
Base Volume Input [veh/h]	118	242	239	92	57	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	332	377	268	133	29
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	142	574	616	360	190	84
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	156	167	98	52	23
Total Analysis Volume [veh/h]	154	624	670	391	207	91
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Number of Conflicting Circulating Lanes	1		1		1	
Circulating Flow Rate [veh/h]	213		159		690	
Exiting Flow Rate [veh/h]	784		856		159	
Demand Flow Rate [veh/h]	142	574	616	360	190	84
Adjusted Demand Flow Rate [veh/h]	154	624	670	391	207	91

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	0.97	0.97	0.97	0.97
Entry Flow Rate [veh/h]	802	691	0	307
Capacity of Entry and Bypass Lanes [veh/h]	1111	1174	1174	683
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1078	1140	1140	663
X, volume / capacity	0.72	0.59	0.34	0.45

Movement, Approach, & Intersection Results

Lane LOS	C	B	A	B
95th-Percentile Queue Length [veh]	6.61	4.01	1.54	2.33
95th-Percentile Queue Length [ft]	165.37	100.16	38.54	58.30
Approach Delay [s/veh]	15.08	9.03		12.04
Approach LOS	C	A		B
Intersection Delay [s/veh]	11.65			
Intersection LOS	B			

Segments

Existing Year - Unimproved

AM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	1 - 100 S EB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	20	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73804	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39582	PF Power Coefficient (p)	0.69876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	8.5
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
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Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	1 - 100 S WB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	54	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75159	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39572	PF Power Coefficient (p)	0.69976
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	16.6
Segment Travel Time, minutes	1.48	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	2 - 100 S EB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	18	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.76991	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39053	PF Power Coefficient (p)	0.68808
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	8.5
Segment Travel Time, minutes	2.30	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	2 - 100 S WB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	11.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	41	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.7
Speed Slope Coefficient (m)	2.68183	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39045	PF Power Coefficient (p)	0.68145
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	38.7

Vehicle Results			
Average Speed, mi/h	38.7	Percent Followers, %	14.7
Segment Travel Time, minutes	2.40	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM Peak
Project Description	3 - 650 E NB BT 200 S AND 100S AM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	107	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73832	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39559	PF Power Coefficient (p)	0.69871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	25.3
Segment Travel Time, minutes	1.51	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM Peak
Project Description	3 - 650 E SB BT 200 S AND 100 S AM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	65	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75187	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39549	PF Power Coefficient (p)	0.69971
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	18.7
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM Peak
Project Description	4 - 200 S EB BT 500 E AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2772
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	10	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.70029	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43824	PF Power Coefficient (p)	0.69352
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2772	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	5.6
Segment Travel Time, minutes	0.79	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM Peak
Project Description	4 - 200 S WB BT 500 E AND 575 E AM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2772
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	33	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.5
Speed Slope Coefficient (m)	2.67455	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43824	PF Power Coefficient (p)	0.69158
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2772	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	12.6
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	5 - 200 S EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4137
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	13	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.75882	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40828	PF Power Coefficient (p)	0.70141
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4137	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	6.5
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/25/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	5 - 200 S WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4137
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	39	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.1
Speed Slope Coefficient (m)	2.77644	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40803	PF Power Coefficient (p)	0.70269
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4137	-	-	41.1

Vehicle Results			
Average Speed, mi/h	41.1	Percent Followers, %	13.4
Segment Travel Time, minutes	1.14	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	6 - 200 S EB BT 650 E AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	50	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77580	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44129	PF Power Coefficient (p)	0.69836
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	16.3
Segment Travel Time, minutes	0.73	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	6 - 200 S WB BT 650 E AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	36	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74870	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44174	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	40.9

Vehicle Results			
Average Speed, mi/h	40.9	Percent Followers, %	13.2
Segment Travel Time, minutes	0.73	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	7 - 200 S EB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	57	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.76346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47411	PF Power Coefficient (p)	0.69071
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	18.3
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	7 - 200 S WB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	30	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68487	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47497	PF Power Coefficient (p)	0.68492
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	12.6
Segment Travel Time, minutes	0.52	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	9 - 575 E NB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	8	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.1
Speed Slope Coefficient (m)	3.03612	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41546	PF Power Coefficient (p)	0.71822
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	46.1

Vehicle Results			
Average Speed, mi/h	46.1	Percent Followers, %	4.2
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	9 - 575 E SB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	17	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.1
Speed Slope Coefficient (m)	3.03612	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41546	PF Power Coefficient (p)	0.71822
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	46.1

Vehicle Results			
Average Speed, mi/h	46.1	Percent Followers, %	7.4
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	10 - 575 E NB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	8	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	45.3
Speed Slope Coefficient (m)	2.97672	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45250	PF Power Coefficient (p)	0.70794
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	45.3

Vehicle Results			
Average Speed, mi/h	45.3	Percent Followers, %	4.5
Segment Travel Time, minutes	0.53	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	10 - 575 E SB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	10.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	17	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.0
Speed Slope Coefficient (m)	2.90897	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45616	PF Power Coefficient (p)	0.70358
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	44.0

Vehicle Results			
Average Speed, mi/h	44.0	Percent Followers, %	8.1
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	11 - PROPOSED/MADERA DRIVE EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2590
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	97	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.3
Speed Slope Coefficient (m)	1.68291	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31498	PF Power Coefficient (p)	0.59342
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2590	-	-	21.3

Vehicle Results			
Average Speed, mi/h	21.3	Percent Followers, %	28.0
Segment Travel Time, minutes	1.38	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	11 - PROPOSED/MADERA DRIVE WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2590
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	16.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	23	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.3
Speed Slope Coefficient (m)	1.62735	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29895	PF Power Coefficient (p)	0.58699
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2590	-	-	20.3

Vehicle Results			
Average Speed, mi/h	20.3	Percent Followers, %	13.2
Segment Travel Time, minutes	1.45	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	12 - 650 E NB BT MADERA DR AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	23.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	105	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.5
Speed Slope Coefficient (m)	1.54303	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25090	PF Power Coefficient (p)	0.58202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	18.3

Vehicle Results			
Average Speed, mi/h	18.3	Percent Followers, %	28.7
Segment Travel Time, minutes	2.11	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	12 - 650 E SB BT MADERA DR AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	90	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.9
Speed Slope Coefficient (m)	1.83706	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33187	PF Power Coefficient (p)	0.61511
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	23.9

Vehicle Results			
Average Speed, mi/h	23.9	Percent Followers, %	26.2
Segment Travel Time, minutes	1.62	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	13 - MAIN STREET NB BT 300 S AND MADERA DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	42.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	127	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	13.7
Speed Slope Coefficient (m)	1.26283	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19034	PF Power Coefficient (p)	0.53635
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	13.5

Vehicle Results			
Average Speed, mi/h	13.5	Percent Followers, %	32.6
Segment Travel Time, minutes	1.58	Adj. Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	13 - MAIN STREET SB BT 300 S AND MADERA DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	210	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	16.0
Speed Slope Coefficient (m)	1.38343	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24184	PF Power Coefficient (p)	0.55041
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	15.4

Vehicle Results			
Average Speed, mi/h	15.4	Percent Followers, %	40.9
Segment Travel Time, minutes	1.38	Adj. Follower Density, followers/mi/ln	5.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	14 - 700 E NB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71645	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44144	PF Power Coefficient (p)	0.69414
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	21.6
Segment Travel Time, minutes	0.75	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	14 - 700 E SB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	183	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.74355	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44117	PF Power Coefficient (p)	0.69614
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	35.7
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	15 - 700 E NB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71590	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44271	PF Power Coefficient (p)	0.69387
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	21.6
Segment Travel Time, minutes	0.74	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	15 - 700 E SB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	183	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.3
Speed Slope Coefficient (m)	2.49775	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43891	PF Power Coefficient (p)	0.67658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	35.4

Vehicle Results			
Average Speed, mi/h	35.4	Percent Followers, %	36.6
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	17 - 300 S EB BT LIMITS AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3254
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	62	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.67399	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42543	PF Power Coefficient (p)	0.69355
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3254	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	18.7
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	17 - 300 S WB BT LIMITS AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3254
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.0
Speed Slope Coefficient (m)	2.54256	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42304	PF Power Coefficient (p)	0.68315
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3254	-	-	37.0

Vehicle Results			
Average Speed, mi/h	37.0	Percent Followers, %	21.9
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	18 - PIERCE STREET/300 S EB BT 575 E AND MAIN ST	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4125
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	24.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	66	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.3
Speed Slope Coefficient (m)	1.53783	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.23557	PF Power Coefficient (p)	0.58334
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4125	-	-	18.3

Vehicle Results			
Average Speed, mi/h	18.3	Percent Followers, %	22.4
Segment Travel Time, minutes	2.57	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	18 - PIERCE STREET/300 S WB BT 575 E AND MAIN ST	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4125
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	65	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.1
Speed Slope Coefficient (m)	1.36439	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.17227	PF Power Coefficient (p)	0.56417
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4125	-	-	15.1

Vehicle Results			
Average Speed, mi/h	15.1	Percent Followers, %	22.2
Segment Travel Time, minutes	3.11	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	19 - PIERCE STREET/300 S EB BT MAIN ST AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	28.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	88	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	17.3
Speed Slope Coefficient (m)	1.46956	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24549	PF Power Coefficient (p)	0.56909
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	17.3

Vehicle Results			
Average Speed, mi/h	17.3	Percent Followers, %	26.8
Segment Travel Time, minutes	1.73	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	19 - PIERCE STREET/300 S WB BT MAIN ST AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	75	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	14.9
Speed Slope Coefficient (m)	1.33542	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19352	PF Power Coefficient (p)	0.55374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	14.9

Vehicle Results			
Average Speed, mi/h	14.9	Percent Followers, %	24.8
Segment Travel Time, minutes	2.02	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	20 - PIERCE STREET/300 S EB BT 700 E AND ALBERT S WHITE DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	246	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.2
Speed Slope Coefficient (m)	1.93058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43393	PF Power Coefficient (p)	0.60659
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	25.4

Vehicle Results			
Average Speed, mi/h	25.4	Percent Followers, %	45.8
Segment Travel Time, minutes	0.25	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

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Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	20 - PIERCE STREET/300 S WB BT 700 E AND ALBERT S WHITE DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	18.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	127	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.5
Speed Slope Coefficient (m)	1.67448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37122	PF Power Coefficient (p)	0.57643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	21.1

Vehicle Results			
Average Speed, mi/h	21.1	Percent Followers, %	34.1
Segment Travel Time, minutes	0.30	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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Project Information			
Analyst	DAD	Date	7/28/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	21 - ALBERT S WHITE DR EB BT 300S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	333	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.08871	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41681	PF Power Coefficient (p)	0.63474
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	27.7

Vehicle Results			
Average Speed, mi/h	27.7	Percent Followers, %	50.6
Segment Travel Time, minutes	0.89	Adj. Follower Density, followers/mi/ln	6.1
Vehicle LOS	C		

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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	21 - ALBERT S WHITE DR WB BT 300S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	305	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.25402	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43792	PF Power Coefficient (p)	0.65127
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	30.8

Vehicle Results			
Average Speed, mi/h	30.8	Percent Followers, %	48.5
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	4.8
Vehicle LOS	B		

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Project Information			
Analyst	DAD	Date	7/28/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	22 - 400 E NB BT PERRY WORTH RD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	110	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	40.5

Vehicle Results			
Average Speed, mi/h	40.5	Percent Followers, %	25.7
Segment Travel Time, minutes	1.35	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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Project Description	22 - 400 E SB BT PERRY WORTH RD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	153	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	31.3
Segment Travel Time, minutes	1.36	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	23 - 400 E NB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	115	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	46.4

Vehicle Results			
Average Speed, mi/h	46.4	Percent Followers, %	27.5
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	23 - 400 E SB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	160	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	46.0

Vehicle Results			
Average Speed, mi/h	46.0	Percent Followers, %	33.3
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	24 - 450 E NB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	34	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.03507	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36775	PF Power Coefficient (p)	0.63665
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	27.6

Vehicle Results			
Average Speed, mi/h	27.6	Percent Followers, %	14.6
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	24 - 450 E SB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	18	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.7
Speed Slope Coefficient (m)	2.09604	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37730	PF Power Coefficient (p)	0.64289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	28.7

Vehicle Results			
Average Speed, mi/h	28.7	Percent Followers, %	10.0
Segment Travel Time, minutes	1.40	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	25 - 500 E NB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	162	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.8
Speed Slope Coefficient (m)	2.04544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37028	PF Power Coefficient (p)	0.63762
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	27.1

Vehicle Results			
Average Speed, mi/h	27.1	Percent Followers, %	34.9
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	25 - 500 E SB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	196	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.08609	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37665	PF Power Coefficient (p)	0.64178
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	27.7

Vehicle Results			
Average Speed, mi/h	27.7	Percent Followers, %	38.3
Segment Travel Time, minutes	1.43	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	26 - 575 E NB BT ALBERT S WHITE DR AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5309
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	46	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.0
Speed Slope Coefficient (m)	3.05547	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38408	PF Power Coefficient (p)	0.72034
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5309	-	-	46.0

Vehicle Results			
Average Speed, mi/h	46.0	Percent Followers, %	13.9
Segment Travel Time, minutes	1.31	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	26 - 575 E SB BT ALBERT S WHITE DR AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5309
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	15.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	33	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.86712	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39313	PF Power Coefficient (p)	0.70792
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5309	-	-	42.6

Vehicle Results			
Average Speed, mi/h	42.6	Percent Followers, %	11.6
Segment Travel Time, minutes	1.42	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	27 - MAIN STREET NB BT PROPOSED AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	211	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.8
Speed Slope Coefficient (m)	1.39094	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.21020	PF Power Coefficient (p)	0.56160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	15.3

Vehicle Results			
Average Speed, mi/h	15.3	Percent Followers, %	39.6
Segment Travel Time, minutes	2.11	Adj. Follower Density, followers/mi/ln	5.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	27 - MAIN STREET SB BT PROPOSED AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	435	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.8
Speed Slope Coefficient (m)	1.39094	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.21020	PF Power Coefficient (p)	0.56160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	15.0

Vehicle Results			
Average Speed, mi/h	15.0	Percent Followers, %	53.1
Segment Travel Time, minutes	2.16	Adj. Follower Density, followers/mi/ln	15.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	28 - MAIN STREET NB BT ALBERT S WHITE DR AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2444
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	6.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	211	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.83396	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35816	PF Power Coefficient (p)	0.60949
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2444	-	-	23.4

Vehicle Results			
Average Speed, mi/h	23.4	Percent Followers, %	40.9
Segment Travel Time, minutes	1.19	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	28 - MAIN STREET SB BT ALBERT S WHITE DR AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2444
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	435	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.2
Speed Slope Coefficient (m)	1.89223	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37092	PF Power Coefficient (p)	0.61599
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2444	-	-	24.0

Vehicle Results			
Average Speed, mi/h	24.0	Percent Followers, %	56.0
Segment Travel Time, minutes	1.16	Adj. Follower Density, followers/mi/ln	10.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	30 - ALBERT S WHITE DR NB BT PROPOSED AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	270	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	29.6

Vehicle Results			
Average Speed, mi/h	29.6	Percent Followers, %	45.1
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	30 - ALBERT S WHITE DR SB BT PROPOSED AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	382	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	29.3

Vehicle Results			
Average Speed, mi/h	29.3	Percent Followers, %	52.9
Segment Travel Time, minutes	1.10	Adj. Follower Density, followers/mi/ln	6.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	31 - ALBERT S WHITE DR NB BT 700 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	270	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	30.2

Vehicle Results			
Average Speed, mi/h	30.2	Percent Followers, %	45.8
Segment Travel Time, minutes	0.82	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	31 - ALBERT S WHITE DR SB BT 700 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	382	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	29.9

Vehicle Results			
Average Speed, mi/h	29.9	Percent Followers, %	53.6
Segment Travel Time, minutes	0.83	Adj. Follower Density, followers/mi/ln	6.8
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	32: ALBERT S WHITE DRIVE BT I-65 AND 400 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	912	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	520
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.27

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	806	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	460
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	33: ALBERT S WHITE DRIVE BT 400 E AND 450 E/ ANSON BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	3.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	791	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	452
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	633	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	362
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	34: ALBERT S WHITE DRIVE BT 450 E/ANSON BLVD AND 500 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	658	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	376
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	639	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	365
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	35: ALBERT S WHITE DRIVE BT 500 E AND 575 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	186	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	106
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.06

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	2.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.7		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	513	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	293
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.7		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	36 - ALBERT S WHITE DR EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	249	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.1
Speed Slope Coefficient (m)	1.96704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34150	PF Power Coefficient (p)	0.63058
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	25.2

Vehicle Results			
Average Speed, mi/h	25.2	Percent Followers, %	42.8
Segment Travel Time, minutes	1.96	Adj. Follower Density, followers/mi/ln	4.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	36 - ALBERT S WHITE DR WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	4.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	545	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.93317	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33505	PF Power Coefficient (p)	0.62701
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	24.1

Vehicle Results			
Average Speed, mi/h	24.1	Percent Followers, %	59.8
Segment Travel Time, minutes	2.05	Adj. Follower Density, followers/mi/ln	13.5
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	37: 400 S/ALBERT S WHITE DRIVE EB BT 650 E AND 700 E/GINGER WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	263	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.22048	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42280	PF Power Coefficient (p)	0.65039
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	30.2

Vehicle Results			
Average Speed, mi/h	30.2	Percent Followers, %	45.0
Segment Travel Time, minutes	0.93	Adj. Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	37: 400 S/ALBERT S WHITE DRIVE WB BT 650 E AND 700 E/GINGER WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	2.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	426	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.19202	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41946	PF Power Coefficient (p)	0.64760
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	29.3

Vehicle Results			
Average Speed, mi/h	29.3	Percent Followers, %	55.8
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	8.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	38 - INDIANAPOLIS ROAD EB BT Limits AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	227	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.69974	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44257	PF Power Coefficient (p)	0.69270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	40.4
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	38 - INDIANAPOLIS ROAD WB BT Limits AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	202	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.5
Speed Slope Coefficient (m)	2.61844	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44212	PF Power Coefficient (p)	0.68646
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	37.5

Vehicle Results			
Average Speed, mi/h	37.5	Percent Followers, %	38.2
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	39: STATE ROAD 267 BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	4.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.9	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	655	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	374
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1938
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1938
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.9
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	8.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	SWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	48.0	Total Lateral Clearance (TLC), ft	11
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	575	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	328
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1960
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1960
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.0
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	6.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	40 - PERRY WORTH ROAD NWB BT ALBERT S WHITE DRIVE AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	3	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.73815	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41088	PF Power Coefficient (p)	0.69980
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	2.5
Segment Travel Time, minutes	1.12	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	40 - PERRY WORTH ROAD SEB BT ALBERT S WHITE DRIVE AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	3	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.79235	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41013	PF Power Coefficient (p)	0.70374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	2.5
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	41 - ANSON BLVD NB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	103	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15633	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40636	PF Power Coefficient (p)	0.64572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	29.8

Vehicle Results			
Average Speed, mi/h	29.8	Percent Followers, %	27.7
Segment Travel Time, minutes	1.04	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	41 - ANSON BLVD SB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	15.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	162	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.9
Speed Slope Coefficient (m)	1.98695	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38003	PF Power Coefficient (p)	0.62823
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	26.2

Vehicle Results			
Average Speed, mi/h	26.2	Percent Followers, %	35.6
Segment Travel Time, minutes	1.18	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	42 - 500 E NB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	46	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	31.1

Vehicle Results			
Average Speed, mi/h	31.1	Percent Followers, %	17.3
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	42 - 500 E SB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	107	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	30.8

Vehicle Results			
Average Speed, mi/h	30.8	Percent Followers, %	28.1
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	43 - 575 E NB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2618
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	28	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.5
Speed Slope Coefficient (m)	3.05184	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42942	PF Power Coefficient (p)	0.71645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2618	-	-	46.5

Vehicle Results			
Average Speed, mi/h	46.5	Percent Followers, %	10.5
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	43 - 575 E SB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2618
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	54	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.5
Speed Slope Coefficient (m)	3.05184	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42942	PF Power Coefficient (p)	0.71645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2618	-	-	46.5

Vehicle Results			
Average Speed, mi/h	46.5	Percent Followers, %	16.3
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	44 - 650 E NB BT 500 S AND 100 S/ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5222
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	300	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.86629	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31103	PF Power Coefficient (p)	0.61905
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5222	-	-	23.2

Vehicle Results			
Average Speed, mi/h	23.2	Percent Followers, %	46.3
Segment Travel Time, minutes	2.56	Adj. Follower Density, followers/mi/ln	6.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	44 - 650 E SB BT 500 S AND 100 S/ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5222
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	597	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.86629	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31103	PF Power Coefficient (p)	0.61905
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	16.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5222	-	-	22.7

Vehicle Results			
Average Speed, mi/h	22.7	Percent Followers, %	61.4
Segment Travel Time, minutes	2.61	Adj. Follower Density, followers/mi/ln	16.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	45 - 700 E NB BT 400 S/ Albert S White Drive AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	145	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.17448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47418	PF Power Coefficient (p)	0.63289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.1

Vehicle Results			
Average Speed, mi/h	30.1	Percent Followers, %	35.2
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	45 - 700 E SB BT 400 S AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	11	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	136	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.0
Speed Slope Coefficient (m)	2.19074	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47623	PF Power Coefficient (p)	0.63454
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.5

Vehicle Results			
Average Speed, mi/h	30.5	Percent Followers, %	34.0
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	46 - 425 S EB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	76	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.14330	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44733	PF Power Coefficient (p)	0.63516
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	24.6
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	46 - 425 S WB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	70	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.05929	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43484	PF Power Coefficient (p)	0.62639
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	23.7
Segment Travel Time, minutes	0.67	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	47 - STATE ROAD 267 NB BT LIMITS AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	408	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	49.1
Speed Slope Coefficient (m)	3.20647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38727	PF Power Coefficient (p)	0.73024
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	47.1

Vehicle Results			
Average Speed, mi/h	47.1	Percent Followers, %	51.3
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	47 - STATE ROAD 267 SB BT Limits AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	10	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	421	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	47.9
Speed Slope Coefficient (m)	3.14143	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39287	PF Power Coefficient (p)	0.72645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	45.9

Vehicle Results			
Average Speed, mi/h	45.9	Percent Followers, %	52.4
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	4.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	48 - INDIANAPOLIS ROAD NWB BT 550 S AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	348	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.81040	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39579	PF Power Coefficient (p)	0.68246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	49.3
Segment Travel Time, minutes	2.71	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	48 - INDIANAPOLIS ROAD SEB BT 550 S AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	227	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.9
Speed Slope Coefficient (m)	2.86324	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39475	PF Power Coefficient (p)	0.68623
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	40.6

Vehicle Results			
Average Speed, mi/h	40.6	Percent Followers, %	39.6
Segment Travel Time, minutes	2.63	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	49 - 450 S EB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	54	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.7
Speed Slope Coefficient (m)	2.87637	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49989	PF Power Coefficient (p)	0.69171
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	43.7

Vehicle Results			
Average Speed, mi/h	43.7	Percent Followers, %	18.1
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	49 - 450 S WB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	40	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.8
Speed Slope Coefficient (m)	2.93599	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49684	PF Power Coefficient (p)	0.69557
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	44.8

Vehicle Results			
Average Speed, mi/h	44.8	Percent Followers, %	14.8
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	50 - 450 S EB BT ANSON BLVD AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	66	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.70445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45780	PF Power Coefficient (p)	0.69006
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	20.1
Segment Travel Time, minutes	0.62	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	50 - 450 S WB BT ANSON BLVD AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	45	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73697	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45751	PF Power Coefficient (p)	0.69246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	15.6
Segment Travel Time, minutes	0.61	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	51 - 450 S EB BT 500 E AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	15	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76561	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40305	PF Power Coefficient (p)	0.70187
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	7.2
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	51 - 450 S WB BT 500 E AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	36	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.73445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40335	PF Power Coefficient (p)	0.69958
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	12.8
Segment Travel Time, minutes	1.27	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	52 - 700 E NB BT LIMITS AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	83	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.0
Speed Slope Coefficient (m)	2.10346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40224	PF Power Coefficient (p)	0.63977
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	29.0

Vehicle Results			
Average Speed, mi/h	29.0	Percent Followers, %	24.8
Segment Travel Time, minutes	1.03	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	52 - 700 E SB BT LIMITS AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15766	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40975	PF Power Coefficient (p)	0.64524
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	23.7
Segment Travel Time, minutes	0.99	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	53 - PERRY WORTH ROAD NWB BT 450 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	148	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.3
Speed Slope Coefficient (m)	2.62160	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40851	PF Power Coefficient (p)	0.69100
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	37.5

Vehicle Results			
Average Speed, mi/h	37.5	Percent Followers, %	31.3
Segment Travel Time, minutes	1.24	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	53 - PERRY WORTH ROAD SEB BT 450 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	42	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76117	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40875	PF Power Coefficient (p)	0.70157
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	14.2
Segment Travel Time, minutes	1.14	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	54 - ANSON BLVD NWB BT 500 S AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	52	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.4
Speed Slope Coefficient (m)	2.18773	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39298	PF Power Coefficient (p)	0.65160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	30.4

Vehicle Results			
Average Speed, mi/h	30.4	Percent Followers, %	18.4
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	54 - ANSON BLVD SEB BT 500 S AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	63	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.10778	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38230	PF Power Coefficient (p)	0.64366
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	20.8
Segment Travel Time, minutes	1.33	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	55 - 575 E NB BT 500 S AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	34	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	45.5
Speed Slope Coefficient (m)	2.99800	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43220	PF Power Coefficient (p)	0.71328
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	45.5

Vehicle Results			
Average Speed, mi/h	45.5	Percent Followers, %	12.0
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	55 - 575 E SB BT 500 S AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	28	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	45.5
Speed Slope Coefficient (m)	2.99800	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43220	PF Power Coefficient (p)	0.71328
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	45.5

Vehicle Results			
Average Speed, mi/h	45.5	Percent Followers, %	10.6
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	56 - 500 S NEB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	154	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	31.3

Vehicle Results			
Average Speed, mi/h	31.3	Percent Followers, %	36.2
Segment Travel Time, minutes	0.36	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	56 - 500 S SWB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	120	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.16635	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47312	PF Power Coefficient (p)	0.63206
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	30.2

Vehicle Results			
Average Speed, mi/h	30.2	Percent Followers, %	31.9
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	57 - 500 S EB BT ANSON BLVD AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	153	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.27712	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39145	PF Power Coefficient (p)	0.66124
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	31.3

Vehicle Results			
Average Speed, mi/h	31.3	Percent Followers, %	33.1
Segment Travel Time, minutes	1.44	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	57 - 500 S WB BT ANSON BLVD AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	120	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.9
Speed Slope Coefficient (m)	2.16872	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37916	PF Power Coefficient (p)	0.65086
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	29.5

Vehicle Results			
Average Speed, mi/h	29.5	Percent Followers, %	29.3
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	58 - 500 S EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	12
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	99	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.3
Speed Slope Coefficient (m)	2.56698	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40787	PF Power Coefficient (p)	0.68662
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	37.3

Vehicle Results			
Average Speed, mi/h	37.3	Percent Followers, %	25.0
Segment Travel Time, minutes	1.24	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	58 - 500 S WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	128	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.9
Speed Slope Coefficient (m)	2.22281	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38382	PF Power Coefficient (p)	0.65619
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	30.4

Vehicle Results			
Average Speed, mi/h	30.4	Percent Followers, %	30.2
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	59 - PERRY WORTH ROAD NWB BT 550 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	334	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	47.9
Segment Travel Time, minutes	1.23	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	59 - PERRY WORTH ROAD SEB BT 550 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	142	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	30.1
Segment Travel Time, minutes	1.21	Adj. Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	60 - 575 E NB BT END AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1341
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	0	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.20198	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47616	PF Power Coefficient (p)	0.63603
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1341	-	-	31.2

Vehicle Results			
Average Speed, mi/h	31.2	Percent Followers, %	0.0
Segment Travel Time, minutes	0.49	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	60 - 575 E NB BT END AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1341
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	0	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.3
Speed Slope Coefficient (m)	2.14914	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46938	PF Power Coefficient (p)	0.63064
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1341	-	-	30.3

Vehicle Results			
Average Speed, mi/h	30.3	Percent Followers, %	0.0
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	61 - 650 E/S MAIN STREET NB BT CENTRAL BLVD AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5749
Lane Width, ft	11	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	548	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.6
Speed Slope Coefficient (m)	2.16942	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35915	PF Power Coefficient (p)	0.64872
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5749	-	-	28.1

Vehicle Results			
Average Speed, mi/h	28.1	Percent Followers, %	60.1
Segment Travel Time, minutes	2.33	Adj. Follower Density, followers/mi/ln	11.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	61 - 650 E/S MAIN STREET SB BT CENTRAL BLVD AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5749
Lane Width, ft	11	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1064	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.63

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.3
Speed Slope Coefficient (m)	2.20736	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36387	PF Power Coefficient (p)	0.65238
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	28.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5749	-	-	28.1

Vehicle Results			
Average Speed, mi/h	28.1	Percent Followers, %	75.8
Segment Travel Time, minutes	2.32	Adj. Follower Density, followers/mi/ln	28.7
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	62 - 550 S EB BT LIMITS AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	174	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.9
Speed Slope Coefficient (m)	2.54650	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40746	PF Power Coefficient (p)	0.68494
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	36.0

Vehicle Results			
Average Speed, mi/h	36.0	Percent Followers, %	34.6
Segment Travel Time, minutes	1.28	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	62 - 550 S WB BT LIMITS AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	65	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66981	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40987	PF Power Coefficient (p)	0.69471
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	19.1
Segment Travel Time, minutes	1.18	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	63 - 550 S EB BT 475 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	229	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	42.3
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	63 - 550 S WB BT 475 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	379	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.69209	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	38.7

Vehicle Results			
Average Speed, mi/h	38.7	Percent Followers, %	54.1
Segment Travel Time, minutes	0.34	Adj. Follower Density, followers/mi/ln	5.3
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	64: 550 S BT INDIANAPOLIS RD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	279	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	160
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.08

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	3.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	543	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	310
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.16
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	65: 550 S BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	317	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	181
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.10

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	4.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	253	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	144
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.08
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	3.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	68 - 475 E NB BT PROPOSED AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	184	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	41.6

Vehicle Results			
Average Speed, mi/h	41.6	Percent Followers, %	36.2
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	68 - 475 E SB BT PROPOSED AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	343	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	41.1

Vehicle Results			
Average Speed, mi/h	41.1	Percent Followers, %	50.1
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	4.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	69 - INDIANAPOLIS ROAD NWB BT COMMERCE DRIVE AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	227	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.4
Speed Slope Coefficient (m)	2.82421	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45079	PF Power Coefficient (p)	0.69969
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	41.2

Vehicle Results			
Average Speed, mi/h	41.2	Percent Followers, %	40.2
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	69 - INDIANAPOLIS ROAD SEB BT COMMERCE DRIVE AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	86	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.0
Speed Slope Coefficient (m)	2.85538	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44975	PF Power Coefficient (p)	0.70183
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	43.0

Vehicle Results			
Average Speed, mi/h	43.0	Percent Followers, %	22.8
Segment Travel Time, minutes	0.62	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	70 - PERRY WORTH ROAD NWB BT 550 S AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	221	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	39.0
Segment Travel Time, minutes	0.88	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	70 - PERRY WORTH ROAD SEB BT 550 S AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	64	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	18.8
Segment Travel Time, minutes	0.86	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	71 - JUNIORS WAY NEB BT PERRY WORTH ROAD AND NEW HOPE BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	45	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	29.4

Vehicle Results			
Average Speed, mi/h	29.4	Percent Followers, %	17.8
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	71 - JUNIORS WAY SWB BT PERRY WORTH ROAD AND NEW HOPE BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	243	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	28.4

Vehicle Results			
Average Speed, mi/h	28.4	Percent Followers, %	44.0
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	3.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	73 - 475 E NB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	13.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	184	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66403	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42128	PF Power Coefficient (p)	0.69331
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	38.2

Vehicle Results			
Average Speed, mi/h	38.2	Percent Followers, %	35.5
Segment Travel Time, minutes	1.02	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	73 - 475 E SB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	343	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient (m)	2.70468	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42135	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	38.4

Vehicle Results			
Average Speed, mi/h	38.4	Percent Followers, %	49.1
Segment Travel Time, minutes	1.02	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	74 - COMMERCE DRIVE NB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	37	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.92514	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34124	PF Power Coefficient (p)	0.62577
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	25.5

Vehicle Results			
Average Speed, mi/h	25.5	Percent Followers, %	15.7
Segment Travel Time, minutes	1.72	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	74 - COMMERCE DRIVE SB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	39	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.8
Speed Slope Coefficient (m)	1.88720	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33351	PF Power Coefficient (p)	0.62169
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	24.8

Vehicle Results			
Average Speed, mi/h	24.8	Percent Followers, %	16.3
Segment Travel Time, minutes	1.77	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	75 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	241	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.77880	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40027	PF Power Coefficient (p)	0.70264
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	40.3
Segment Travel Time, minutes	1.35	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	75 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	123	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.6
Speed Slope Coefficient (m)	2.80861	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39973	PF Power Coefficient (p)	0.70478
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	41.0

Vehicle Results			
Average Speed, mi/h	41.0	Percent Followers, %	27.3
Segment Travel Time, minutes	1.31	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	76: PERRY WORTH ROAD NWB BT MILLS DRIVE AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	235	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	2.02390	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36179	PF Power Coefficient (p)	0.63594
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	26.4

Vehicle Results			
Average Speed, mi/h	26.4	Percent Followers, %	41.8
Segment Travel Time, minutes	1.60	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	76: PERRY WORTH ROAD SEB BT MILLS DRIVE AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	174	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.1
Speed Slope Coefficient (m)	2.12011	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37668	PF Power Coefficient (p)	0.64574
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	28.4

Vehicle Results			
Average Speed, mi/h	28.4	Percent Followers, %	35.9
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	77: PERRY WORTH ROAD BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	376	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	214
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.11

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	4.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	13.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	40.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	291	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	166
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.09
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	4.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	78 - MILLS DRIVE EB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	245	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.8

Vehicle Results			
Average Speed, mi/h	21.8	Percent Followers, %	45.2
Segment Travel Time, minutes	0.79	Adj. Follower Density, followers/mi/ln	5.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	78 - MILLS DRIVE WB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	273	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.7

Vehicle Results			
Average Speed, mi/h	21.7	Percent Followers, %	47.4
Segment Travel Time, minutes	0.79	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	79: 650 E/S MAIN STREET BT MILLS DRIVE AND CENTRAL BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	513	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	293
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	921	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	526
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	80: 650 E/S MAIN STREET BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	448	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	256
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.13

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	750	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	428
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	81 - CENTRAL BLVD EB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	234	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.5
Speed Slope Coefficient (m)	2.00104	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44742	PF Power Coefficient (p)	0.61446
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	26.7

Vehicle Results			
Average Speed, mi/h	26.7	Percent Followers, %	44.7
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	81 - CENTRAL BLVD WB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	20.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	159	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.88857	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42514	PF Power Coefficient (p)	0.60180
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	24.9

Vehicle Results			
Average Speed, mi/h	24.9	Percent Followers, %	37.5
Segment Travel Time, minutes	0.58	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	82 - HEARTLAND DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	185	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	26.5

Vehicle Results			
Average Speed, mi/h	26.5	Percent Followers, %	40.1
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	82 - HEARTLAND DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	78	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	27.3

Vehicle Results			
Average Speed, mi/h	27.3	Percent Followers, %	26.2
Segment Travel Time, minutes	0.49	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	83 - CENTRAL BLVD EB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	149	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.5
Speed Slope Coefficient (m)	2.10537	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46459	PF Power Coefficient (p)	0.62572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	35.9
Segment Travel Time, minutes	0.44	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	83 - CENTRAL BLVD WB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	139	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.3
Speed Slope Coefficient (m)	2.04033	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45428	PF Power Coefficient (p)	0.61876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	27.7

Vehicle Results			
Average Speed, mi/h	27.7	Percent Followers, %	34.9
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	84 - 700 E NB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	371	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.7
Speed Slope Coefficient (m)	1.90405	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42181	PF Power Coefficient (p)	0.60532
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	24.6

Vehicle Results			
Average Speed, mi/h	24.6	Percent Followers, %	54.1
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	8.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	84 - 700 E SB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	330	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.00568	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44156	PF Power Coefficient (p)	0.61668
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	26.5

Vehicle Results			
Average Speed, mi/h	26.5	Percent Followers, %	51.7
Segment Travel Time, minutes	0.61	Adj. Follower Density, followers/mi/ln	6.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	85 - VETERANS DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	372	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75171	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50391	PF Power Coefficient (p)	0.68309
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	53.5
Segment Travel Time, minutes	0.30	Adj. Follower Density, followers/mi/ln	5.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	85 - VETERANS DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	391	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.9
Speed Slope Coefficient (m)	2.61756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50442	PF Power Coefficient (p)	0.67297
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	37.3

Vehicle Results			
Average Speed, mi/h	37.3	Percent Followers, %	55.1
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	5.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	86 - WHITESTOWN PARKWAY EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	455	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.64466	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50465	PF Power Coefficient (p)	0.67509
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	37.7

Vehicle Results			
Average Speed, mi/h	37.7	Percent Followers, %	58.7
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	7.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	86 - WHITESTOWN PARKWAY WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	124	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.70022	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50459	PF Power Coefficient (p)	0.67932
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	30.5
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	87 - WHITESTOWN PARKWAY EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	462	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.72667	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47126	PF Power Coefficient (p)	0.68879
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	57.9
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	6.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	87 - WHITESTOWN PARKWAY WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	189	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68873	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47153	PF Power Coefficient (p)	0.68596
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	37.5
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	88 - WHITESTOWN PARKWAY EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	462	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	39.6

Vehicle Results			
Average Speed, mi/h	39.6	Percent Followers, %	58.8
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	6.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	88 - WHITESTOWN PARKWAY WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	189	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.1
Speed Slope Coefficient (m)	2.79236	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50296	PF Power Coefficient (p)	0.68598
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	41.1

Vehicle Results			
Average Speed, mi/h	41.1	Percent Followers, %	38.1
Segment Travel Time, minutes	0.20	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	89 - WHITESTOWN PARKWAY EB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	565	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77587	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44113	PF Power Coefficient (p)	0.69839
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	62.0
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	8.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	89 - WHITESTOWN PARKWAY WB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	286	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74877	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44158	PF Power Coefficient (p)	0.69643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	39.6

Vehicle Results			
Average Speed, mi/h	39.6	Percent Followers, %	45.3
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	90 - WHITESTOWN PARKWAY EB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	598	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.75887	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42853	PF Power Coefficient (p)	0.69936
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	63.1
Segment Travel Time, minutes	0.91	Adj. Follower Density, followers/mi/ln	9.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	90 - WHITESTOWN PARKWAY WB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	453	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.3
Speed Slope Coefficient (m)	2.66673	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42899	PF Power Coefficient (p)	0.69248
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	37.6

Vehicle Results			
Average Speed, mi/h	37.6	Percent Followers, %	56.2
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	6.8
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	91: WHITESTOWN PARKWAY BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1124	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	642
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	15.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	788	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	450
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	10.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	92: WHITESTOWN PARKWAY BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1142	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	435
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	10.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1503	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	858
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	20.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	93: WHITESTOWN PARKWAY BT PERRY WORTH ROAD AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	45.0	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	963	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	550
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	45.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	12.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.7	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1287	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	734
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.7
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	17.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	94: WHITESTOWN PARKWAY BT 650 E/S MAIN STREET AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	43.6	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	708	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	404
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	9.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	44.0	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	691	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	394
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	9.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.1		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	95: WHITESTOWN PARKWAY BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	43.4	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	616	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	352
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.4
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	8.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	713	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	407
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	9.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	AM
Project Description	96: WHITESTOWN PARKWAY BT 700 E AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	42.8	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	771	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	440
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.8
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	10.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.8		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	11.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	668	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	382
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	98 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	771	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	69.1
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	13.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	98 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	477	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	56.7
Segment Travel Time, minutes	1.05	Adj. Follower Density, followers/mi/ln	6.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	100 - INDIANAPOLIS ROAD NWB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	771	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.7
Speed Slope Coefficient (m)	2.80071	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42289	PF Power Coefficient (p)	0.70306
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	69.4
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	13.6
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	100 - INDIANAPOLIS ROAD SEB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	477	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.9
Speed Slope Coefficient (m)	2.86575	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42101	PF Power Coefficient (p)	0.70759
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	41.0

Vehicle Results			
Average Speed, mi/h	41.0	Percent Followers, %	56.9
Segment Travel Time, minutes	0.92	Adj. Follower Density, followers/mi/ln	6.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	101 - 750 S EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	23.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	73	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	35.5
Speed Slope Coefficient (m)	2.43464	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49818	PF Power Coefficient (p)	0.65768
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	35.5

Vehicle Results			
Average Speed, mi/h	35.5	Percent Followers, %	23.5
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	101 - 750 S WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	122	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	40.9

Vehicle Results			
Average Speed, mi/h	40.9	Percent Followers, %	30.0
Segment Travel Time, minutes	0.19	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	102 - 750 S EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	85	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.1
Speed Slope Coefficient (m)	2.69642	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46498	PF Power Coefficient (p)	0.68795
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	23.5
Segment Travel Time, minutes	0.58	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	102 - 750 S WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	128	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73165	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46470	PF Power Coefficient (p)	0.69056
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	29.9
Segment Travel Time, minutes	0.58	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	103 - 750 S EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	85	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	24.3
Segment Travel Time, minutes	0.17	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	103 - 750 S WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	128	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	30.9
Segment Travel Time, minutes	0.18	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	104 - 750 S EB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	149	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.74177	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38969	PF Power Coefficient (p)	0.69469
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	30.9
Segment Travel Time, minutes	1.90	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	104 - 750 S WB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	262	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.75261	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38962	PF Power Coefficient (p)	0.69550
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	42.2
Segment Travel Time, minutes	1.91	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	105 - 750 S EB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	235	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.75127	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41555	PF Power Coefficient (p)	0.70042
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	40.1
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	105 - 750 S WB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	121	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.71198	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41584	PF Power Coefficient (p)	0.69752
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	27.7
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	107 - 600 E NB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	40	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.8
Speed Slope Coefficient (m)	2.66772	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67688
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	15.7
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	107 - 600 E SB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	25	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.72192	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50430	PF Power Coefficient (p)	0.68094
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	11.5
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	108 - INDIANAPOLIS ROAD NWB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	10
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	391	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.0
Speed Slope Coefficient (m)	2.89704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48404	PF Power Coefficient (p)	0.69658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	42.3

Vehicle Results			
Average Speed, mi/h	42.3	Percent Followers, %	53.8
Segment Travel Time, minutes	0.42	Adj. Follower Density, followers/mi/ln	5.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	108 - INDIANAPOLIS ROAD SEB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	362	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.73173	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48917	PF Power Coefficient (p)	0.68512
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	52.4
Segment Travel Time, minutes	0.45	Adj. Follower Density, followers/mi/ln	4.8
Vehicle LOS	B		

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PM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	1 - 100 S EB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	85	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73804	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39582	PF Power Coefficient (p)	0.69876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	22.0
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	1 - 100 S WB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	53	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75159	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39572	PF Power Coefficient (p)	0.69976
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	16.4
Segment Travel Time, minutes	1.48	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	2 - 100 S EB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	75	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.76991	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39053	PF Power Coefficient (p)	0.68808
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	20.9
Segment Travel Time, minutes	2.30	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	2 - 100 S WB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	11.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	52	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.7
Speed Slope Coefficient (m)	2.68183	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39045	PF Power Coefficient (p)	0.68145
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	38.7

Vehicle Results			
Average Speed, mi/h	38.7	Percent Followers, %	17.0
Segment Travel Time, minutes	2.40	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	3 - 650 E NB BT 200 S AND 100S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	114	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73832	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39559	PF Power Coefficient (p)	0.69871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	26.4
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	3 - 650 E SB BT 200 S AND 100 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	118	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75187	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39549	PF Power Coefficient (p)	0.69971
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	26.9
Segment Travel Time, minutes	1.51	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	4 - 200 S EB BT 500 E AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2772
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	14	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.70029	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43824	PF Power Coefficient (p)	0.69352
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2772	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	7.2
Segment Travel Time, minutes	0.79	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	4 - 200 S WB BT 500 E AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2772
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	16	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.5
Speed Slope Coefficient (m)	2.67455	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43824	PF Power Coefficient (p)	0.69158
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2772	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	8.0
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	5 - 200 S EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4137
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	25	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.75882	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40828	PF Power Coefficient (p)	0.70141
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4137	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	10.1
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	5 - 200 S WB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4137
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	17	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.1
Speed Slope Coefficient (m)	2.77644	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40803	PF Power Coefficient (p)	0.70269
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4137	-	-	41.1

Vehicle Results			
Average Speed, mi/h	41.1	Percent Followers, %	7.8
Segment Travel Time, minutes	1.14	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	6 - 200 S EB BT 650 E AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	52	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77580	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44129	PF Power Coefficient (p)	0.69836
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	16.7
Segment Travel Time, minutes	0.73	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	6 - 200 S WB BT 650 E AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	37	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74870	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44174	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	40.9

Vehicle Results			
Average Speed, mi/h	40.9	Percent Followers, %	13.5
Segment Travel Time, minutes	0.73	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	7 - 200 S EB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	52	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.76346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47411	PF Power Coefficient (p)	0.69071
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	17.4
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	7 - 200 S WB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	52	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68487	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47497	PF Power Coefficient (p)	0.68492
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	17.7
Segment Travel Time, minutes	0.52	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	9 - 575 E NB BT PROPOSED AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	11	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.1
Speed Slope Coefficient (m)	3.03612	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41546	PF Power Coefficient (p)	0.71822
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	46.1

Vehicle Results			
Average Speed, mi/h	46.1	Percent Followers, %	5.4
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	9 - 575 E SB BT PROPOSED AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	10	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.1
Speed Slope Coefficient (m)	3.03612	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41546	PF Power Coefficient (p)	0.71822
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	46.1

Vehicle Results			
Average Speed, mi/h	46.1	Percent Followers, %	5.0
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	10 - 575 E NB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	11	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	45.3
Speed Slope Coefficient (m)	2.97672	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45250	PF Power Coefficient (p)	0.70794
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	45.3

Vehicle Results			
Average Speed, mi/h	45.3	Percent Followers, %	5.7
Segment Travel Time, minutes	0.53	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	10 - 575 E SB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2112
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	10.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	10	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.0
Speed Slope Coefficient (m)	2.90897	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45616	PF Power Coefficient (p)	0.70358
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2112	-	-	44.0

Vehicle Results			
Average Speed, mi/h	44.0	Percent Followers, %	5.5
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	11 - PROPOSED/MADERA DRIVE EB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2590
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	66	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.3
Speed Slope Coefficient (m)	1.68291	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31498	PF Power Coefficient (p)	0.59342
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2590	-	-	21.3

Vehicle Results			
Average Speed, mi/h	21.3	Percent Followers, %	23.1
Segment Travel Time, minutes	1.38	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	11 - PROPOSED/MADERA DRIVE WB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2590
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	16.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	113	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.3
Speed Slope Coefficient (m)	1.62735	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29895	PF Power Coefficient (p)	0.58699
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2590	-	-	20.0

Vehicle Results			
Average Speed, mi/h	20.0	Percent Followers, %	30.3
Segment Travel Time, minutes	1.47	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	12 - 650 E NB BT MADERA DR AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	23.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	160	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.5
Speed Slope Coefficient (m)	1.54303	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25090	PF Power Coefficient (p)	0.58202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	18.0

Vehicle Results			
Average Speed, mi/h	18.0	Percent Followers, %	35.0
Segment Travel Time, minutes	2.14	Adj. Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	12 - 650 E SB BT MADERA DR AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	127	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.9
Speed Slope Coefficient (m)	1.83706	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33187	PF Power Coefficient (p)	0.61511
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	23.5

Vehicle Results			
Average Speed, mi/h	23.5	Percent Followers, %	31.2
Segment Travel Time, minutes	1.64	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	13 - MAIN STREET NB BT 300 S AND MADERA DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	42.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	261	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	13.7
Speed Slope Coefficient (m)	1.26283	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19034	PF Power Coefficient (p)	0.53635
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	13.1

Vehicle Results			
Average Speed, mi/h	13.1	Percent Followers, %	44.0
Segment Travel Time, minutes	1.62	Adj. Follower Density, followers/mi/ln	8.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	13 - MAIN STREET SB BT 300 S AND MADERA DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	192	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	16.0
Speed Slope Coefficient (m)	1.38343	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24184	PF Power Coefficient (p)	0.55041
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	15.4

Vehicle Results			
Average Speed, mi/h	15.4	Percent Followers, %	39.4
Segment Travel Time, minutes	1.37	Adj. Follower Density, followers/mi/ln	4.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	14 - 700 E NB BT PROPOSED AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	172	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71645	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44144	PF Power Coefficient (p)	0.69414
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	34.6
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	14 - 700 E SB BT PROPOSED AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	130	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.74355	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44117	PF Power Coefficient (p)	0.69614
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	29.5
Segment Travel Time, minutes	0.75	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	15 - 700 E NB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	172	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71590	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44271	PF Power Coefficient (p)	0.69387
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	34.6
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	15 - 700 E SB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	130	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.3
Speed Slope Coefficient (m)	2.49775	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43891	PF Power Coefficient (p)	0.67658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	35.7

Vehicle Results			
Average Speed, mi/h	35.7	Percent Followers, %	30.4
Segment Travel Time, minutes	0.83	Adj. Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	17 - 300 S EB BT LIMITS AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3254
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	111	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.67399	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42543	PF Power Coefficient (p)	0.69355
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3254	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	26.7
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	17 - 300 S WB BT LIMITS AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3254
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	60	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.0
Speed Slope Coefficient (m)	2.54256	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42304	PF Power Coefficient (p)	0.68315
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3254	-	-	37.0

Vehicle Results			
Average Speed, mi/h	37.0	Percent Followers, %	18.8
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	18 - PIERCE STREET/300 S EB BT 575 E AND MAIN ST PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4125
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	24.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	103	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.3
Speed Slope Coefficient (m)	1.53783	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.23557	PF Power Coefficient (p)	0.58334
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4125	-	-	18.1

Vehicle Results			
Average Speed, mi/h	18.1	Percent Followers, %	28.0
Segment Travel Time, minutes	2.59	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	18 - PIERCE STREET/300 S WB BT 575 E AND MAIN ST PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4125
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	68	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.1
Speed Slope Coefficient (m)	1.36439	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.17227	PF Power Coefficient (p)	0.56417
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4125	-	-	15.1

Vehicle Results			
Average Speed, mi/h	15.1	Percent Followers, %	22.8
Segment Travel Time, minutes	3.11	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	19 - PIERCE STREET/300 S EB BT MAIN ST AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	28.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	71	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	17.3
Speed Slope Coefficient (m)	1.46956	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24549	PF Power Coefficient (p)	0.56909
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	17.3

Vehicle Results			
Average Speed, mi/h	17.3	Percent Followers, %	24.1
Segment Travel Time, minutes	1.73	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	19 - PIERCE STREET/300 S WB BT MAIN ST AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	102	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	14.9
Speed Slope Coefficient (m)	1.33542	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19352	PF Power Coefficient (p)	0.55374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	14.8

Vehicle Results			
Average Speed, mi/h	14.8	Percent Followers, %	28.6
Segment Travel Time, minutes	2.04	Adj. Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	20 - PIERCE STREET/300 S EB BT 700 E AND ALBERT S WHITE DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	179	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.2
Speed Slope Coefficient (m)	1.93058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43393	PF Power Coefficient (p)	0.60659
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	25.6

Vehicle Results			
Average Speed, mi/h	25.6	Percent Followers, %	39.7
Segment Travel Time, minutes	0.25	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	20 - PIERCE STREET/300 S WB BT 700 E AND ALBERT S WHITE DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	18.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	315	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.5
Speed Slope Coefficient (m)	1.67448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37122	PF Power Coefficient (p)	0.57643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	20.6

Vehicle Results			
Average Speed, mi/h	20.6	Percent Followers, %	50.6
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	7.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	21 - ALBERT S WHITE DR EB BT 300S AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	399	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.08871	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41681	PF Power Coefficient (p)	0.63474
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	27.6

Vehicle Results			
Average Speed, mi/h	27.6	Percent Followers, %	54.6
Segment Travel Time, minutes	0.89	Adj. Follower Density, followers/mi/ln	7.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	21 - ALBERT S WHITE DR WB BT 300S AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	477	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.25402	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43792	PF Power Coefficient (p)	0.65127
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	30.4

Vehicle Results			
Average Speed, mi/h	30.4	Percent Followers, %	58.9
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	9.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	22 - 400 E NB BT PERRY WORTH RD AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	177	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	34.0
Segment Travel Time, minutes	1.37	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	22 - 400 E SB BT PERRY WORTH RD AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	126	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	27.9
Segment Travel Time, minutes	1.36	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	23 - 400 E NB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	223	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	45.7

Vehicle Results			
Average Speed, mi/h	45.7	Percent Followers, %	40.1
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	23 - 400 E SB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	154	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	46.0

Vehicle Results			
Average Speed, mi/h	46.0	Percent Followers, %	32.6
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	24 - 450 E NB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	45	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.03507	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36775	PF Power Coefficient (p)	0.63665
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	27.6

Vehicle Results			
Average Speed, mi/h	27.6	Percent Followers, %	17.2
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	24 - 450 E SB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	54	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.7
Speed Slope Coefficient (m)	2.09604	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37730	PF Power Coefficient (p)	0.64289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	28.7

Vehicle Results			
Average Speed, mi/h	28.7	Percent Followers, %	19.1
Segment Travel Time, minutes	1.40	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	25 - 500 E NB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	135	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.8
Speed Slope Coefficient (m)	2.04544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37028	PF Power Coefficient (p)	0.63762
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	27.3

Vehicle Results			
Average Speed, mi/h	27.3	Percent Followers, %	31.7
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	25 - 500 E SB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	114	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.08609	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37665	PF Power Coefficient (p)	0.64178
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	28.2

Vehicle Results			
Average Speed, mi/h	28.2	Percent Followers, %	29.0
Segment Travel Time, minutes	1.41	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	26 - 575 E NB BT ALBERT S WHITE DR AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5309
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	41	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.0
Speed Slope Coefficient (m)	3.05547	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38408	PF Power Coefficient (p)	0.72034
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5309	-	-	46.0

Vehicle Results			
Average Speed, mi/h	46.0	Percent Followers, %	13.0
Segment Travel Time, minutes	1.31	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	26 - 575 E SB BT ALBERT S WHITE DR AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5309
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	15.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	27	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.86712	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39313	PF Power Coefficient (p)	0.70792
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5309	-	-	42.6

Vehicle Results			
Average Speed, mi/h	42.6	Percent Followers, %	10.3
Segment Travel Time, minutes	1.42	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	27 - MAIN STREET NB BT PROPOSED AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	475	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.8
Speed Slope Coefficient (m)	1.39094	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.21020	PF Power Coefficient (p)	0.56160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	17.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	14.9

Vehicle Results			
Average Speed, mi/h	14.9	Percent Followers, %	54.9
Segment Travel Time, minutes	2.17	Adj. Follower Density, followers/mi/ln	17.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	27 - MAIN STREET SB BT PROPOSED AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	359	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.8
Speed Slope Coefficient (m)	1.39094	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.21020	PF Power Coefficient (p)	0.56160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	15.0

Vehicle Results			
Average Speed, mi/h	15.0	Percent Followers, %	49.4
Segment Travel Time, minutes	2.15	Adj. Follower Density, followers/mi/ln	11.8
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	28 - MAIN STREET NB BT ALBERT S WHITE DR AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2444
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	6.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	475	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.83396	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35816	PF Power Coefficient (p)	0.60949
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2444	-	-	22.9

Vehicle Results			
Average Speed, mi/h	22.9	Percent Followers, %	57.8
Segment Travel Time, minutes	1.21	Adj. Follower Density, followers/mi/ln	12.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	28 - MAIN STREET SB BT ALBERT S WHITE DR AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2444
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	359	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.2
Speed Slope Coefficient (m)	1.89223	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37092	PF Power Coefficient (p)	0.61599
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2444	-	-	24.1

Vehicle Results			
Average Speed, mi/h	24.1	Percent Followers, %	51.8
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	7.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	30 - ALBERT S WHITE DR NB BT PROPOSED AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	499	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	29.1

Vehicle Results			
Average Speed, mi/h	29.1	Percent Followers, %	59.2
Segment Travel Time, minutes	1.11	Adj. Follower Density, followers/mi/ln	10.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	30 - ALBERT S WHITE DR SB BT PROPOSED AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	425	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	29.3

Vehicle Results			
Average Speed, mi/h	29.3	Percent Followers, %	55.4
Segment Travel Time, minutes	1.10	Adj. Follower Density, followers/mi/ln	8.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	31 - ALBERT S WHITE DR NB BT 700 E AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	499	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	29.7

Vehicle Results			
Average Speed, mi/h	29.7	Percent Followers, %	59.9
Segment Travel Time, minutes	0.83	Adj. Follower Density, followers/mi/ln	10.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	31 - ALBERT S WHITE DR SB BT 700 E AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	425	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	29.8

Vehicle Results			
Average Speed, mi/h	29.8	Percent Followers, %	56.1
Segment Travel Time, minutes	0.83	Adj. Follower Density, followers/mi/ln	8.0
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	32: ALBERT S WHITE DRIVE BT I-65 AND 400 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	906	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	517
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.27

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1071	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	612
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	33: ALBERT S WHITE DRIVE BT 400 E AND 450 E/ ANSON BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	3.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	725	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	414
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.22

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	862	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	492
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	34: ALBERT S WHITE DRIVE BT 450 E/ANSON BLVD AND 500 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	644	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	368
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	586	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	334
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.18
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	35: ALBERT S WHITE DRIVE BT 500 E AND 575 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	428	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	244
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.13

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.7		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	393	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	224
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.12
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.7		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	36 - ALBERT S WHITE DR EB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	530	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.1
Speed Slope Coefficient (m)	1.96704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34150	PF Power Coefficient (p)	0.63058
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	24.7

Vehicle Results			
Average Speed, mi/h	24.7	Percent Followers, %	59.3
Segment Travel Time, minutes	1.99	Adj. Follower Density, followers/mi/ln	12.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	36 - ALBERT S WHITE DR WB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	4.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	462	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.93317	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33505	PF Power Coefficient (p)	0.62701
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	24.2

Vehicle Results			
Average Speed, mi/h	24.2	Percent Followers, %	56.1
Segment Travel Time, minutes	2.04	Adj. Follower Density, followers/mi/ln	10.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	37 - 400 S/ALBERT S WHITE DRIVE EB BT 650 E AND 700 E/GINGER WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	460	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.22048	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42280	PF Power Coefficient (p)	0.65039
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	29.8

Vehicle Results			
Average Speed, mi/h	29.8	Percent Followers, %	57.6
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	8.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	37 - 400 S/ALBERT S WHITE DRIVE WB BT 650 E AND 700 E/GINGER WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	2.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	420	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.19202	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41946	PF Power Coefficient (p)	0.64760
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	29.3

Vehicle Results			
Average Speed, mi/h	29.3	Percent Followers, %	55.5
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	7.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	38 - INDIANAPOLIS ROAD EB BT LIMITS AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	213	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.69974	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44257	PF Power Coefficient (p)	0.69270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	39.0
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	38 - INDIANAPOLIS ROAD WB BT LIMITS AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	238	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.5
Speed Slope Coefficient (m)	2.61844	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44212	PF Power Coefficient (p)	0.68646
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	37.4

Vehicle Results			
Average Speed, mi/h	37.4	Percent Followers, %	41.6
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	39: STATE ROAD 267 BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	4.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.9	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	665	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	380
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1938
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1938
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.9
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	8.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	SWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	48.0	Total Lateral Clearance (TLC), ft	11
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	754	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	430
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1960
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1960
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.22
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.0
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	9.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	40 - PERRY WORTH ROAD NWB BT ALBERT S WHITE DRIVE AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	9	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.73815	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41088	PF Power Coefficient (p)	0.69980
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	5.0
Segment Travel Time, minutes	1.12	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	40 - PERRY WORTH ROAD SEB BT ALBERT S WHITE DRIVE AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	16	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.79235	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41013	PF Power Coefficient (p)	0.70374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	7.5
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	41 - ANSON BLVD NB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	229	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15633	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40636	PF Power Coefficient (p)	0.64572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	29.1

Vehicle Results			
Average Speed, mi/h	29.1	Percent Followers, %	41.9
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	41 - ANSON BLVD SB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	15.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	138	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.9
Speed Slope Coefficient (m)	1.98695	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38003	PF Power Coefficient (p)	0.62823
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	26.3

Vehicle Results			
Average Speed, mi/h	26.3	Percent Followers, %	32.8
Segment Travel Time, minutes	1.18	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	42 - 500 E NB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	143	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	30.5

Vehicle Results			
Average Speed, mi/h	30.5	Percent Followers, %	33.0
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	42 - 500 E SB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	98	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	31.1

Vehicle Results			
Average Speed, mi/h	31.1	Percent Followers, %	26.9
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	43 - 575 E NB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2618
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	141	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.5
Speed Slope Coefficient (m)	3.05184	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42942	PF Power Coefficient (p)	0.71645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2618	-	-	45.7

Vehicle Results			
Average Speed, mi/h	45.7	Percent Followers, %	29.7
Segment Travel Time, minutes	0.65	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	43 - 575 E SB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2618
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	34	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.5
Speed Slope Coefficient (m)	3.05184	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42942	PF Power Coefficient (p)	0.71645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2618	-	-	46.5

Vehicle Results			
Average Speed, mi/h	46.5	Percent Followers, %	11.8
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	44 - 650 E NB BT 500 S AND 100 S/ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5222
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	709	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.86629	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31103	PF Power Coefficient (p)	0.61905
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5222	-	-	22.6

Vehicle Results			
Average Speed, mi/h	22.6	Percent Followers, %	65.3
Segment Travel Time, minutes	2.63	Adj. Follower Density, followers/mi/ln	20.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	44 - 650 E SB BT 500 S AND 100 S/ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5222
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	521	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.86629	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31103	PF Power Coefficient (p)	0.61905
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5222	-	-	22.8

Vehicle Results			
Average Speed, mi/h	22.8	Percent Followers, %	58.3
Segment Travel Time, minutes	2.60	Adj. Follower Density, followers/mi/ln	13.3
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	45 - 700 E NB BT 400 S/ Albert S White Drive AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	234	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.17448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47418	PF Power Coefficient (p)	0.63289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	29.8

Vehicle Results			
Average Speed, mi/h	29.8	Percent Followers, %	44.4
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	45 - 700 E SB BT 400 S AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	11	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	137	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.0
Speed Slope Coefficient (m)	2.19074	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47623	PF Power Coefficient (p)	0.63454
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.5

Vehicle Results			
Average Speed, mi/h	30.5	Percent Followers, %	34.2
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	46 - 425 S EB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	76	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.14330	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44733	PF Power Coefficient (p)	0.63516
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	24.6
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	46 - 425 S WB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	99	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.05929	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43484	PF Power Coefficient (p)	0.62639
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	28.6
Segment Travel Time, minutes	0.67	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	47 - STATE ROAD 267 NB BT LIMITS AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	442	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	49.1
Speed Slope Coefficient (m)	3.20647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38727	PF Power Coefficient (p)	0.73024
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	47.0

Vehicle Results			
Average Speed, mi/h	47.0	Percent Followers, %	53.5
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	5.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	47 - STATE ROAD 267 SB BT Limits AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	10	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	517	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	47.9
Speed Slope Coefficient (m)	3.14143	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39287	PF Power Coefficient (p)	0.72645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	45.7

Vehicle Results			
Average Speed, mi/h	45.7	Percent Followers, %	57.8
Segment Travel Time, minutes	0.98	Adj. Follower Density, followers/mi/ln	6.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	48 - INDIANAPOLIS ROAD NWB BT 550 S AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	238	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.81040	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39579	PF Power Coefficient (p)	0.68246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	40.8
Segment Travel Time, minutes	2.69	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	48 - INDIANAPOLIS ROAD SEB BT 550 S AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	405	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.9
Speed Slope Coefficient (m)	2.86324	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39475	PF Power Coefficient (p)	0.68623
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	52.8
Segment Travel Time, minutes	2.66	Adj. Follower Density, followers/mi/ln	5.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	49 - 450 S EB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	42	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.7
Speed Slope Coefficient (m)	2.87637	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49989	PF Power Coefficient (p)	0.69171
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	43.7

Vehicle Results			
Average Speed, mi/h	43.7	Percent Followers, %	15.5
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	49 - 450 S WB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.8
Speed Slope Coefficient (m)	2.93599	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49684	PF Power Coefficient (p)	0.69557
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	44.8

Vehicle Results			
Average Speed, mi/h	44.8	Percent Followers, %	22.3
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	50 - 450 S EB BT ANSON BLVD AND 500 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	87	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.70445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45780	PF Power Coefficient (p)	0.69006
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	23.7
Segment Travel Time, minutes	0.62	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	50 - 450 S WB BT ANSON BLVD AND 500 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	93	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73697	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45751	PF Power Coefficient (p)	0.69246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	24.6
Segment Travel Time, minutes	0.61	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	51 - 450 S EB BT 500 E AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	39	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76561	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40305	PF Power Coefficient (p)	0.70187
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	13.4
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	51 - 450 S WB BT 500 E AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	15	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.73445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40335	PF Power Coefficient (p)	0.69958
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	7.2
Segment Travel Time, minutes	1.27	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	52 - 700 E NB BT LIMITS AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	155	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.0
Speed Slope Coefficient (m)	2.10346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40224	PF Power Coefficient (p)	0.63977
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	28.4

Vehicle Results			
Average Speed, mi/h	28.4	Percent Followers, %	34.7
Segment Travel Time, minutes	1.05	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	52 - 700 E SB BT LIMITS AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	62	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15766	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40975	PF Power Coefficient (p)	0.64524
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	20.9
Segment Travel Time, minutes	0.99	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	53 - PERRY WORTH ROAD NWB BT 450 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	57	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.3
Speed Slope Coefficient (m)	2.62160	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40851	PF Power Coefficient (p)	0.69100
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	38.3

Vehicle Results			
Average Speed, mi/h	38.3	Percent Followers, %	17.6
Segment Travel Time, minutes	1.22	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	53 - PERRY WORTH ROAD SEB BT 450 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	335	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76117	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40875	PF Power Coefficient (p)	0.70157
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	48.0
Segment Travel Time, minutes	1.19	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	54 - ANSON BLVD NWB BT 500 S AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	189	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.4
Speed Slope Coefficient (m)	2.18773	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39298	PF Power Coefficient (p)	0.65160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	29.6

Vehicle Results			
Average Speed, mi/h	29.6	Percent Followers, %	37.5
Segment Travel Time, minutes	1.30	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	54 - ANSON BLVD SEB BT 500 S AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	63	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.10778	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38230	PF Power Coefficient (p)	0.64366
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	20.8
Segment Travel Time, minutes	1.33	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	55 - 575 E NB BT 500 S AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	84	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	45.5
Speed Slope Coefficient (m)	2.99800	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43220	PF Power Coefficient (p)	0.71328
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	45.5

Vehicle Results			
Average Speed, mi/h	45.5	Percent Followers, %	21.7
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	55 - 575 E SB BT 500 S AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	37	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	45.5
Speed Slope Coefficient (m)	2.99800	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43220	PF Power Coefficient (p)	0.71328
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	45.5

Vehicle Results			
Average Speed, mi/h	45.5	Percent Followers, %	12.7
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	56 - 500 S NEB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	278	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	30.8

Vehicle Results			
Average Speed, mi/h	30.8	Percent Followers, %	48.0
Segment Travel Time, minutes	0.36	Adj. Follower Density, followers/mi/ln	4.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	56 - 500 S SWB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	250	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.16635	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47312	PF Power Coefficient (p)	0.63206
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	29.6

Vehicle Results			
Average Speed, mi/h	29.6	Percent Followers, %	45.8
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	57 - 500 S EB BT ANSON BLVD AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	262	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.27712	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39145	PF Power Coefficient (p)	0.66124
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	30.9

Vehicle Results			
Average Speed, mi/h	30.9	Percent Followers, %	43.7
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	57 - 500 S WB BT ANSON BLVD AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	360	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.9
Speed Slope Coefficient (m)	2.16872	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37916	PF Power Coefficient (p)	0.65086
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	28.7

Vehicle Results			
Average Speed, mi/h	28.7	Percent Followers, %	50.8
Segment Travel Time, minutes	1.57	Adj. Follower Density, followers/mi/ln	6.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	58 - 500 S EB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	12
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	151	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.3
Speed Slope Coefficient (m)	2.56698	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40787	PF Power Coefficient (p)	0.68662
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	36.5

Vehicle Results			
Average Speed, mi/h	36.5	Percent Followers, %	31.9
Segment Travel Time, minutes	1.27	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	58 - 500 S WB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	92	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.9
Speed Slope Coefficient (m)	2.22281	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38382	PF Power Coefficient (p)	0.65619
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	30.9

Vehicle Results			
Average Speed, mi/h	30.9	Percent Followers, %	25.2
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	59 - PERRY WORTH ROAD NWB BT 550 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	313	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	46.3
Segment Travel Time, minutes	1.23	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	59 - PERRY WORTH ROAD SEB BT 550 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	540	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	59.9
Segment Travel Time, minutes	1.24	Adj. Follower Density, followers/mi/ln	8.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	60 - 575 E NB BT END AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1341
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	30	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.20198	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47616	PF Power Coefficient (p)	0.63603
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1341	-	-	31.2

Vehicle Results			
Average Speed, mi/h	31.2	Percent Followers, %	14.8
Segment Travel Time, minutes	0.49	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	60 - 575 E NB BT END AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1341
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	9	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.3
Speed Slope Coefficient (m)	2.14914	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46938	PF Power Coefficient (p)	0.63064
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1341	-	-	30.3

Vehicle Results			
Average Speed, mi/h	30.3	Percent Followers, %	7.1
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	61 - 650 E/S MAIN STREET NB BT CENTRAL BLVD AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5749
Lane Width, ft	11	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1095	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.64

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.6
Speed Slope Coefficient (m)	2.16942	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35915	PF Power Coefficient (p)	0.64872
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	30.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5749	-	-	27.4

Vehicle Results			
Average Speed, mi/h	27.4	Percent Followers, %	76.3
Segment Travel Time, minutes	2.38	Adj. Follower Density, followers/mi/ln	30.4
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	61 - 650 E/S MAIN STREET SB BT CENTRAL BLVD AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5749
Lane Width, ft	11	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	747	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.3
Speed Slope Coefficient (m)	2.20736	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36387	PF Power Coefficient (p)	0.65238
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	17.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5749	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	67.6
Segment Travel Time, minutes	2.29	Adj. Follower Density, followers/mi/ln	17.7
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	62 - 550 S EB BT LIMITS AND 475 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	83	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.9
Speed Slope Coefficient (m)	2.54650	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40746	PF Power Coefficient (p)	0.68494
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	36.9

Vehicle Results			
Average Speed, mi/h	36.9	Percent Followers, %	22.5
Segment Travel Time, minutes	1.25	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	62 - 550 S WB BT LIMITS AND 475 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	147	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66981	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40987	PF Power Coefficient (p)	0.69471
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	38.4

Vehicle Results			
Average Speed, mi/h	38.4	Percent Followers, %	31.0
Segment Travel Time, minutes	1.20	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	63 - 550 S EB BT 475 E AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	312	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	49.3
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	3.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	63 - 550 S WB BT 475 E AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.69209	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	39.4
Segment Travel Time, minutes	0.33	Adj. Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	64: 550 S BT INDIANAPOLIS RD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	586	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	334
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.18

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	288	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	164
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.09
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	3.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	65: 550 S BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	414	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	236
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.12

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	567	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	324
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	68 - 475 E NB BT PROPOSED AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	291	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	41.2

Vehicle Results			
Average Speed, mi/h	41.2	Percent Followers, %	46.2
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	68 - 475 E SB BT PROPOSED AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	227	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	40.6
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	69 - INDIANAPOLIS ROAD NWB BT COMMERCE DRIVE AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	160	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.4
Speed Slope Coefficient (m)	2.82421	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45079	PF Power Coefficient (p)	0.69969
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	41.5

Vehicle Results			
Average Speed, mi/h	41.5	Percent Followers, %	33.1
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	69 - INDIANAPOLIS ROAD SEB BT COMMERCE DRIVE AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	199	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.0
Speed Slope Coefficient (m)	2.85538	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44975	PF Power Coefficient (p)	0.70183
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	41.9

Vehicle Results			
Average Speed, mi/h	41.9	Percent Followers, %	37.3
Segment Travel Time, minutes	0.63	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	70 - PERRY WORTH ROAD NWB BT 550 S AND JUNIORS WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	177	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	40.5

Vehicle Results			
Average Speed, mi/h	40.5	Percent Followers, %	34.6
Segment Travel Time, minutes	0.88	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	70 - PERRY WORTH ROAD SEB BT 550 S AND JUNIORS WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	216	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	38.6
Segment Travel Time, minutes	0.88	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	71 - JUNIORS WAY NEB BT PERRY WORTH ROAD AND NEW HOPE BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	28.6

Vehicle Results			
Average Speed, mi/h	28.6	Percent Followers, %	40.1
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	71 - JUNIORS WAY SWB BT PERRY WORTH ROAD AND NEW HOPE BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	97	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	29.4

Vehicle Results			
Average Speed, mi/h	29.4	Percent Followers, %	27.5
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	73 - 475 E NB BT WHITESTOWN PARKWAY AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	13.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	291	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66403	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42128	PF Power Coefficient (p)	0.69331
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	37.8

Vehicle Results			
Average Speed, mi/h	37.8	Percent Followers, %	45.4
Segment Travel Time, minutes	1.03	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	73 - 475 E SB BT WHITESTOWN PARKWAY AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	227	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient (m)	2.70468	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42135	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	39.7
Segment Travel Time, minutes	1.01	Adj. Follower Density, followers/mi/ln	2.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	74 - COMMERCE DRIVE NB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	65	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.92514	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34124	PF Power Coefficient (p)	0.62577
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	25.5

Vehicle Results			
Average Speed, mi/h	25.5	Percent Followers, %	21.6
Segment Travel Time, minutes	1.72	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	74 - COMMERCE DRIVE SB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	27	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.8
Speed Slope Coefficient (m)	1.88720	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33351	PF Power Coefficient (p)	0.62169
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	24.8

Vehicle Results			
Average Speed, mi/h	24.8	Percent Followers, %	13.2
Segment Travel Time, minutes	1.77	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	75 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	196	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.77880	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40027	PF Power Coefficient (p)	0.70264
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	35.9
Segment Travel Time, minutes	1.35	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	75 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.6
Speed Slope Coefficient (m)	2.80861	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39973	PF Power Coefficient (p)	0.70478
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	44.1
Segment Travel Time, minutes	1.34	Adj. Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	76 - PERRY WORTH ROAD NWB BT JUNIORS WAY AND MILLS DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	411	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	2.02390	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36179	PF Power Coefficient (p)	0.63594
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	26.1

Vehicle Results			
Average Speed, mi/h	26.1	Percent Followers, %	53.9
Segment Travel Time, minutes	1.63	Adj. Follower Density, followers/mi/ln	8.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	76 - PERRY WORTH ROAD SEB BT JUNIORS WAY AND MILLS DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	262	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.1
Speed Slope Coefficient (m)	2.12011	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37668	PF Power Coefficient (p)	0.64574
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	28.1

Vehicle Results			
Average Speed, mi/h	28.1	Percent Followers, %	44.0
Segment Travel Time, minutes	1.51	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	77: PERRY WORTH ROAD BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	628	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	358
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	13.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	40.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	485	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	277
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	78 - MILLS DRIVE EB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	467	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.4

Vehicle Results			
Average Speed, mi/h	21.4	Percent Followers, %	58.5
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	12.8
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/3/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	78 - MILLS DRIVE WB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	491	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.4

Vehicle Results			
Average Speed, mi/h	21.4	Percent Followers, %	59.6
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	13.7
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	79: 650 E/S MAIN STREET BT MILLS DRIVE AND CENTRAL BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1016	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	580
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	670	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	382
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	80: 650 E/S MAIN STREET BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	926	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	528
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.9		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	575	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	328
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	81 - CENTRAL BLVD EB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	182	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.5
Speed Slope Coefficient (m)	2.00104	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44742	PF Power Coefficient (p)	0.61446
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	26.8

Vehicle Results			
Average Speed, mi/h	26.8	Percent Followers, %	39.8
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	81 - CENTRAL BLVD WB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	20.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	245	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.88857	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42514	PF Power Coefficient (p)	0.60180
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	24.6

Vehicle Results			
Average Speed, mi/h	24.6	Percent Followers, %	45.7
Segment Travel Time, minutes	0.59	Adj. Follower Density, followers/mi/ln	4.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	82 - HEARTLAND DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	243	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	26.4

Vehicle Results			
Average Speed, mi/h	26.4	Percent Followers, %	45.5
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	4.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	82 - HEARTLAND DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	27.3

Vehicle Results			
Average Speed, mi/h	27.3	Percent Followers, %	26.0
Segment Travel Time, minutes	0.49	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	83 - CENTRAL BLVD EB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	242	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.5
Speed Slope Coefficient (m)	2.10537	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46459	PF Power Coefficient (p)	0.62572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	45.3
Segment Travel Time, minutes	0.44	Adj. Follower Density, followers/mi/ln	3.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	83 - CENTRAL BLVD WB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	198	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.3
Speed Slope Coefficient (m)	2.04033	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45428	PF Power Coefficient (p)	0.61876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	27.5

Vehicle Results			
Average Speed, mi/h	27.5	Percent Followers, %	41.4
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	84 - 700 E NB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	559	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.7
Speed Slope Coefficient (m)	1.90405	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42181	PF Power Coefficient (p)	0.60532
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	24.3

Vehicle Results			
Average Speed, mi/h	24.3	Percent Followers, %	63.2
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	14.5
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	84 - 700 E SB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	310	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.00568	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44156	PF Power Coefficient (p)	0.61668
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	26.5

Vehicle Results			
Average Speed, mi/h	26.5	Percent Followers, %	50.3
Segment Travel Time, minutes	0.61	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	85 - VETERANS DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	460	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75171	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50391	PF Power Coefficient (p)	0.68309
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	39.6

Vehicle Results			
Average Speed, mi/h	39.6	Percent Followers, %	58.7
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	6.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	85 - VETERANS DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	367	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.9
Speed Slope Coefficient (m)	2.61756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50442	PF Power Coefficient (p)	0.67297
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	37.4

Vehicle Results			
Average Speed, mi/h	37.4	Percent Followers, %	53.6
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	5.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	86 - WHITESTOWN PARKWAY EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	271	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.64466	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50465	PF Power Coefficient (p)	0.67509
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	38.1

Vehicle Results			
Average Speed, mi/h	38.1	Percent Followers, %	46.3
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	86 - WHITESTOWN PARKWAY WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	261	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.70022	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50459	PF Power Coefficient (p)	0.67932
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	45.3
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	87 - WHITESTOWN PARKWAY EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	305	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.72667	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47126	PF Power Coefficient (p)	0.68879
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	47.8
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	87 - WHITESTOWN PARKWAY WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	440	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68873	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47153	PF Power Coefficient (p)	0.68596
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	38.3

Vehicle Results			
Average Speed, mi/h	38.3	Percent Followers, %	56.8
Segment Travel Time, minutes	0.56	Adj. Follower Density, followers/mi/ln	6.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	88 - WHITESTOWN PARKWAY EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	305	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	48.8
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	88 - WHITESTOWN PARKWAY WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	440	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.1
Speed Slope Coefficient (m)	2.79236	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50296	PF Power Coefficient (p)	0.68598
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	57.5
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	6.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	89 - WHITESTOWN PARKWAY EB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	547	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77587	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44113	PF Power Coefficient (p)	0.69839
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	61.1
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	8.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	89 - WHITESTOWN PARKWAY WB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	546	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74877	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44158	PF Power Coefficient (p)	0.69643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	61.1
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	8.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	90 - WHITESTOWN PARKWAY EB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	604	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.75887	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42853	PF Power Coefficient (p)	0.69936
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	63.4
Segment Travel Time, minutes	0.91	Adj. Follower Density, followers/mi/ln	9.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	90 - WHITESTOWN PARKWAY WB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	597	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.3
Speed Slope Coefficient (m)	2.66673	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42899	PF Power Coefficient (p)	0.69248
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	37.3

Vehicle Results			
Average Speed, mi/h	37.3	Percent Followers, %	63.2
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	10.1
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	91: WHITESTOWN PARKWAY BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1134	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	648
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	15.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	984	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	562
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	13.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	92 - WHITESTOWN PARKWAY BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1987	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	756
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	17.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1282	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	732
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	17.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	93: WHITESTOWN PARKWAY BT PERRY WORTH ROAD AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	45.0	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1569	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	896
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.47

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	45.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	19.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.7	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1004	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	573
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.7
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	13.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	94: WHITESTOWN PARKWAY BT 650 E/S MAIN STREET AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	43.6	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1006	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	574
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	13.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	44.0	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	809	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	462
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	10.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.1		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	95: WHITESTOWN PARKWAY BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	43.4	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	950	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	542
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.4
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	12.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	851	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	486
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	11.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	7/28/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	City of Whitestown	Time Analyzed	PM
Project Description	96: WHITESTOWN PARKWAY BT 700 E AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	42.8	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	943	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	538
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.8
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	12.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.8		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	11.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	874	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	499
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	3.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	98 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	615	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	63.3
Segment Travel Time, minutes	1.06	Adj. Follower Density, followers/mi/ln	9.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	98 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	785	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.46

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	69.6
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	13.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	100 - INDIANAPOLIS ROAD NWB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	615	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.7
Speed Slope Coefficient (m)	2.80071	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42289	PF Power Coefficient (p)	0.70306
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	39.6

Vehicle Results			
Average Speed, mi/h	39.6	Percent Followers, %	63.6
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	9.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	100 - INDIANAPOLIS ROAD SEB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	785	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.46

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.9
Speed Slope Coefficient (m)	2.86575	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42101	PF Power Coefficient (p)	0.70759
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	40.5

Vehicle Results			
Average Speed, mi/h	40.5	Percent Followers, %	69.8
Segment Travel Time, minutes	0.93	Adj. Follower Density, followers/mi/ln	13.5
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	101 - 750 S EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	23.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	152	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	35.5
Speed Slope Coefficient (m)	2.43464	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49818	PF Power Coefficient (p)	0.65768
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	34.8

Vehicle Results			
Average Speed, mi/h	34.8	Percent Followers, %	35.2
Segment Travel Time, minutes	0.22	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	101 - 750 S WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	113	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	41.0

Vehicle Results			
Average Speed, mi/h	41.0	Percent Followers, %	28.8
Segment Travel Time, minutes	0.19	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	102 - 750 S EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	163	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.1
Speed Slope Coefficient (m)	2.69642	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46498	PF Power Coefficient (p)	0.68795
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	34.3
Segment Travel Time, minutes	0.59	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	102 - 750 S WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	105	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73165	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46470	PF Power Coefficient (p)	0.69056
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	40.5

Vehicle Results			
Average Speed, mi/h	40.5	Percent Followers, %	26.6
Segment Travel Time, minutes	0.57	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	103 - 750 S EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	163	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	40.6

Vehicle Results			
Average Speed, mi/h	40.6	Percent Followers, %	35.3
Segment Travel Time, minutes	0.18	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	103 - 750 S WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	105	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	41.1

Vehicle Results			
Average Speed, mi/h	41.1	Percent Followers, %	27.6
Segment Travel Time, minutes	0.17	Adj. Follower Density, followers/mi/ln	0.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	104 - 750 S EB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	171	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.74177	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38969	PF Power Coefficient (p)	0.69469
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	33.4
Segment Travel Time, minutes	1.91	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	104 - 750 S WB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	264	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.75261	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38962	PF Power Coefficient (p)	0.69550
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	42.3
Segment Travel Time, minutes	1.91	Adj. Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	105 - 750 S EB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	129	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.75127	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41555	PF Power Coefficient (p)	0.70042
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	28.7
Segment Travel Time, minutes	1.05	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	105 - 750 S WB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	336	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.71198	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41584	PF Power Coefficient (p)	0.69752
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	48.4
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	4.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	107 - 600 E NB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	29	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.8
Speed Slope Coefficient (m)	2.66772	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67688
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	12.9
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	107 - 600 E SB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	39	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.72192	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50430	PF Power Coefficient (p)	0.68094
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	15.3
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	108 - INDIANAPOLIS ROAD NWB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	10
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	434	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.0
Speed Slope Coefficient (m)	2.89704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48404	PF Power Coefficient (p)	0.69658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	42.1

Vehicle Results			
Average Speed, mi/h	42.1	Percent Followers, %	56.4
Segment Travel Time, minutes	0.42	Adj. Follower Density, followers/mi/ln	5.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/6/2025
Agency	EMCS, INC.	Analysis Year	2025
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	108 - INDIANAPOLIS ROAD SEB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	366	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.73173	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48917	PF Power Coefficient (p)	0.68512
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	52.7
Segment Travel Time, minutes	0.45	Adj. Follower Density, followers/mi/ln	4.9
Vehicle LOS	B		

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Existing Year - Improved

AM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC.	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	27 - MAIN STREET NB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	211	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64026	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29513	PF Power Coefficient (p)	0.59027
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	19.8

Vehicle Results			
Average Speed, mi/h	19.8	Percent Followers, %	40.4
Segment Travel Time, minutes	1.63	Adj. Follower Density, followers/mi/ln	4.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC.	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	27 - MAIN STREET SB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	435	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64026	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29513	PF Power Coefficient (p)	0.59027
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	19.4

Vehicle Results			
Average Speed, mi/h	19.4	Percent Followers, %	54.7
Segment Travel Time, minutes	1.67	Adj. Follower Density, followers/mi/ln	12.3
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	44 - 650 E BT 500 S AND 100 S/ALBERT S WHITE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	276	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	158
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.08

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	3.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	549	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	314
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	61 - 650 E/S MAIN STREET BT CENTRAL BLVD AND 500 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	8.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.4	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	504	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	288
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	2.1		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	979	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	559
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.4		

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PM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC.	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	27 - MAIN STREET NB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	475	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64026	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29513	PF Power Coefficient (p)	0.59027
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	19.3

Vehicle Results			
Average Speed, mi/h	19.3	Percent Followers, %	56.6
Segment Travel Time, minutes	1.67	Adj. Follower Density, followers/mi/ln	13.9
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC.	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	27 - MAIN STREET SB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	359	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64026	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29513	PF Power Coefficient (p)	0.59027
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	19.5

Vehicle Results			
Average Speed, mi/h	19.5	Percent Followers, %	50.7
Segment Travel Time, minutes	1.66	Adj. Follower Density, followers/mi/ln	9.3
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	44 - 650 E BT 500 S AND 100 S/ALBERT S WHITE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	652	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	372
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	479	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	274
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.14
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC	Analysis Year	2025 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	61 - 650 E/S MAIN STREET BT CENTRAL BLVD AND 500 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	8.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.4	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1007	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	575
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.1		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	687	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	392
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.4		

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10-Year - Unimproved

AM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	1 - 100 S EB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	139	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73804	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39582	PF Power Coefficient (p)	0.69876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	29.7
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

Bicycle Results			
Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	139	Bicycle Effective Width, ft	16
Bicycle LOS Score	4.35	Bicycle Effective Speed Factor	4.17
Bicycle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	1 - 100 S WB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	251	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75159	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39572	PF Power Coefficient (p)	0.69976
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	41.2
Segment Travel Time, minutes	1.53	Adj. Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	2 - 100 S EB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	271	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.76991	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39053	PF Power Coefficient (p)	0.68808
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	43.2
Segment Travel Time, minutes	2.38	Adj. Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	2 - 100 S WB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	11.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	248	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.7
Speed Slope Coefficient (m)	2.68183	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39045	PF Power Coefficient (p)	0.68145
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	37.5

Vehicle Results			
Average Speed, mi/h	37.5	Percent Followers, %	41.6
Segment Travel Time, minutes	2.47	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM Peak
Project Description	3 - 650 E NB BT 200 S AND 100S AM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	249	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73832	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39559	PF Power Coefficient (p)	0.69871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	41.0
Segment Travel Time, minutes	1.55	Adj. Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM Peak
Project Description	3 - 650 E SB BT 200 S AND 100 S AM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	257	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75187	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39549	PF Power Coefficient (p)	0.69971
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	41.6
Segment Travel Time, minutes	1.54	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM Peak
Project Description	4: 200 S EB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4058
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	36	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.5
Speed Slope Coefficient (m)	2.69020	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40986	PF Power Coefficient (p)	0.69627
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4058	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	13.0
Segment Travel Time, minutes	1.17	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM Peak
Project Description	4: 200 S WB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4058
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	55	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.5
Speed Slope Coefficient (m)	2.69020	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40986	PF Power Coefficient (p)	0.69627
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4058	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	17.2
Segment Travel Time, minutes	1.17	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	5: 200 S EB BT 600 E (575 REALIGNED) AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2851
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	167	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.74335	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43560	PF Power Coefficient (p)	0.69712
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2851	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	33.8
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	5: 200 S WB BT 600 E (575 REALIGNED) AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2851
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	221	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.1
Speed Slope Coefficient (m)	2.76097	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43536	PF Power Coefficient (p)	0.69840
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2851	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	39.3
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	6 - 200 S EB BT 650 E AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	258	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77580	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44129	PF Power Coefficient (p)	0.69836
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	42.8
Segment Travel Time, minutes	0.75	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	6 - 200 S WB BT 650 E AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	242	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74870	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44174	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	41.6
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	7 - 200 S EB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	63	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.76346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47411	PF Power Coefficient (p)	0.69071
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	19.6
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	7 - 200 S WB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	46	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68487	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47497	PF Power Coefficient (p)	0.68492
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	16.3
Segment Travel Time, minutes	0.52	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	8 - FUTURE MINOR COLLECTOR EB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5233
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	29	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.7
Speed Slope Coefficient (m)	1.89756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31756	PF Power Coefficient (p)	0.62236
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5233	-	-	24.7

Vehicle Results			
Average Speed, mi/h	24.7	Percent Followers, %	13.6
Segment Travel Time, minutes	2.41	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	8 - FUTURE MINOR COLLECTOR WB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5233
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	57	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.7
Speed Slope Coefficient (m)	1.89756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31756	PF Power Coefficient (p)	0.62236
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5233	-	-	24.7

Vehicle Results			
Average Speed, mi/h	24.7	Percent Followers, %	19.8
Segment Travel Time, minutes	2.41	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	9: 600 E (575 REALIGNED) NB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	510	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	50.7
Speed Slope Coefficient (m)	3.28544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39394	PF Power Coefficient (p)	0.73270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	48.4

Vehicle Results			
Average Speed, mi/h	48.4	Percent Followers, %	57.3
Segment Travel Time, minutes	0.74	Adj. Follower Density, followers/mi/ln	6.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	9: 600 E (575 REALIGNED) SB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	951	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	50.7
Speed Slope Coefficient (m)	3.28544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39394	PF Power Coefficient (p)	0.73270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	47.6

Vehicle Results			
Average Speed, mi/h	47.6	Percent Followers, %	73.9
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	14.8
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	10 - 600 E (575 REALIGNED) BT PIERCE STREET/300 S AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.3	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	503	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	287
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1924
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1924
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.3	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	998	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	570
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1924
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1924
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	11: PROPOSED/MADERA DRIVE EB BT 600 E (575 REALIGNED) AND 650 E/ MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2932
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	130	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.3
Speed Slope Coefficient (m)	1.68752	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.30606	PF Power Coefficient (p)	0.59623
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2932	-	-	20.9

Vehicle Results			
Average Speed, mi/h	20.9	Percent Followers, %	32.1
Segment Travel Time, minutes	1.59	Adj. Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	11 - PROPOSED/MADERA DRIVE WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2932
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	16.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	70	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.3
Speed Slope Coefficient (m)	1.63196	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29017	PF Power Coefficient (p)	0.58986
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2932	-	-	20.3

Vehicle Results			
Average Speed, mi/h	20.3	Percent Followers, %	23.5
Segment Travel Time, minutes	1.64	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	12 - 650 E NB BT MADERA DR AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	23.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	154	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.5
Speed Slope Coefficient (m)	1.54303	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25090	PF Power Coefficient (p)	0.58202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	18.1

Vehicle Results			
Average Speed, mi/h	18.1	Percent Followers, %	34.4
Segment Travel Time, minutes	2.14	Adj. Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/8/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	12 - 650 E SB BT MADERA DR AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	248	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.9
Speed Slope Coefficient (m)	1.83706	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33187	PF Power Coefficient (p)	0.61511
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	23.1

Vehicle Results			
Average Speed, mi/h	23.1	Percent Followers, %	43.1
Segment Travel Time, minutes	1.67	Adj. Follower Density, followers/mi/ln	4.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	13 - MAIN STREET NB BT 300 S AND MADERA DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	42.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	182	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	13.7
Speed Slope Coefficient (m)	1.26283	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19034	PF Power Coefficient (p)	0.53635
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	13.3

Vehicle Results			
Average Speed, mi/h	13.3	Percent Followers, %	37.9
Segment Travel Time, minutes	1.60	Adj. Follower Density, followers/mi/ln	5.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	13 - MAIN STREET SB BT 300 S AND MADERA DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	360	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	16.0
Speed Slope Coefficient (m)	1.38343	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24184	PF Power Coefficient (p)	0.55041
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	15.2

Vehicle Results			
Average Speed, mi/h	15.2	Percent Followers, %	50.7
Segment Travel Time, minutes	1.40	Adj. Follower Density, followers/mi/ln	12.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	14 - 700 E NB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	271	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71645	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44144	PF Power Coefficient (p)	0.69414
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	44.1
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/242025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	14 - 700 E SB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	400	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.74355	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44117	PF Power Coefficient (p)	0.69614
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	53.3
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	5.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KKAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	15 - 700 E NB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	488	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71590	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44271	PF Power Coefficient (p)	0.69387
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	58.4
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	7.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	15 - 700 E SB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	547	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.3
Speed Slope Coefficient (m)	2.49775	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43891	PF Power Coefficient (p)	0.67658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	34.5

Vehicle Results			
Average Speed, mi/h	34.5	Percent Followers, %	61.6
Segment Travel Time, minutes	0.86	Adj. Follower Density, followers/mi/ln	9.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	16 - FUTURE MINOR COLLECTOR EB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	271	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.6
Speed Slope Coefficient (m)	1.88120	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.32897	PF Power Coefficient (p)	0.62130
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	23.7

Vehicle Results			
Average Speed, mi/h	23.7	Percent Followers, %	44.6
Segment Travel Time, minutes	1.94	Adj. Follower Density, followers/mi/ln	5.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	16 - FUTURE MINOR COLLECTOR WB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	171	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.6
Speed Slope Coefficient (m)	1.88120	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.32897	PF Power Coefficient (p)	0.62130
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	24.0

Vehicle Results			
Average Speed, mi/h	24.0	Percent Followers, %	35.8
Segment Travel Time, minutes	1.92	Adj. Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	17: 300 S EB BT LIMITS AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4202
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	205	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.68501	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40766	PF Power Coefficient (p)	0.69593
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4202	-	-	38.4

Vehicle Results			
Average Speed, mi/h	38.4	Percent Followers, %	37.4
Segment Travel Time, minutes	1.24	Adj. Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	kaz	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	17: 300 S WB BT LIMITS AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3254
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	271	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.0
Speed Slope Coefficient (m)	2.54256	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42304	PF Power Coefficient (p)	0.68315
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3254	-	-	35.8

Vehicle Results			
Average Speed, mi/h	35.8	Percent Followers, %	44.2
Segment Travel Time, minutes	1.03	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	18: PIERCE STREET/300 S EB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	24.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	415	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.3
Speed Slope Coefficient (m)	1.52670	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25069	PF Power Coefficient (p)	0.57914
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	17.3

Vehicle Results			
Average Speed, mi/h	17.3	Percent Followers, %	52.8
Segment Travel Time, minutes	2.09	Adj. Follower Density, followers/mi/ln	12.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	18 - PIERCE STREET/300 S WB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	284	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.1
Speed Slope Coefficient (m)	1.35326	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.18646	PF Power Coefficient (p)	0.55953
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	14.4

Vehicle Results			
Average Speed, mi/h	14.4	Percent Followers, %	44.4
Segment Travel Time, minutes	2.51	Adj. Follower Density, followers/mi/ln	8.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	19 - PIERCE STREET/300 S EB BT MAIN ST AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	28.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	504	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	17.3
Speed Slope Coefficient (m)	1.46956	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24549	PF Power Coefficient (p)	0.56909
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	17.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	16.3

Vehicle Results			
Average Speed, mi/h	16.3	Percent Followers, %	57.0
Segment Travel Time, minutes	1.84	Adj. Follower Density, followers/mi/ln	17.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	19 - PIERCE STREET/300 S WB BT MAIN ST AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	249	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	14.9
Speed Slope Coefficient (m)	1.33542	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19352	PF Power Coefficient (p)	0.55374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	14.3

Vehicle Results			
Average Speed, mi/h	14.3	Percent Followers, %	42.5
Segment Travel Time, minutes	2.11	Adj. Follower Density, followers/mi/ln	7.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	20 - PIERCE STREET/300 S EB BT 700 E AND ALBERT S WHITE DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	246	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.2
Speed Slope Coefficient (m)	1.93058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43393	PF Power Coefficient (p)	0.60659
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	25.4

Vehicle Results			
Average Speed, mi/h	25.4	Percent Followers, %	45.8
Segment Travel Time, minutes	0.25	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	20 - PIERCE STREET/300 S WB BT 700 E AND ALBERT S WHITE DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	18.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	511	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.5
Speed Slope Coefficient (m)	1.67448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37122	PF Power Coefficient (p)	0.57643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	20.4

Vehicle Results			
Average Speed, mi/h	20.4	Percent Followers, %	60.6
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	15.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	21 - ALBERT S WHITE DR EB BT 300S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1190	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.70

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.08871	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41681	PF Power Coefficient (p)	0.63474
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	35.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	26.7

Vehicle Results			
Average Speed, mi/h	26.7	Percent Followers, %	79.5
Segment Travel Time, minutes	0.92	Adj. Follower Density, followers/mi/ln	35.4
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	21 - ALBERT S WHITE DR WB BT 300S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1273	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.75

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.25402	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43792	PF Power Coefficient (p)	0.65127
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	35.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	29.5

Vehicle Results			
Average Speed, mi/h	29.5	Percent Followers, %	81.4
Segment Travel Time, minutes	0.83	Adj. Follower Density, followers/mi/ln	35.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	22 - 400 E NB BT PERRY WORTH RD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	598	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	62.3
Segment Travel Time, minutes	1.41	Adj. Follower Density, followers/mi/ln	9.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	22 - 400 E SB BT PERRY WORTH RD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	153	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	31.3
Segment Travel Time, minutes	1.36	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/284/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	23 - 400 E NB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	603	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	44.6

Vehicle Results			
Average Speed, mi/h	44.6	Percent Followers, %	64.4
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	8.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	23 - 400 E SB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	160	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	46.0

Vehicle Results			
Average Speed, mi/h	46.0	Percent Followers, %	33.3
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	24 - 450 E NB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	34	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.03507	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36775	PF Power Coefficient (p)	0.63665
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	27.6

Vehicle Results			
Average Speed, mi/h	27.6	Percent Followers, %	14.6
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	24 - 450 E SB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	189	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.7
Speed Slope Coefficient (m)	2.09604	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37730	PF Power Coefficient (p)	0.64289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	27.9

Vehicle Results			
Average Speed, mi/h	27.9	Percent Followers, %	37.6
Segment Travel Time, minutes	1.44	Adj. Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	25 - 500 E NB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	387	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.8
Speed Slope Coefficient (m)	2.04544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37028	PF Power Coefficient (p)	0.63762
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	26.5

Vehicle Results			
Average Speed, mi/h	26.5	Percent Followers, %	52.7
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	7.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	25 - 500 E SB BT ALBERT S WHITE DR AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	742	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.08609	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37665	PF Power Coefficient (p)	0.64178
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	26.8

Vehicle Results			
Average Speed, mi/h	26.8	Percent Followers, %	67.9
Segment Travel Time, minutes	1.48	Adj. Follower Density, followers/mi/ln	18.8
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	26 - 575 E BT ALBERT S WHITE DRIVE AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	47.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	873	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	498
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1940
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1940
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	47.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	15.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	43.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1507	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	860
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	19.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	4.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	27: MAIN STREET NB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3414
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	257	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64751	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28288	PF Power Coefficient (p)	0.59394
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3414	-	-	19.7

Vehicle Results			
Average Speed, mi/h	19.7	Percent Followers, %	43.5
Segment Travel Time, minutes	1.97	Adj. Follower Density, followers/mi/ln	5.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	27: MAIN STREET SB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3414
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	457	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64751	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28288	PF Power Coefficient (p)	0.59394
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3414	-	-	19.4

Vehicle Results			
Average Speed, mi/h	19.4	Percent Followers, %	55.3
Segment Travel Time, minutes	2.00	Adj. Follower Density, followers/mi/ln	13.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	28: MAIN STREET NB BT 700 E/GINGER WAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1872
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	6.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	287	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.82522	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37956	PF Power Coefficient (p)	0.60278
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1872	-	-	23.2

Vehicle Results			
Average Speed, mi/h	23.2	Percent Followers, %	47.8
Segment Travel Time, minutes	0.92	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	28: MAIN STREET SB BT 700 E/GINGER WAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1872
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	560	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.2
Speed Slope Coefficient (m)	1.88349	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39261	PF Power Coefficient (p)	0.60940
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1872	-	-	23.8

Vehicle Results			
Average Speed, mi/h	23.8	Percent Followers, %	62.4
Segment Travel Time, minutes	0.89	Adj. Follower Density, followers/mi/ln	14.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	29 - FUTURE MINOR COLLECTOR EB BT MAIN STREET AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2586
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	76	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.4
Speed Slope Coefficient (m)	1.85301	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35762	PF Power Coefficient (p)	0.61270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2586	-	-	24.4

Vehicle Results			
Average Speed, mi/h	24.4	Percent Followers, %	24.4
Segment Travel Time, minutes	1.20	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	29 - FUTURE MINOR COLLECTOR WB BT MAIN STREET AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2586
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	80	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.4
Speed Slope Coefficient (m)	1.85301	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35762	PF Power Coefficient (p)	0.61270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2586	-	-	24.4

Vehicle Results			
Average Speed, mi/h	24.4	Percent Followers, %	25.2
Segment Travel Time, minutes	1.20	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	30 - ALBERT S WHITE DR NB BT PROPOSED AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	957	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	24.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	28.6

Vehicle Results			
Average Speed, mi/h	28.6	Percent Followers, %	74.5
Segment Travel Time, minutes	1.13	Adj. Follower Density, followers/mi/ln	24.9
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	30 - ALBERT S WHITE DR SB BT PROPOSED AND 300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1442	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.85

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	42.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	28.2

Vehicle Results			
Average Speed, mi/h	28.2	Percent Followers, %	83.2
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	42.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	31 - ALBERT S WHITE DR NB BT 700 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.76

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	36.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	81.5
Segment Travel Time, minutes	0.86	Adj. Follower Density, followers/mi/ln	36.4
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	31 - ALBERT S WHITE DR SB BT 700 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1846	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	29.9

Vehicle Results			
Average Speed, mi/h	-	Percent Followers, %	-
Segment Travel Time, minutes	-	Adj. Follower Density, followers/mi/ln	-
Vehicle LOS	F		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	32: ALBERT S WHITE DRIVE BT I-65 AND 400 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2130	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1216
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.64

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	28.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2080	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1188
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	28.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	33: ALBERT S WHITE DRIVE BT 400 E AND 450 E/ ANSON BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	3.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1550	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	885
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.47

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1625	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	928
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.49
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	22.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	34: ALBERT S WHITE DRIVE BT 450 E/ANSON BLVD AND 500 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1110	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	634
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1535	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	876
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	35: ALBERT S WHITE DRIVE BT 500 E AND 575 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	486	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	278
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.7		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	967	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	552
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.7		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	36 - ALBERT S WHITE DR EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	952	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.56

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.1
Speed Slope Coefficient (m)	1.96704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34150	PF Power Coefficient (p)	0.63058
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	28.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	24.3

Vehicle Results			
Average Speed, mi/h	24.3	Percent Followers, %	72.8
Segment Travel Time, minutes	2.03	Adj. Follower Density, followers/mi/ln	28.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	36 - ALBERT S WHITE DR WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	4.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1590	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.94

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.93317	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33505	PF Power Coefficient (p)	0.62701
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	57.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	23.2

Vehicle Results			
Average Speed, mi/h	23.2	Percent Followers, %	83.2
Segment Travel Time, minutes	2.13	Adj. Follower Density, followers/mi/ln	57.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	37: 400 S/ALBERT S WHITE DRIVE EB BT 650 E AND 700 E/GINGER WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1351	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.79

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.22048	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42280	PF Power Coefficient (p)	0.65039
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	38.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	28.8

Vehicle Results			
Average Speed, mi/h	28.8	Percent Followers, %	82.3
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	38.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	37: 400 S/ALBERT S WHITE DRIVE WB BT 650 E AND 700 E/GINGER WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	2.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	426	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.19202	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41946	PF Power Coefficient (p)	0.64760
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	29.3

Vehicle Results			
Average Speed, mi/h	29.3	Percent Followers, %	55.8
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	8.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	38 - INDIANAPOLIS ROAD EB BT Limits AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	333	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.69974	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44257	PF Power Coefficient (p)	0.69270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	49.0
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	4.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	38 - INDIANAPOLIS ROAD WB BT Limits AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	229	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.5
Speed Slope Coefficient (m)	2.61844	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44212	PF Power Coefficient (p)	0.68646
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	37.4

Vehicle Results			
Average Speed, mi/h	37.4	Percent Followers, %	40.8
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	39: STATE ROAD 267 BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	4.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.9	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1089	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	622
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1938
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1938
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.9
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	13.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	SWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	48.0	Total Lateral Clearance (TLC), ft	11
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1285	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	734
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1960
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1960
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.0
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	15.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	40 - PERRY WORTH ROAD NWB BT ALBERT S WHITE DRIVE AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	3	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.73815	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41088	PF Power Coefficient (p)	0.69980
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	2.5
Segment Travel Time, minutes	1.12	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	40 - PERRY WORTH ROAD SEB BT ALBERT S WHITE DRIVE AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	16	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.79235	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41013	PF Power Coefficient (p)	0.70374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	7.5
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	41 - ANSON BLVD NB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	110	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15633	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40636	PF Power Coefficient (p)	0.64572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	29.7

Vehicle Results			
Average Speed, mi/h	29.7	Percent Followers, %	28.7
Segment Travel Time, minutes	1.04	Adj. Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/25/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	41 - ANSON BLVD SB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	15.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.9
Speed Slope Coefficient (m)	1.98695	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38003	PF Power Coefficient (p)	0.62823
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	26.1

Vehicle Results			
Average Speed, mi/h	26.1	Percent Followers, %	39.6
Segment Travel Time, minutes	1.19	Adj. Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	42 - 500 E NB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	72	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	31.1

Vehicle Results			
Average Speed, mi/h	31.1	Percent Followers, %	22.6
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	42 - 500 E SB BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	163	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	30.4

Vehicle Results			
Average Speed, mi/h	30.4	Percent Followers, %	35.3
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	43 - 575 E BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1264	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	722
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2100	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1199
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	28.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	44 - 650 E BT 500 S AND 100 S/ALBERT S WHITE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	710	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	406
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1070	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	611
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	45 - 700 E NB BT 400 S/ Albert S White Drive AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	176	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.17448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47418	PF Power Coefficient (p)	0.63289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	38.8
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	2.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	45 - 700 E SB BT 400 S AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	11	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	353	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.0
Speed Slope Coefficient (m)	2.19074	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47623	PF Power Coefficient (p)	0.63454
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	29.8

Vehicle Results			
Average Speed, mi/h	29.8	Percent Followers, %	53.4
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	6.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	46 - 425 S EB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	148	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.14330	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44733	PF Power Coefficient (p)	0.63516
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	29.4

Vehicle Results			
Average Speed, mi/h	29.4	Percent Followers, %	34.9
Segment Travel Time, minutes	0.65	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	46 - 425 S WB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	141	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.05929	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43484	PF Power Coefficient (p)	0.62639
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	27.9

Vehicle Results			
Average Speed, mi/h	27.9	Percent Followers, %	34.4
Segment Travel Time, minutes	0.69	Adj. Follower Density, followers/mi/ln	1.7
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	47 - STATE ROAD 267 NB BT LIMITS AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	863	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.51

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	49.1
Speed Slope Coefficient (m)	3.20647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38727	PF Power Coefficient (p)	0.73024
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	46.2

Vehicle Results			
Average Speed, mi/h	46.2	Percent Followers, %	71.2
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	13.3
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	47 - STATE ROAD 267 SB BT Limits AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	10	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1088	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.64

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	47.9
Speed Slope Coefficient (m)	3.14143	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39287	PF Power Coefficient (p)	0.72645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	44.8

Vehicle Results			
Average Speed, mi/h	44.8	Percent Followers, %	77.3
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	18.8
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	48 - INDIANAPOLIS ROAD NWB BT 550 S AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	580	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.81040	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39579	PF Power Coefficient (p)	0.68246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	61.8
Segment Travel Time, minutes	2.75	Adj. Follower Density, followers/mi/ln	9.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	48 - INDIANAPOLIS ROAD SEB BT 550 S AND STATE ROAD 267	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	333	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.9
Speed Slope Coefficient (m)	2.86324	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39475	PF Power Coefficient (p)	0.68623
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	48.1
Segment Travel Time, minutes	2.65	Adj. Follower Density, followers/mi/ln	4.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	49 - 450 S EB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	54	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.7
Speed Slope Coefficient (m)	2.87637	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49989	PF Power Coefficient (p)	0.69171
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	43.7

Vehicle Results			
Average Speed, mi/h	43.7	Percent Followers, %	18.1
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	49 - 450 S WB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	41	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.8
Speed Slope Coefficient (m)	2.93599	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49684	PF Power Coefficient (p)	0.69557
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	44.8

Vehicle Results			
Average Speed, mi/h	44.8	Percent Followers, %	15.1
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	50 - 450 S EB BT ANSON BLVD AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	79	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.70445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45780	PF Power Coefficient (p)	0.69006
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	22.4
Segment Travel Time, minutes	0.62	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	50 - 450 S WB BT ANSON BLVD AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	61	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73697	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45751	PF Power Coefficient (p)	0.69246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	18.9
Segment Travel Time, minutes	0.61	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	51 - 450 S EB BT 500 E AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	42	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76561	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40305	PF Power Coefficient (p)	0.70187
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	14.2
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	51 - 450 S WB BT 500 E AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.73445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40335	PF Power Coefficient (p)	0.69958
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	36.7
Segment Travel Time, minutes	1.31	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	52 - 700 E NB BT LIMITS AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	114	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.0
Speed Slope Coefficient (m)	2.10346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40224	PF Power Coefficient (p)	0.63977
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	28.7

Vehicle Results			
Average Speed, mi/h	28.7	Percent Followers, %	29.5
Segment Travel Time, minutes	1.04	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	52 - 700 E SB BT LIMITS AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	295	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15766	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40975	PF Power Coefficient (p)	0.64524
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	47.3
Segment Travel Time, minutes	1.03	Adj. Follower Density, followers/mi/ln	4.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	53 - PERRY WORTH ROAD NWB BT 450 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	147	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.3
Speed Slope Coefficient (m)	2.62160	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40851	PF Power Coefficient (p)	0.69100
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	37.5

Vehicle Results			
Average Speed, mi/h	37.5	Percent Followers, %	31.2
Segment Travel Time, minutes	1.24	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	53 - PERRY WORTH ROAD SEB BT 450 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	55	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76117	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40875	PF Power Coefficient (p)	0.70157
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	16.9
Segment Travel Time, minutes	1.14	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	54 - ANSON BLVD NWB BT 500 S AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	62	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.4
Speed Slope Coefficient (m)	2.18773	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39298	PF Power Coefficient (p)	0.65160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	30.4

Vehicle Results			
Average Speed, mi/h	30.4	Percent Followers, %	20.3
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	54 - ANSON BLVD SEB BT 500 S AND 450 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	76	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.10778	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38230	PF Power Coefficient (p)	0.64366
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	23.2
Segment Travel Time, minutes	1.33	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	55 - 575 E BT 500 S AND 450 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	47.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1475	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	842
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1940
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1940
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.43

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	47.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	47.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2044	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1167
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1940
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1940
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	47.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	56 - 500 S NEB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	153	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	31.3

Vehicle Results			
Average Speed, mi/h	31.3	Percent Followers, %	36.0
Segment Travel Time, minutes	0.36	Adj. Follower Density, followers/mi/ln	1.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	56 - 500 S SWB BT PERRY WORTH ROAD AND ANSON BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	121	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.16635	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47312	PF Power Coefficient (p)	0.63206
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	30.2

Vehicle Results			
Average Speed, mi/h	30.2	Percent Followers, %	32.1
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	57 - 500 S EB BT ANSON BLVD AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	152	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.27712	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39145	PF Power Coefficient (p)	0.66124
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	31.3

Vehicle Results			
Average Speed, mi/h	31.3	Percent Followers, %	33.0
Segment Travel Time, minutes	1.44	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	57 - 500 S WB BT ANSON BLVD AND 575 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	187	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.9
Speed Slope Coefficient (m)	2.16872	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37916	PF Power Coefficient (p)	0.65086
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	29.1

Vehicle Results			
Average Speed, mi/h	29.1	Percent Followers, %	37.1
Segment Travel Time, minutes	1.54	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	58 - 500 S EB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	12
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	143	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.3
Speed Slope Coefficient (m)	2.56698	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40787	PF Power Coefficient (p)	0.68662
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	36.6

Vehicle Results			
Average Speed, mi/h	36.6	Percent Followers, %	31.0
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	58 - 500 S WB BT 575 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	561	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.9
Speed Slope Coefficient (m)	2.22281	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38382	PF Power Coefficient (p)	0.65619
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	29.3

Vehicle Results			
Average Speed, mi/h	29.3	Percent Followers, %	61.2
Segment Travel Time, minutes	1.58	Adj. Follower Density, followers/mi/ln	11.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	59 - PERRY WORTH ROAD NWB BT 550 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	499	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	57.8
Segment Travel Time, minutes	1.24	Adj. Follower Density, followers/mi/ln	7.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	59 - PERRY WORTH ROAD SEB BT 550 S AND 500 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	204	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	37.0
Segment Travel Time, minutes	1.22	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestwon	Time Analyzed	AM
Project Description	60 - 575 E BT PERRY WORTH ROAD AND 500 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1534	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	876
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2371	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1354
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	31.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	61 - 650 E/S MAIN STREET BT CENTRAL BLVD AND 500 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	8.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.4	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	949	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	542
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.1		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1352	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	772
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.4		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/284/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	62 - 550 S EB BT LIMITS AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	304	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.9
Speed Slope Coefficient (m)	2.54650	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40746	PF Power Coefficient (p)	0.68494
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	35.6

Vehicle Results			
Average Speed, mi/h	35.6	Percent Followers, %	46.4
Segment Travel Time, minutes	1.29	Adj. Follower Density, followers/mi/ln	4.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	62 - 550 S WB BT LIMITS AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	239	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66981	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40987	PF Power Coefficient (p)	0.69471
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	38.0

Vehicle Results			
Average Speed, mi/h	38.0	Percent Followers, %	40.7
Segment Travel Time, minutes	1.21	Adj. Follower Density, followers/mi/ln	2.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	63 - 550 S EB BT 475 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	737	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.43

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	70.5
Segment Travel Time, minutes	0.33	Adj. Follower Density, followers/mi/ln	13.3
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	63 - 550 S WB BT 475 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1333	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.78

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.69209	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	29.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	37.3

Vehicle Results			
Average Speed, mi/h	37.3	Percent Followers, %	83.9
Segment Travel Time, minutes	0.35	Adj. Follower Density, followers/mi/ln	29.9
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	64: 550 S BT INDIANAPOLIS RD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	771	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	440
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1680	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	959
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	65: 550 S BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1871	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1068
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2409	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1376
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	31.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	66 - PROPOSED RONALD REAGAN CORRIDOR BT PROPOSED RONALD REAGAN SPUR AND SR 267	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.8	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	573	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	327
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1976
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1976
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.3		

Direction 2 Geometric Data			
Direction 2	SEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	439	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	250
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1976
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1976
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.13
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.3		

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HCS Multilane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	67 - PROPOSED RONALD REAGAN SPUR EB BT PROPOSED RONALD REAGAN CORRIDOR AND 475 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.5
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	623	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	356
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1970
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1970
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.18

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.6		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.5
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	693	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	396
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1970
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1970
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.6		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	68 - 475 E NB BT PROPOSED AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	734	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.43

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	69.3
Segment Travel Time, minutes	0.56	Adj. Follower Density, followers/mi/ln	12.6
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	68 - 475 E SB BT PROPOSED AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1038	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.61

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	77.8
Segment Travel Time, minutes	0.56	Adj. Follower Density, followers/mi/ln	20.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	69 - INDIANAPOLIS ROAD NWB BT COMMERCE DRIVE AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	370	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.4
Speed Slope Coefficient (m)	2.82421	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45079	PF Power Coefficient (p)	0.69969
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	51.5
Segment Travel Time, minutes	0.65	Adj. Follower Density, followers/mi/ln	4.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	69 - INDIANAPOLIS ROAD SEB BT COMMERCE DRIVE AND 550 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	218	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.0
Speed Slope Coefficient (m)	2.85538	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44975	PF Power Coefficient (p)	0.70183
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	41.8

Vehicle Results			
Average Speed, mi/h	41.8	Percent Followers, %	39.3
Segment Travel Time, minutes	0.63	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	70 - PERRY WORTH ROAD NWB BT 550 S AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	427	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	54.5
Segment Travel Time, minutes	0.90	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	70 - PERRY WORTH ROAD SEB BT 550 S AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	458	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.27

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	39.6

Vehicle Results			
Average Speed, mi/h	39.6	Percent Followers, %	56.2
Segment Travel Time, minutes	0.90	Adj. Follower Density, followers/mi/ln	6.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	71 - JUNIORS WAY NEB BT PERRY WORTH ROAD AND NEW HOPE BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	58	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	29.4

Vehicle Results			
Average Speed, mi/h	29.4	Percent Followers, %	20.6
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	71 - JUNIORS WAY SWB BT PERRY WORTH ROAD AND NEW HOPE BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	259	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	28.4

Vehicle Results			
Average Speed, mi/h	28.4	Percent Followers, %	45.2
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	72 - PROPOSED RONALD REAGAN CORRIDOR NB BT WHITESTOWN PARKWAY AND PROPOSED RONALD REAGAN SPUR	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1162	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	664
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1972
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1972
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.6	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	915	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	522
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1972
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1972
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.5		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	73 - 475 E NB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	13.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	246	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66403	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42128	PF Power Coefficient (p)	0.69331
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	38.0

Vehicle Results			
Average Speed, mi/h	38.0	Percent Followers, %	41.6
Segment Travel Time, minutes	1.03	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	73 - 475 E SB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	305	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient (m)	2.70468	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42135	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	46.3
Segment Travel Time, minutes	1.01	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	74 - COMMERCE DRIVE NB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	62	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.92514	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34124	PF Power Coefficient (p)	0.62577
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	25.5

Vehicle Results			
Average Speed, mi/h	25.5	Percent Followers, %	21.0
Segment Travel Time, minutes	1.72	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	74 - COMMERCE DRIVE SB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	63	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.8
Speed Slope Coefficient (m)	1.88720	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33351	PF Power Coefficient (p)	0.62169
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	24.8

Vehicle Results			
Average Speed, mi/h	24.8	Percent Followers, %	21.3
Segment Travel Time, minutes	1.77	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	75 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	371	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.77880	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40027	PF Power Coefficient (p)	0.70264
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	50.2
Segment Travel Time, minutes	1.37	Adj. Follower Density, followers/mi/ln	4.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	75 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	153	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.6
Speed Slope Coefficient (m)	2.80861	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39973	PF Power Coefficient (p)	0.70478
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	31.1
Segment Travel Time, minutes	1.32	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	76: PERRY WORTH ROAD NWB BT MILLS DRIVE AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	412	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	2.02390	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36179	PF Power Coefficient (p)	0.63594
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	26.1

Vehicle Results			
Average Speed, mi/h	26.1	Percent Followers, %	53.9
Segment Travel Time, minutes	1.63	Adj. Follower Density, followers/mi/ln	8.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	76: PERRY WORTH ROAD SEB BT MILLS DRIVE AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	474	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.1
Speed Slope Coefficient (m)	2.12011	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37668	PF Power Coefficient (p)	0.64574
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	27.7

Vehicle Results			
Average Speed, mi/h	27.7	Percent Followers, %	57.3
Segment Travel Time, minutes	1.53	Adj. Follower Density, followers/mi/ln	9.8
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	77: PERRY WORTH ROAD BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	784	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	448
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	13.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	40.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	547	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	312
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.16
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	78 - MILLS DRIVE EB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	530	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.4

Vehicle Results			
Average Speed, mi/h	21.4	Percent Followers, %	61.3
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	15.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	78 - MILLS DRIVE WB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	279	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.7

Vehicle Results			
Average Speed, mi/h	21.7	Percent Followers, %	47.8
Segment Travel Time, minutes	0.79	Adj. Follower Density, followers/mi/ln	6.1
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	79: 650 E/S MAIN STREET BT MILLS DRIVE AND CENTRAL BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	958	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	547
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1289	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	736
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	80: 650 E/S MAIN STREET BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	642	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	366
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1117	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	638
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.9		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	81 - CENTRAL BLVD EB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	241	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.5
Speed Slope Coefficient (m)	2.00104	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44742	PF Power Coefficient (p)	0.61446
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	26.6

Vehicle Results			
Average Speed, mi/h	26.6	Percent Followers, %	45.4
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	81 - CENTRAL BLVD WB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	20.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	174	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.88857	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42514	PF Power Coefficient (p)	0.60180
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	24.8

Vehicle Results			
Average Speed, mi/h	24.8	Percent Followers, %	39.2
Segment Travel Time, minutes	0.58	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	82 - HEARTLAND DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	201	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	26.5

Vehicle Results			
Average Speed, mi/h	26.5	Percent Followers, %	41.8
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	3.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	82 - HEARTLAND DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	83	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	27.3

Vehicle Results			
Average Speed, mi/h	27.3	Percent Followers, %	26.9
Segment Travel Time, minutes	0.49	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	83 - CENTRAL BLVD EB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	149	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.5
Speed Slope Coefficient (m)	2.10537	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46459	PF Power Coefficient (p)	0.62572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	35.9
Segment Travel Time, minutes	0.44	Adj. Follower Density, followers/mi/ln	1.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	83 - CENTRAL BLVD WB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	159	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.3
Speed Slope Coefficient (m)	2.04033	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45428	PF Power Coefficient (p)	0.61876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	27.6

Vehicle Results			
Average Speed, mi/h	27.6	Percent Followers, %	37.2
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	2.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	84 - 700 E NB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	400	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.7
Speed Slope Coefficient (m)	1.90405	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42181	PF Power Coefficient (p)	0.60532
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	24.6

Vehicle Results			
Average Speed, mi/h	24.6	Percent Followers, %	55.8
Segment Travel Time, minutes	0.66	Adj. Follower Density, followers/mi/ln	9.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	84 - 700 E SB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	690	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.00568	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44156	PF Power Coefficient (p)	0.61668
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	26.0

Vehicle Results			
Average Speed, mi/h	26.0	Percent Followers, %	68.2
Segment Travel Time, minutes	0.62	Adj. Follower Density, followers/mi/ln	18.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	85 - VETERANS DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	402	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75171	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50391	PF Power Coefficient (p)	0.68309
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	55.4
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	5.6
Vehicle LOS	C		

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Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	85 - VETERANS DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	741	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.9
Speed Slope Coefficient (m)	2.61756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50442	PF Power Coefficient (p)	0.67297
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	36.7

Vehicle Results			
Average Speed, mi/h	36.7	Percent Followers, %	70.8
Segment Travel Time, minutes	0.33	Adj. Follower Density, followers/mi/ln	14.3
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	86 - WHITESTOWN PARKWAY EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	508	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.64466	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50465	PF Power Coefficient (p)	0.67509
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	37.6

Vehicle Results			
Average Speed, mi/h	37.6	Percent Followers, %	61.4
Segment Travel Time, minutes	0.40	Adj. Follower Density, followers/mi/ln	8.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	86 - WHITESTOWN PARKWAY WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	151	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.70022	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50459	PF Power Coefficient (p)	0.67932
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	34.1
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	1.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	87 - WHITESTOWN PARKWAY EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	514	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.72667	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47126	PF Power Coefficient (p)	0.68879
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	60.6
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	8.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	87 - WHITESTOWN PARKWAY WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	252	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68873	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47153	PF Power Coefficient (p)	0.68596
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	43.6
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	88 - WHITESTOWN PARKWAY EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	617	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	66.1
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	10.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	88 - WHITESTOWN PARKWAY WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	675	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.1
Speed Slope Coefficient (m)	2.79236	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50296	PF Power Coefficient (p)	0.68598
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	68.3
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	11.5
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	89 - WHITESTOWN PARKWAY EB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	724	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.43

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77587	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44113	PF Power Coefficient (p)	0.69839
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	68.3
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	12.6
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	89 - WHITESTOWN PARKWAY WB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	852	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.50

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74877	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44158	PF Power Coefficient (p)	0.69643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	16.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	72.5
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	16.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	90 - WHITESTOWN PARKWAY EB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	933	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.55

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.75887	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42853	PF Power Coefficient (p)	0.69936
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	74.3
Segment Travel Time, minutes	0.92	Adj. Follower Density, followers/mi/ln	18.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	90 - WHITESTOWN PARKWAY WB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1173	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.69

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.3
Speed Slope Coefficient (m)	2.66673	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42899	PF Power Coefficient (p)	0.69248
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	25.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	36.6

Vehicle Results			
Average Speed, mi/h	36.6	Percent Followers, %	79.7
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	25.6
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	91: WHITESTOWN PARKWAY BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1943	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1109
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.58

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	26.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2045	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1168
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.61
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	27.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	92 - WHITESTOWN PARKWAY BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1609	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	612
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	14.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2399	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1370
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	33.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	93: WHITESTOWN PARKWAY BT PERRY WORTH ROAD AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	45.0	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1401	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	800
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	45.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	17.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.7	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2318	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1324
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.7
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	31.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	94: WHITESTOWN PARKWAY BT 650 E/S MAIN STREET AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	43.6	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1253	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	716
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	16.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	44.0	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1635	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	934
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.49
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	21.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.1		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	95: WHITESTOWN PARKWAY BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	43.4	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1148	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	656
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.4
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	15.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1652	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	943
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	22.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	96: WHITESTOWN PARKWAY BT 700 E AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	42.8	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1447	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	826
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.43

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.8
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	19.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.8		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	11.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1452	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	829
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	3.0		

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HCS Multilane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	97 - PROPOSED RONALD REAGAN CORRIDOR NB BT 750 S AND WHITESTOWN PARKWAY	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.9	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1109	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	633
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1978
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1978
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.2		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.9	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1050	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	600
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1978
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1978
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.2		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	98 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1416	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.83

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	30.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	83.6
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	30.3
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	98 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1109	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.65

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	22.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	78.1
Segment Travel Time, minutes	1.08	Adj. Follower Density, followers/mi/ln	22.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	99: FUTURE MINOR COLLECTOR EB BT DEVELOPMENT AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	950
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	95	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.6
Speed Slope Coefficient (m)	1.78966	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40216	PF Power Coefficient (p)	0.59025
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	950	-	-	23.6

Vehicle Results			
Average Speed, mi/h	23.6	Percent Followers, %	29.4
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	99: FUTURE MINOR COLLECTOR WB BT DEVELOPMENT AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	950
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	97	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.6
Speed Slope Coefficient (m)	1.78966	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40216	PF Power Coefficient (p)	0.59025
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	950	-	-	23.6

Vehicle Results			
Average Speed, mi/h	23.6	Percent Followers, %	29.8
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	1.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	100 - INDIANAPOLIS ROAD NWB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1143	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.67

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.7
Speed Slope Coefficient (m)	2.80071	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42289	PF Power Coefficient (p)	0.70306
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	23.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	79.1
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	23.3
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	100 - INDIANAPOLIS ROAD SEB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	815	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.48

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.9
Speed Slope Coefficient (m)	2.86575	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42101	PF Power Coefficient (p)	0.70759
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	70.8
Segment Travel Time, minutes	0.93	Adj. Follower Density, followers/mi/ln	14.3
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	101 - 750 S EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	23.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	124	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	35.5
Speed Slope Coefficient (m)	2.43464	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49818	PF Power Coefficient (p)	0.65768
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	35.0

Vehicle Results			
Average Speed, mi/h	35.0	Percent Followers, %	31.6
Segment Travel Time, minutes	0.22	Adj. Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	101 - 750 S WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	114	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	41.0

Vehicle Results			
Average Speed, mi/h	41.0	Percent Followers, %	28.9
Segment Travel Time, minutes	0.19	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	102 - 750 S EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	158	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.1
Speed Slope Coefficient (m)	2.69642	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46498	PF Power Coefficient (p)	0.68795
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	33.7
Segment Travel Time, minutes	0.59	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	102 - 750 S WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	437	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73165	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46470	PF Power Coefficient (p)	0.69056
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	56.3
Segment Travel Time, minutes	0.59	Adj. Follower Density, followers/mi/ln	6.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	103 - 750 S EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	163	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	40.6

Vehicle Results			
Average Speed, mi/h	40.6	Percent Followers, %	35.3
Segment Travel Time, minutes	0.18	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	103 - 750 S WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	354	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	52.3
Segment Travel Time, minutes	0.18	Adj. Follower Density, followers/mi/ln	4.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	104 - 750 S EB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	222	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.74177	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38969	PF Power Coefficient (p)	0.69469
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	38.6
Segment Travel Time, minutes	1.92	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	104 - 750 S WB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	450	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.75261	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38962	PF Power Coefficient (p)	0.69550
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	55.0
Segment Travel Time, minutes	1.94	Adj. Follower Density, followers/mi/ln	6.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	105 - 750 S EB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	376	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.75127	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41555	PF Power Coefficient (p)	0.70042
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	51.0
Segment Travel Time, minutes	1.08	Adj. Follower Density, followers/mi/ln	4.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	105 - 750 S WB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	257	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.71198	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41584	PF Power Coefficient (p)	0.69752
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	42.2
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	KAZ	Date	10/2/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	106 - PROPOSED RONALD REAGAN CORRIDOR NB BT LIMITS AND 750 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.7	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	923	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	527
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1974
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1974
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.27

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.7
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.4		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.7	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	783	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	447
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1974
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1974
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.7
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.4		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	107 - 600 E NB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	117	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.8
Speed Slope Coefficient (m)	2.66772	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67688
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	29.7
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	107 - 600 E SB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	60	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.72192	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50430	PF Power Coefficient (p)	0.68094
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	19.8
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	108 - INDIANAPOLIS ROAD NWB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	10
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	685	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.0
Speed Slope Coefficient (m)	2.89704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48404	PF Power Coefficient (p)	0.69658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	41.7

Vehicle Results			
Average Speed, mi/h	41.7	Percent Followers, %	68.0
Segment Travel Time, minutes	0.42	Adj. Follower Density, followers/mi/ln	11.2
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/26/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	108 - INDIANAPOLIS ROAD SEB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	626	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.37

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.73173	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48917	PF Power Coefficient (p)	0.68512
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	66.1
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	10.6
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	109 - 600 E (575 REALIGNED) NB BT 200 S AND 100 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5304
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	278	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	48.1
Speed Slope Coefficient (m)	3.16659	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37599	PF Power Coefficient (p)	0.72714
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5304	-	-	46.5

Vehicle Results			
Average Speed, mi/h	46.5	Percent Followers, %	41.9
Segment Travel Time, minutes	1.30	Adj. Follower Density, followers/mi/ln	2.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	KAZ	Date	10/27/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	109 - 600 E (575 REALIGNED) SB BT 200 S AND 100 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5304
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	563	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.33

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	48.1
Speed Slope Coefficient (m)	3.16659	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37599	PF Power Coefficient (p)	0.72714
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5304	-	-	45.8

Vehicle Results			
Average Speed, mi/h	45.8	Percent Followers, %	59.6
Segment Travel Time, minutes	1.32	Adj. Follower Density, followers/mi/ln	7.3
Vehicle LOS	C		

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PM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	1 - 100 S EB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	548	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73804	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39582	PF Power Coefficient (p)	0.69876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	38.2

Vehicle Results			
Average Speed, mi/h	38.2	Percent Followers, %	60.0
Segment Travel Time, minutes	1.57	Adj. Follower Density, followers/mi/ln	8.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	1 - 100 S WB BT 400 E AND 500 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5272
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	221	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75159	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39572	PF Power Coefficient (p)	0.69976
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5272	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	38.4
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	2 - 100 S EB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	541	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.76991	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39053	PF Power Coefficient (p)	0.68808
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	38.3

Vehicle Results			
Average Speed, mi/h	38.3	Percent Followers, %	59.8
Segment Travel Time, minutes	2.42	Adj. Follower Density, followers/mi/ln	8.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	2 - 100 S WB BT 500 E AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	8159
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	11.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	343	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.7
Speed Slope Coefficient (m)	2.68183	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39045	PF Power Coefficient (p)	0.68145
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	8159	-	-	37.2

Vehicle Results			
Average Speed, mi/h	37.2	Percent Followers, %	48.9
Segment Travel Time, minutes	2.49	Adj. Follower Density, followers/mi/ln	4.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	3 - 650 E NB BT 200 S AND 100S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	354	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.73832	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39559	PF Power Coefficient (p)	0.69871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	49.1
Segment Travel Time, minutes	1.56	Adj. Follower Density, followers/mi/ln	4.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	3 - 650 E SB BT 200 S AND 100 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5301
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	359	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.75187	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39549	PF Power Coefficient (p)	0.69971
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5301	-	-	38.9

Vehicle Results			
Average Speed, mi/h	38.9	Percent Followers, %	49.4
Segment Travel Time, minutes	1.55	Adj. Follower Density, followers/mi/ln	4.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	4 - 200 S EB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4058
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	36	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.71594	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40983	PF Power Coefficient (p)	0.69820
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4058	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	12.9
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	4: 200 S WB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4058
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	78	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.5
Speed Slope Coefficient (m)	2.69020	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40986	PF Power Coefficient (p)	0.69627
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4058	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	21.3
Segment Travel Time, minutes	1.17	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	5 - 200 S EB BT 600 E (575 REALIGNED) AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2851
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	257	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.74335	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43560	PF Power Coefficient (p)	0.69712
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2851	-	-	39.5

Vehicle Results			
Average Speed, mi/h	39.5	Percent Followers, %	42.7
Segment Travel Time, minutes	0.82	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	5 - 200 S WB BT 600 E (575 REALIGNED) AND 650 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4137
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	268	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.1
Speed Slope Coefficient (m)	2.77644	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40803	PF Power Coefficient (p)	0.70269
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4137	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	42.8
Segment Travel Time, minutes	1.18	Adj. Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	6 - 200 S EB BT 650 E AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	290	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77580	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44129	PF Power Coefficient (p)	0.69836
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	45.5
Segment Travel Time, minutes	0.75	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	6 - 200 S WB BT 650 E AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2645
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	391	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74870	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44174	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2645	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	52.8
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	5.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	7 - 200 S EB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	76	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.76346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47411	PF Power Coefficient (p)	0.69071
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	22.0
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	7 - 200 S WB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1825
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	65	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68487	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47497	PF Power Coefficient (p)	0.68492
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1825	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	20.3
Segment Travel Time, minutes	0.52	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	8 - FUTURE MINOR COLLECTOR EB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5233
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	83	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.7
Speed Slope Coefficient (m)	1.89756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31756	PF Power Coefficient (p)	0.62236
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5233	-	-	24.7

Vehicle Results			
Average Speed, mi/h	24.7	Percent Followers, %	24.4
Segment Travel Time, minutes	2.41	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	8 - FUTURE MINOR COLLECTOR WB BT 500 E AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5233
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	50	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.7
Speed Slope Coefficient (m)	1.89756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.31756	PF Power Coefficient (p)	0.62236
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5233	-	-	24.7

Vehicle Results			
Average Speed, mi/h	24.7	Percent Followers, %	18.5
Segment Travel Time, minutes	2.41	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	9 - 600 E (575 REALIGNED) NB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	917	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.54

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	50.7
Speed Slope Coefficient (m)	3.28544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39394	PF Power Coefficient (p)	0.73270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	47.7

Vehicle Results			
Average Speed, mi/h	47.7	Percent Followers, %	73.0
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	14.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	9 - 600 E (575 REALIGNED) SB BT PROPOSED AND 200 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3173
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	755	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	50.7
Speed Slope Coefficient (m)	3.28544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39394	PF Power Coefficient (p)	0.73270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3173	-	-	48.0

Vehicle Results			
Average Speed, mi/h	48.0	Percent Followers, %	67.9
Segment Travel Time, minutes	0.75	Adj. Follower Density, followers/mi/ln	10.7
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	10 - 600 E (575 REALIGNED) BT PIERCE STREET/300 S AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.3	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	963	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	550
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1924
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1924
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.3	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	777	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	444
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1924
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1924
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	11 - PROPOSED/MADERA DRIVE EB BT 600 E (575 REALIGNED) AND 650 E/ MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2932
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	148	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.3
Speed Slope Coefficient (m)	1.68752	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.30606	PF Power Coefficient (p)	0.59623
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2932	-	-	20.8

Vehicle Results			
Average Speed, mi/h	20.8	Percent Followers, %	34.1
Segment Travel Time, minutes	1.60	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	11 - PROPOSED/MADERA DRIVE WB BT 600 E (575 REALIGNED) AND 650 E/ MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2590
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	16.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	154	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.3
Speed Slope Coefficient (m)	1.62735	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29895	PF Power Coefficient (p)	0.58699
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2590	-	-	19.8

Vehicle Results			
Average Speed, mi/h	19.8	Percent Followers, %	35.2
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	12 - 650 E NB BT MADERA DR AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	23.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	293	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.5
Speed Slope Coefficient (m)	1.54303	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25090	PF Power Coefficient (p)	0.58202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	17.7

Vehicle Results			
Average Speed, mi/h	17.7	Percent Followers, %	45.8
Segment Travel Time, minutes	2.18	Adj. Follower Density, followers/mi/ln	7.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	12 - 650 E SB BT MADERA DR AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3402
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	321	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.9
Speed Slope Coefficient (m)	1.83706	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33187	PF Power Coefficient (p)	0.61511
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3402	-	-	23.0

Vehicle Results			
Average Speed, mi/h	23.0	Percent Followers, %	48.4
Segment Travel Time, minutes	1.68	Adj. Follower Density, followers/mi/ln	6.8
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	13 - MAIN STREET NB BT 300 S AND MADERA DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	42.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	378	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	13.7
Speed Slope Coefficient (m)	1.26283	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19034	PF Power Coefficient (p)	0.53635
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	13.0

Vehicle Results			
Average Speed, mi/h	13.0	Percent Followers, %	50.7
Segment Travel Time, minutes	1.63	Adj. Follower Density, followers/mi/ln	14.8
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	13 - MAIN STREET SB BT 300 S AND MADERA DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1868
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	391	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	16.0
Speed Slope Coefficient (m)	1.38343	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24184	PF Power Coefficient (p)	0.55041
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1868	-	-	15.1

Vehicle Results			
Average Speed, mi/h	15.1	Percent Followers, %	52.3
Segment Travel Time, minutes	1.40	Adj. Follower Density, followers/mi/ln	13.5
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	14 - 700 E NB BT PROPOSED AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	442	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71645	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44144	PF Power Coefficient (p)	0.69414
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	55.9
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	6.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	14 - 700 E SB BT PROPOSED AND 200 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2665
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	403	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.74355	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44117	PF Power Coefficient (p)	0.69614
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2665	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	53.5
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	5.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	15 - 700 E NB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	811	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.48

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.71590	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44271	PF Power Coefficient (p)	0.69387
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	38.0

Vehicle Results			
Average Speed, mi/h	38.0	Percent Followers, %	71.3
Segment Travel Time, minutes	0.79	Adj. Follower Density, followers/mi/ln	15.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	15 - 700 E SB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	623	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.37

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.3
Speed Slope Coefficient (m)	2.49775	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43891	PF Power Coefficient (p)	0.67658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	34.4

Vehicle Results			
Average Speed, mi/h	34.4	Percent Followers, %	64.8
Segment Travel Time, minutes	0.87	Adj. Follower Density, followers/mi/ln	11.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	16 - FUTURE MINOR COLLECTOR EB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	352	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.6
Speed Slope Coefficient (m)	1.88120	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.32897	PF Power Coefficient (p)	0.62130
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	23.5

Vehicle Results			
Average Speed, mi/h	23.5	Percent Followers, %	50.1
Segment Travel Time, minutes	1.96	Adj. Follower Density, followers/mi/ln	7.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	16 - FUTURE MINOR COLLECTOR WB BT 700 E AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	302	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.6
Speed Slope Coefficient (m)	1.88120	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.32897	PF Power Coefficient (p)	0.62130
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	23.6

Vehicle Results			
Average Speed, mi/h	23.6	Percent Followers, %	46.8
Segment Travel Time, minutes	1.95	Adj. Follower Density, followers/mi/ln	6.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	17 - 300 S EB BT LIMITS AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4202
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	324	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.68501	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40766	PF Power Coefficient (p)	0.69593
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4202	-	-	38.0

Vehicle Results			
Average Speed, mi/h	38.0	Percent Followers, %	47.4
Segment Travel Time, minutes	1.26	Adj. Follower Density, followers/mi/ln	4.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	17 - 300 S WB BT LIMITS AND 600 E (575 REALIGNED)	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4202
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	282	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.0
Speed Slope Coefficient (m)	2.55357	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40537	PF Power Coefficient (p)	0.68558
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4202	-	-	35.7

Vehicle Results			
Average Speed, mi/h	35.7	Percent Followers, %	44.5
Segment Travel Time, minutes	1.34	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	18 - PIERCE STREET/300 S EB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	24.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	590	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.3
Speed Slope Coefficient (m)	1.52670	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25069	PF Power Coefficient (p)	0.57914
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	17.1

Vehicle Results			
Average Speed, mi/h	17.1	Percent Followers, %	60.2
Segment Travel Time, minutes	2.11	Adj. Follower Density, followers/mi/ln	20.8
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	18 - PIERCE STREET/300 S WB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	283	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	15.1
Speed Slope Coefficient (m)	1.35326	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.18646	PF Power Coefficient (p)	0.55953
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	14.4

Vehicle Results			
Average Speed, mi/h	14.4	Percent Followers, %	44.3
Segment Travel Time, minutes	2.51	Adj. Follower Density, followers/mi/ln	8.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	19 - PIERCE STREET/300 S EB BT MAIN ST AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	28.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	667	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	17.3
Speed Slope Coefficient (m)	1.46956	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.24549	PF Power Coefficient (p)	0.56909
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	25.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	16.2

Vehicle Results			
Average Speed, mi/h	16.2	Percent Followers, %	62.8
Segment Travel Time, minutes	1.86	Adj. Follower Density, followers/mi/ln	25.9
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	19 - PIERCE STREET/300 S WB BT MAIN ST AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	473	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	14.9
Speed Slope Coefficient (m)	1.33542	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.19352	PF Power Coefficient (p)	0.55374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	14.0

Vehicle Results			
Average Speed, mi/h	14.0	Percent Followers, %	54.5
Segment Travel Time, minutes	2.15	Adj. Follower Density, followers/mi/ln	18.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	20 - PIERCE STREET/300 S EB BT 700 E AND ALBERT S WHITE DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	767	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.2
Speed Slope Coefficient (m)	1.93058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43393	PF Power Coefficient (p)	0.60659
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	22.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	24.6

Vehicle Results			
Average Speed, mi/h	24.6	Percent Followers, %	70.5
Segment Travel Time, minutes	0.26	Adj. Follower Density, followers/mi/ln	22.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	20 - PIERCE STREET/300 S WB BT 700 E AND ALBERT S WHITE DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	18.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	876	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.52

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.5
Speed Slope Coefficient (m)	1.67448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37122	PF Power Coefficient (p)	0.57643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	31.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	20.0

Vehicle Results			
Average Speed, mi/h	20.0	Percent Followers, %	71.9
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	31.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	21 - ALBERT S WHITE DR EB BT 300S AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1602	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.94

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.08871	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41681	PF Power Coefficient (p)	0.63474
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	51.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	26.4

Vehicle Results			
Average Speed, mi/h	26.4	Percent Followers, %	85.2
Segment Travel Time, minutes	0.93	Adj. Follower Density, followers/mi/ln	51.7
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	21 - ALBERT S WHITE DR WB BT 300S AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2169
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1735	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.25402	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43792	PF Power Coefficient (p)	0.65127
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2169	-	-	30.4

Vehicle Results			
Average Speed, mi/h	-	Percent Followers, %	-
Segment Travel Time, minutes	-	Adj. Follower Density, followers/mi/ln	-
Vehicle LOS	F		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	22 - 400 E NB BT PERRY WORTH RD AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	695	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	38.7

Vehicle Results			
Average Speed, mi/h	38.7	Percent Followers, %	66.2
Segment Travel Time, minutes	1.41	Adj. Follower Density, followers/mi/ln	11.9
Vehicle LOS	D		

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HCS Two-Lane Highway Report

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Analyst	DAD	Date	10/23/2025
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Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	22 - 400 E SB BT PERRY WORTH RD AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4805
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	630	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.37

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.77132	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39971	PF Power Coefficient (p)	0.70202
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4805	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	63.7
Segment Travel Time, minutes	1.41	Adj. Follower Density, followers/mi/ln	10.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	23 - 400 E NB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	740	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.44

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	44.4

Vehicle Results			
Average Speed, mi/h	44.4	Percent Followers, %	69.7
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	11.6
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	23 - 400 E SB BT PERRY WORTH DRIVE AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1499
Lane Width, ft	11	Shoulder Width, ft	9
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	660	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	46.9
Speed Slope Coefficient (m)	3.05589	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47733	PF Power Coefficient (p)	0.70567
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1499	-	-	44.5

Vehicle Results			
Average Speed, mi/h	44.5	Percent Followers, %	66.8
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	9.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	24 - 450 E NB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	374	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.03507	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36775	PF Power Coefficient (p)	0.63665
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	26.4

Vehicle Results			
Average Speed, mi/h	26.4	Percent Followers, %	51.9
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	7.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	24 - 450 E SB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3529
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	829	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.49

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.7
Speed Slope Coefficient (m)	2.09604	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37730	PF Power Coefficient (p)	0.64289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	21.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3529	-	-	26.8

Vehicle Results			
Average Speed, mi/h	26.8	Percent Followers, %	70.5
Segment Travel Time, minutes	1.49	Adj. Follower Density, followers/mi/ln	21.8
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	25 - 500 E NB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	654	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.38

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.8
Speed Slope Coefficient (m)	2.04544	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37028	PF Power Coefficient (p)	0.63762
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	16.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	26.2

Vehicle Results			
Average Speed, mi/h	26.2	Percent Followers, %	64.9
Segment Travel Time, minutes	1.52	Adj. Follower Density, followers/mi/ln	16.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	25 - 500 E SB BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3490
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	214	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.08609	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37665	PF Power Coefficient (p)	0.64178
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3490	-	-	27.7

Vehicle Results			
Average Speed, mi/h	27.7	Percent Followers, %	40.1
Segment Travel Time, minutes	1.43	Adj. Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	26 - 575 E BT ALBERT S WHITE DRIVE AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	47.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1758	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1004
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1940
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1940
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.52

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	47.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	15.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	43.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1139	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	650
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	4.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	27: MAIN STREET NB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3414
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	489	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64751	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.28288	PF Power Coefficient (p)	0.59394
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3414	-	-	19.3

Vehicle Results			
Average Speed, mi/h	19.3	Percent Followers, %	56.8
Segment Travel Time, minutes	2.01	Adj. Follower Density, followers/mi/ln	14.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	27: MAIN STREET SB BT PROPOSED AND PIERCE STREET/300 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2842
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	31.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	642	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.38

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.4
Speed Slope Coefficient (m)	1.64026	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.29513	PF Power Coefficient (p)	0.59027
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	21.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2842	-	-	19.2

Vehicle Results			
Average Speed, mi/h	19.2	Percent Followers, %	63.1
Segment Travel Time, minutes	1.69	Adj. Follower Density, followers/mi/ln	21.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	28 - MAIN STREET NB BT 700 E/GINGER WAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1872
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	6.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	797	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.47

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.1
Speed Slope Coefficient (m)	1.82522	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37956	PF Power Coefficient (p)	0.60278
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	24.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1872	-	-	22.5

Vehicle Results			
Average Speed, mi/h	22.5	Percent Followers, %	70.0
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	24.7
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	28 - MAIN STREET SB BT 700 E/GINGER WAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1872
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	717	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.2
Speed Slope Coefficient (m)	1.88349	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39261	PF Power Coefficient (p)	0.60940
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1872	-	-	23.6

Vehicle Results			
Average Speed, mi/h	23.6	Percent Followers, %	67.9
Segment Travel Time, minutes	0.90	Adj. Follower Density, followers/mi/ln	20.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	29 - FUTURE MINOR COLLECTOR EB BT MAIN STREET AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2586
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	141	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.4
Speed Slope Coefficient (m)	1.85301	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35762	PF Power Coefficient (p)	0.61270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2586	-	-	23.9

Vehicle Results			
Average Speed, mi/h	23.9	Percent Followers, %	33.6
Segment Travel Time, minutes	1.23	Adj. Follower Density, followers/mi/ln	2.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	29 - FUTURE MINOR COLLECTOR WB BT MAIN STREET AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2586
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	79	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.4
Speed Slope Coefficient (m)	1.85301	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.35762	PF Power Coefficient (p)	0.61270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2586	-	-	24.4

Vehicle Results			
Average Speed, mi/h	24.4	Percent Followers, %	25.0
Segment Travel Time, minutes	1.20	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	30 - ALBERT S WHITE DR NB BT PROPOSED AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1441	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.85

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	42.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	28.2

Vehicle Results			
Average Speed, mi/h	28.2	Percent Followers, %	83.2
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	42.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	30 - ALBERT S WHITE DR SB BT PROPOSED AND 300 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2840
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1528	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.90

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.19307	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40758	PF Power Coefficient (p)	0.64997
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	45.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2840	-	-	28.1

Vehicle Results			
Average Speed, mi/h	28.1	Percent Followers, %	84.3
Segment Travel Time, minutes	1.15	Adj. Follower Density, followers/mi/ln	45.9
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	31 - ALBERT S WHITE DR NB BT 700 E AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	2040	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	29.7

Vehicle Results			
Average Speed, mi/h	-	Percent Followers, %	-
Segment Travel Time, minutes	-	Adj. Follower Density, followers/mi/ln	-
Vehicle LOS	F		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	31 - ALBERT S WHITE DR SB BT 700 E AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2182
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	2009	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.21628	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43324	PF Power Coefficient (p)	0.64772
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2182	-	-	29.8

Vehicle Results			
Average Speed, mi/h	-	Percent Followers, %	-
Segment Travel Time, minutes	-	Adj. Follower Density, followers/mi/ln	-
Vehicle LOS	F		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	32: ALBERT S WHITE DRIVE BT I-65 AND 400 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2647	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1511
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.80

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	35.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	E
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2690	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1536
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	36.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	E
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	33: ALBERT S WHITE DRIVE BT 400 E AND 450 E/ ANSON BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	3.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1959	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1118
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	27.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2001	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1142
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	27.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	34: ALBERT S WHITE DRIVE BT 450 E/ANSON BLVD AND 500 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1604	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	916
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	22.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	4.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1049	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	599
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	35: ALBERT S WHITE DRIVE BT 500 E AND 575 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1013	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	578
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.7		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	2.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.6	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	817	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	466
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.25
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.7		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	36 - ALBERT S WHITE DR EB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1328	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.78

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.1
Speed Slope Coefficient (m)	1.96704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34150	PF Power Coefficient (p)	0.63058
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	44.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	24.0

Vehicle Results			
Average Speed, mi/h	24.0	Percent Followers, %	79.9
Segment Travel Time, minutes	2.06	Adj. Follower Density, followers/mi/ln	44.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	36 - ALBERT S WHITE DR WB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4344
Lane Width, ft	14	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	4.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1536	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.90

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.93317	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33505	PF Power Coefficient (p)	0.62701
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	54.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4344	-	-	23.3

Vehicle Results			
Average Speed, mi/h	23.3	Percent Followers, %	82.6
Segment Travel Time, minutes	2.12	Adj. Follower Density, followers/mi/ln	54.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	37 - 400 S/ALBERT S WHITE DRIVE EB BT 650 E AND 700 E/GINGER WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1671	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.98

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.2
Speed Slope Coefficient (m)	2.22048	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42280	PF Power Coefficient (p)	0.65039
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	50.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	28.6

Vehicle Results			
Average Speed, mi/h	28.6	Percent Followers, %	86.3
Segment Travel Time, minutes	0.98	Adj. Follower Density, followers/mi/ln	50.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	37 - 400 S/ALBERT S WHITE DRIVE WB BT 650 E AND 700 E/GINGER WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2468
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	2.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1945	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.19202	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41946	PF Power Coefficient (p)	0.64760
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2468	-	-	29.3

Vehicle Results			
Average Speed, mi/h	-	Percent Followers, %	-
Segment Travel Time, minutes	-	Adj. Follower Density, followers/mi/ln	-
Vehicle LOS	F		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	38 - INDIANAPOLIS ROAD EB BT LIMITS AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	268	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.69974	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44257	PF Power Coefficient (p)	0.69270
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	38.7

Vehicle Results			
Average Speed, mi/h	38.7	Percent Followers, %	44.0
Segment Travel Time, minutes	0.77	Adj. Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	38 - INDIANAPOLIS ROAD WB BT LIMITS AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2632
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	336	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.5
Speed Slope Coefficient (m)	2.61844	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44212	PF Power Coefficient (p)	0.68646
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2632	-	-	37.1

Vehicle Results			
Average Speed, mi/h	37.1	Percent Followers, %	49.4
Segment Travel Time, minutes	0.81	Adj. Follower Density, followers/mi/ln	4.5
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	39: STATE ROAD 267 BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	4.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.9	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1495	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	854
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1938
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1938
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.9
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	18.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	SWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	13.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	48.0	Total Lateral Clearance (TLC), ft	11
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1421	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	811
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1960
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1960
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.0
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	16.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	40 - PERRY WORTH ROAD NWB BT ALBERT S WHITE DRIVE AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	10	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.73815	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41088	PF Power Coefficient (p)	0.69980
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	40.4

Vehicle Results			
Average Speed, mi/h	40.4	Percent Followers, %	5.4
Segment Travel Time, minutes	1.12	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	40 - PERRY WORTH ROAD SEB BT ALBERT S WHITE DRIVE AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3984
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	40	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.79235	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41013	PF Power Coefficient (p)	0.70374
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3984	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	13.7
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	41 - ANSON BLVD NB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	4
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	257	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15633	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40636	PF Power Coefficient (p)	0.64572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	29.0

Vehicle Results			
Average Speed, mi/h	29.0	Percent Followers, %	44.2
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	41 - ANSON BLVD SB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2727
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	15.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	173	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.9
Speed Slope Coefficient (m)	1.98695	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38003	PF Power Coefficient (p)	0.62823
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2727	-	-	26.2

Vehicle Results			
Average Speed, mi/h	26.2	Percent Followers, %	36.7
Segment Travel Time, minutes	1.18	Adj. Follower Density, followers/mi/ln	2.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	42 - 500 E NB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	216	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	30.2

Vehicle Results			
Average Speed, mi/h	30.2	Percent Followers, %	40.8
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	2.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	42 - 500 E SB BT 450 S AND ALBERT S WHITE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2576
Lane Width, ft	16	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	10.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	137	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.08

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.1
Speed Slope Coefficient (m)	2.21387	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41833	PF Power Coefficient (p)	0.65047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2576	-	-	30.5

Vehicle Results			
Average Speed, mi/h	30.5	Percent Followers, %	32.2
Segment Travel Time, minutes	0.96	Adj. Follower Density, followers/mi/ln	1.4
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	43 - 575 E BT 450 S AND ALBERT S WHITE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2096	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1196
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	28.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1818	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1038
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	44 - 650 E BT 500 S AND 100 S/ALBERT S WHITE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1350	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	770
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1188	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	678
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.36
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.3		

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HCS Two-Lane Highway Report

Project Information

Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	45 - 700 E NB BT 400 S/ Albert S White Drive AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	838	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.49

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	30.7
Speed Slope Coefficient (m)	2.17448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47418	PF Power Coefficient (p)	0.63289
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	21.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	28.8

Vehicle Results

Average Speed, mi/h	28.8	Percent Followers, %	73.2
Segment Travel Time, minutes	0.41	Adj. Follower Density, followers/mi/ln	21.3
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	45 - 700 E SB BT 400 S AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	11	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	525	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.0
Speed Slope Coefficient (m)	2.19074	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47623	PF Power Coefficient (p)	0.63454
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	29.5

Vehicle Results			
Average Speed, mi/h	29.5	Percent Followers, %	62.5
Segment Travel Time, minutes	0.40	Adj. Follower Density, followers/mi/ln	11.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	46 - 425 S EB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	76	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.14330	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44733	PF Power Coefficient (p)	0.63516
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	24.6
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	46 - 425 S WB BT 700 E AND LIMITS PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1690
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	6.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	99	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.5
Speed Slope Coefficient (m)	2.05929	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43484	PF Power Coefficient (p)	0.62639
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1690	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	28.6
Segment Travel Time, minutes	0.67	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	47 - STATE ROAD 267 NB BT LIMITS AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	12	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1226	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.72

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	49.1
Speed Slope Coefficient (m)	3.20647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38727	PF Power Coefficient (p)	0.73024
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	21.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	45.7

Vehicle Results			
Average Speed, mi/h	45.7	Percent Followers, %	80.0
Segment Travel Time, minutes	0.98	Adj. Follower Density, followers/mi/ln	21.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	47 - STATE ROAD 267 SB BT Limits AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3939
Lane Width, ft	10	Shoulder Width, ft	5
Speed Limit, mi/h	45	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1174	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.69

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	47.9
Speed Slope Coefficient (m)	3.14143	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39287	PF Power Coefficient (p)	0.72645
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3939	-	-	44.6

Vehicle Results			
Average Speed, mi/h	44.6	Percent Followers, %	79.1
Segment Travel Time, minutes	1.00	Adj. Follower Density, followers/mi/ln	20.8
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	48 - INDIANAPOLIS ROAD NWB BT 550 S AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	336	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.81040	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39579	PF Power Coefficient (p)	0.68246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	48.5
Segment Travel Time, minutes	2.71	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	48 - INDIANAPOLIS ROAD SEB BT 550 S AND STATE ROAD 267 PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	9392
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	643	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.38

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.9
Speed Slope Coefficient (m)	2.86324	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39475	PF Power Coefficient (p)	0.68623
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	9392	-	-	39.6

Vehicle Results			
Average Speed, mi/h	39.6	Percent Followers, %	64.3
Segment Travel Time, minutes	2.69	Adj. Follower Density, followers/mi/ln	10.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	49 - 450 S EB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	47	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.7
Speed Slope Coefficient (m)	2.87637	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49989	PF Power Coefficient (p)	0.69171
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	43.7

Vehicle Results			
Average Speed, mi/h	43.7	Percent Followers, %	16.5
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	49 - 450 S WB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1211
Lane Width, ft	15	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	77	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.8
Speed Slope Coefficient (m)	2.93599	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49684	PF Power Coefficient (p)	0.69557
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1211	-	-	44.8

Vehicle Results			
Average Speed, mi/h	44.8	Percent Followers, %	22.3
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	0.4
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	50 - 450 S EB BT ANSON BLVD AND 500 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	121	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.70445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45780	PF Power Coefficient (p)	0.69006
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	28.7
Segment Travel Time, minutes	0.63	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	50 - 450 S WB BT ANSON BLVD AND 500 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2207
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	95	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73697	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45751	PF Power Coefficient (p)	0.69246
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2207	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	24.8
Segment Travel Time, minutes	0.61	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	51 - 450 S EB BT 500 E AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	186	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76561	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40305	PF Power Coefficient (p)	0.70187
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	35.0
Segment Travel Time, minutes	1.29	Adj. Follower Density, followers/mi/ln	1.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	51 - 450 S WB BT 500 E AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4516
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	48	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.73445	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40335	PF Power Coefficient (p)	0.69958
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4516	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	15.4
Segment Travel Time, minutes	1.27	Adj. Follower Density, followers/mi/ln	0.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	52 - 700 E NB BT LIMITS AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	760	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.0
Speed Slope Coefficient (m)	2.10346	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40224	PF Power Coefficient (p)	0.63977
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	19.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	27.3

Vehicle Results			
Average Speed, mi/h	27.3	Percent Followers, %	69.2
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	19.3
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	52 - 700 E SB BT LIMITS AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	450	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.0
Speed Slope Coefficient (m)	2.15766	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40975	PF Power Coefficient (p)	0.64524
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	28.6

Vehicle Results			
Average Speed, mi/h	28.6	Percent Followers, %	56.9
Segment Travel Time, minutes	1.04	Adj. Follower Density, followers/mi/ln	8.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	53 - PERRY WORTH ROAD NWB BT 450 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	55	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.3
Speed Slope Coefficient (m)	2.62160	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40851	PF Power Coefficient (p)	0.69100
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	38.3

Vehicle Results			
Average Speed, mi/h	38.3	Percent Followers, %	17.4
Segment Travel Time, minutes	1.22	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	53 - PERRY WORTH ROAD SEB BT 450 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4104
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	351	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76117	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40875	PF Power Coefficient (p)	0.70157
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4104	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	49.1
Segment Travel Time, minutes	1.19	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	54 - ANSON BLVD NWB BT 500 S AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	203	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.12

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.4
Speed Slope Coefficient (m)	2.18773	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39298	PF Power Coefficient (p)	0.65160
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	29.6

Vehicle Results			
Average Speed, mi/h	29.6	Percent Followers, %	38.9
Segment Travel Time, minutes	1.30	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	54 - ANSON BLVD SEB BT 500 S AND 450 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3379
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	72	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.9
Speed Slope Coefficient (m)	2.10778	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38230	PF Power Coefficient (p)	0.64366
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3379	-	-	28.9

Vehicle Results			
Average Speed, mi/h	28.9	Percent Followers, %	22.4
Segment Travel Time, minutes	1.33	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	55 - 575 E BT 500 S AND 450 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	47.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2100	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1199
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1940
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1940
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	47.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	25.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	47.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2009	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1147
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1940
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1940
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	47.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	56 - 500 S NEB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	278	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	30.8

Vehicle Results			
Average Speed, mi/h	30.8	Percent Followers, %	48.0
Segment Travel Time, minutes	0.36	Adj. Follower Density, followers/mi/ln	4.3
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	56 - 500 S SWB BT PERRY WORTH ROAD AND ANSON BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	985
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	238	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.6
Speed Slope Coefficient (m)	2.16635	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47312	PF Power Coefficient (p)	0.63206
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	985	-	-	29.6

Vehicle Results			
Average Speed, mi/h	29.6	Percent Followers, %	44.8
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	3.6
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	57 - 500 S EB BT ANSON BLVD AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	262	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.27712	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39145	PF Power Coefficient (p)	0.66124
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	30.9

Vehicle Results			
Average Speed, mi/h	30.9	Percent Followers, %	43.7
Segment Travel Time, minutes	1.46	Adj. Follower Density, followers/mi/ln	3.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	57 - 500 S WB BT ANSON BLVD AND 575 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3955
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	353	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.9
Speed Slope Coefficient (m)	2.16872	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37916	PF Power Coefficient (p)	0.65086
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3955	-	-	28.7

Vehicle Results			
Average Speed, mi/h	28.7	Percent Followers, %	50.4
Segment Travel Time, minutes	1.57	Adj. Follower Density, followers/mi/ln	6.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	58 - 500 S EB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	12
Speed Limit, mi/h	30	Access Point Density, pts/mi	3.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	541	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.3
Speed Slope Coefficient (m)	2.56698	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40787	PF Power Coefficient (p)	0.68662
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	35.4

Vehicle Results			
Average Speed, mi/h	35.4	Percent Followers, %	60.3
Segment Travel Time, minutes	1.30	Adj. Follower Density, followers/mi/ln	9.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	58 - 500 S WB BT 575 E AND 650 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	389	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	30.9
Speed Slope Coefficient (m)	2.22281	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38382	PF Power Coefficient (p)	0.65619
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4066	-	-	29.6

Vehicle Results			
Average Speed, mi/h	29.6	Percent Followers, %	52.5
Segment Travel Time, minutes	1.56	Adj. Follower Density, followers/mi/ln	6.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	59 - PERRY WORTH ROAD NWB BT 550 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	385	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	51.3
Segment Travel Time, minutes	1.23	Adj. Follower Density, followers/mi/ln	5.0
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	59 - PERRY WORTH ROAD SEB BT 550 S AND 500 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4255
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	711	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.76282	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40651	PF Power Coefficient (p)	0.70173
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4255	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	66.9
Segment Travel Time, minutes	1.25	Adj. Follower Density, followers/mi/ln	12.3
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestwon	Time Analyzed	PM
Project Description	60 - 575 E BT PERRY WORTH ROAD AND 500 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2317	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1322
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	31.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2322	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1326
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	31.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	61 - 650 E/S MAIN STREET BT CENTRAL BLVD AND 500 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	8.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.4	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1537	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	878
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.1		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1241	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	708
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.4		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	62 - 550 S EB BT LIMITS AND 475 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	312	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	36.9
Speed Slope Coefficient (m)	2.54650	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40746	PF Power Coefficient (p)	0.68494
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	35.5

Vehicle Results			
Average Speed, mi/h	35.5	Percent Followers, %	46.9
Segment Travel Time, minutes	1.30	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	62 - 550 S WB BT LIMITS AND 475 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4052
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	9.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	315	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66981	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40987	PF Power Coefficient (p)	0.69471
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4052	-	-	37.8

Vehicle Results			
Average Speed, mi/h	37.8	Percent Followers, %	46.9
Segment Travel Time, minutes	1.22	Adj. Follower Density, followers/mi/ln	3.9
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	63 - 550 S EB BT 475 E AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1314	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.77

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	28.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	38.4

Vehicle Results			
Average Speed, mi/h	38.4	Percent Followers, %	83.7
Segment Travel Time, minutes	0.34	Adj. Follower Density, followers/mi/ln	28.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	63 - 550 S WB BT 475 E AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1143
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	980	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.58

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.3
Speed Slope Coefficient (m)	2.69209	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67871
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1143	-	-	37.7

Vehicle Results			
Average Speed, mi/h	37.7	Percent Followers, %	77.3
Segment Travel Time, minutes	0.34	Adj. Follower Density, followers/mi/ln	20.1
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	64: 550 S BT INDIANAPOLIS RD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1747	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	998
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	22.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1632	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	932
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.49
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	65: 550 S BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2619	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1495
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.79

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	34.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2785	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1590
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	36.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	E
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	66 - PROPOSED RONALD REAGAN CORRIDOR BT PROPOSED RONALD REAGAN SPUR AND SR 267	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.8	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	582	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	332
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1976
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1976
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	6.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.3		

Direction 2 Geometric Data			
Direction 2	SEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	677	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	386
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1976
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1976
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	67 - PROPOSED RONALD REAGAN SPUR EB BT PROPOSED RONALD REAGAN CORRIDOR AND 475 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.5
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	743	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	424
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1970
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1970
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.22

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.6		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.5
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	804	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	459
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1970
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1970
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.6		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	68 - 475 E NB BT PROPOSED AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1091	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.64

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	21.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	78.9
Segment Travel Time, minutes	0.56	Adj. Follower Density, followers/mi/ln	21.6
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	68 - 475 E SB BT PROPOSED AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1969
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1037	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.61

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.83084	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46551	PF Power Coefficient (p)	0.69696
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1969	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	77.8
Segment Travel Time, minutes	0.56	Adj. Follower Density, followers/mi/ln	20.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	69 - INDIANAPOLIS ROAD NWB BT COMMERCE DRIVE AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	304	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.4
Speed Slope Coefficient (m)	2.82421	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45079	PF Power Coefficient (p)	0.69969
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	41.0

Vehicle Results			
Average Speed, mi/h	41.0	Percent Followers, %	46.8
Segment Travel Time, minutes	0.65	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	69 - INDIANAPOLIS ROAD SEB BT COMMERCE DRIVE AND 550 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2333
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	361	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	43.0
Speed Slope Coefficient (m)	2.85538	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44975	PF Power Coefficient (p)	0.70183
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2333	-	-	41.4

Vehicle Results			
Average Speed, mi/h	41.4	Percent Followers, %	50.8
Segment Travel Time, minutes	0.64	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	70 - PERRY WORTH ROAD NWB BT 550 S AND JUNIORS WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	550	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	39.4

Vehicle Results			
Average Speed, mi/h	39.4	Percent Followers, %	60.9
Segment Travel Time, minutes	0.90	Adj. Follower Density, followers/mi/ln	8.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	70 - PERRY WORTH ROAD SEB BT 550 S AND JUNIORS WAY PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3126
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	703	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.78214	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42766	PF Power Coefficient (p)	0.70111
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3126	-	-	39.2

Vehicle Results			
Average Speed, mi/h	39.2	Percent Followers, %	67.2
Segment Travel Time, minutes	0.91	Adj. Follower Density, followers/mi/ln	12.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	71 - JUNIORS WAY NEB BT PERRY WORTH ROAD AND NEW HOPE BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	226	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	42.4
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/23/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	71 - JUNIORS WAY SWB BT PERRY WORTH ROAD AND NEW HOPE BLVD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2101
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	107	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.06

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.4
Speed Slope Coefficient (m)	2.11477	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42351	PF Power Coefficient (p)	0.63679
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2101	-	-	29.1

Vehicle Results			
Average Speed, mi/h	29.1	Percent Followers, %	29.0
Segment Travel Time, minutes	0.82	Adj. Follower Density, followers/mi/ln	1.1
Vehicle LOS	A		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	72 - PROPOSED RONALD REAGAN CORRIDOR NB BT WHITESTOWN PARKWAY AND PROPOSED RONALD REAGAN SPUR	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1147	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	655
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1972
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1972
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.6	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1379	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	787
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1972
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1972
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	73 - 475 E NB BT WHITESTOWN PARKWAY AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	13.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	307	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.2
Speed Slope Coefficient (m)	2.66403	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42128	PF Power Coefficient (p)	0.69331
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	37.8

Vehicle Results			
Average Speed, mi/h	37.8	Percent Followers, %	46.5
Segment Travel Time, minutes	1.03	Adj. Follower Density, followers/mi/ln	3.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	73 - 475 E SB BT WHITESTOWN PARKWAY AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3436
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	10.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	392	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.9
Speed Slope Coefficient (m)	2.70468	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42135	PF Power Coefficient (p)	0.69640
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3436	-	-	38.3

Vehicle Results			
Average Speed, mi/h	38.3	Percent Followers, %	52.3
Segment Travel Time, minutes	1.02	Adj. Follower Density, followers/mi/ln	5.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	74 - COMMERCE DRIVE NB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	2.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	89	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.92514	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.34124	PF Power Coefficient (p)	0.62577
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	25.5

Vehicle Results			
Average Speed, mi/h	25.5	Percent Followers, %	25.6
Segment Travel Time, minutes	1.72	Adj. Follower Density, followers/mi/ln	0.9
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	74 - COMMERCE DRIVE SB BT WHITESTOWN PARKWAY AND INDIANAPOLIS ROAD PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3863
Lane Width, ft	13	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	67	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	24.8
Speed Slope Coefficient (m)	1.88720	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.33351	PF Power Coefficient (p)	0.62169
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3863	-	-	24.8

Vehicle Results			
Average Speed, mi/h	24.8	Percent Followers, %	22.1
Segment Travel Time, minutes	1.77	Adj. Follower Density, followers/mi/ln	0.6
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	75 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	7.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	257	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.77880	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40027	PF Power Coefficient (p)	0.70264
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	41.6
Segment Travel Time, minutes	1.36	Adj. Follower Density, followers/mi/ln	2.7
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	75 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND COMMERCE DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	4742
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	435	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.6
Speed Slope Coefficient (m)	2.80861	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39973	PF Power Coefficient (p)	0.70478
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	4742	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	54.1
Segment Travel Time, minutes	1.35	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	76 - PERRY WORTH ROAD NWB BT JUNIORS WAY AND MILLS DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	675	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	2.02390	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.36179	PF Power Coefficient (p)	0.63594
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	17.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	25.7

Vehicle Results			
Average Speed, mi/h	25.7	Percent Followers, %	65.4
Segment Travel Time, minutes	1.65	Adj. Follower Density, followers/mi/ln	17.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	76 - PERRY WORTH ROAD SEB BT JUNIORS WAY AND MILLS DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	1.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	579	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.1
Speed Slope Coefficient (m)	2.12011	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37668	PF Power Coefficient (p)	0.64574
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	27.5

Vehicle Results			
Average Speed, mi/h	27.5	Percent Followers, %	62.0
Segment Travel Time, minutes	1.54	Adj. Follower Density, followers/mi/ln	13.1
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	77: PERRY WORTH ROAD BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1273	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	726
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.38

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	13.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	9
Free-Flow Speed (FFS), mi/h	40.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	724	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	414
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.22
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.3		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	78 - MILLS DRIVE EB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	939	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.55

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	32.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.0

Vehicle Results			
Average Speed, mi/h	21.0	Percent Followers, %	73.5
Segment Travel Time, minutes	0.82	Adj. Follower Density, followers/mi/ln	32.9
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	78 - MILLS DRIVE WB BT PERRY WORTH ROAD AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1518
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	468	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	22.6
Speed Slope Coefficient (m)	1.73647	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37610	PF Power Coefficient (p)	0.58740
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1518	-	-	21.4

Vehicle Results			
Average Speed, mi/h	21.4	Percent Followers, %	58.6
Segment Travel Time, minutes	0.80	Adj. Follower Density, followers/mi/ln	12.8
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	79: 650 E/S MAIN STREET BT MILLS DRIVE AND CENTRAL BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1386	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	791
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1224	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	699
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	80: 650 E/S MAIN STREET BT WHITESTOWN PARKWAY AND MILLS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	881	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	503
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.9		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	18
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1168	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	667
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.9		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	81 - CENTRAL BLVD EB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	12.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	193	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.5
Speed Slope Coefficient (m)	2.00104	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44742	PF Power Coefficient (p)	0.61446
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	26.8

Vehicle Results			
Average Speed, mi/h	26.8	Percent Followers, %	41.0
Segment Travel Time, minutes	0.54	Adj. Follower Density, followers/mi/ln	3.0
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	81 - CENTRAL BLVD WB BT 650 E AND HEARTLAND DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1276
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	20.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	430	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.5
Speed Slope Coefficient (m)	1.88857	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42514	PF Power Coefficient (p)	0.60180
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1276	-	-	24.3

Vehicle Results			
Average Speed, mi/h	24.3	Percent Followers, %	57.6
Segment Travel Time, minutes	0.60	Adj. Follower Density, followers/mi/ln	10.2
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	82 - HEARTLAND DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	414	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	26.0

Vehicle Results			
Average Speed, mi/h	26.0	Percent Followers, %	56.9
Segment Travel Time, minutes	0.51	Adj. Follower Density, followers/mi/ln	9.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	82 - HEARTLAND DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1172
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	13.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	185	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.11

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.3
Speed Slope Coefficient (m)	1.98613	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44470	PF Power Coefficient (p)	0.61282
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1172	-	-	26.5

Vehicle Results			
Average Speed, mi/h	26.5	Percent Followers, %	40.1
Segment Travel Time, minutes	0.50	Adj. Follower Density, followers/mi/ln	2.8
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	83 - CENTRAL BLVD EB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	4.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	251	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	29.5
Speed Slope Coefficient (m)	2.10537	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46459	PF Power Coefficient (p)	0.62572
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	28.5

Vehicle Results			
Average Speed, mi/h	28.5	Percent Followers, %	46.0
Segment Travel Time, minutes	0.44	Adj. Follower Density, followers/mi/ln	4.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	83 - CENTRAL BLVD WB BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1114
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	9.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	314	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	28.3
Speed Slope Coefficient (m)	2.04033	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.45428	PF Power Coefficient (p)	0.61876
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1114	-	-	27.2

Vehicle Results			
Average Speed, mi/h	27.2	Percent Followers, %	50.9
Segment Travel Time, minutes	0.47	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	84 - 700 E NB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1263	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.74

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	25.7
Speed Slope Coefficient (m)	1.90405	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42181	PF Power Coefficient (p)	0.60532
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	43.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	23.7

Vehicle Results			
Average Speed, mi/h	23.7	Percent Followers, %	80.6
Segment Travel Time, minutes	0.68	Adj. Follower Density, followers/mi/ln	43.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	84 - 700 E SB BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1421
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	689	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.41

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	27.6
Speed Slope Coefficient (m)	2.00568	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44156	PF Power Coefficient (p)	0.61668
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	18.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1421	-	-	26.0

Vehicle Results			
Average Speed, mi/h	26.0	Percent Followers, %	68.2
Segment Travel Time, minutes	0.62	Adj. Follower Density, followers/mi/ln	18.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	85 - VETERANS DRIVE NB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1162	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.68

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75171	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50391	PF Power Coefficient (p)	0.68309
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	24.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	81.1
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	24.4
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	85 - VETERANS DRIVE SB BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1066
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	14.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	653	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.38

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	38.9
Speed Slope Coefficient (m)	2.61756	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50442	PF Power Coefficient (p)	0.67297
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1066	-	-	36.9

Vehicle Results			
Average Speed, mi/h	36.9	Percent Followers, %	67.7
Segment Travel Time, minutes	0.33	Adj. Follower Density, followers/mi/ln	12.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	86 - WHITESTOWN PARKWAY EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	320	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.19

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.4
Speed Slope Coefficient (m)	2.64466	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50465	PF Power Coefficient (p)	0.67509
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	38.0

Vehicle Results			
Average Speed, mi/h	38.0	Percent Followers, %	50.2
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	4.2
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	86 - WHITESTOWN PARKWAY WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1309
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	288	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.4
Speed Slope Coefficient (m)	2.70022	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50459	PF Power Coefficient (p)	0.67932
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1309	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	47.6
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	3.5
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	87 - WHITESTOWN PARKWAY EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	445	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.72667	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47126	PF Power Coefficient (p)	0.68879
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	56.9
Segment Travel Time, minutes	0.55	Adj. Follower Density, followers/mi/ln	6.5
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	87 - WHITESTOWN PARKWAY WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1895
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	449	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.68873	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.47153	PF Power Coefficient (p)	0.68596
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1895	-	-	38.3

Vehicle Results			
Average Speed, mi/h	38.3	Percent Followers, %	57.2
Segment Travel Time, minutes	0.56	Adj. Follower Density, followers/mi/ln	6.7
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/3/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	88 - WHITESTOWN PARKWAY EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	795	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.47

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	72.3
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	14.7
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	88 - WHITESTOWN PARKWAY WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	739
Lane Width, ft	10	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	604	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.36

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.1
Speed Slope Coefficient (m)	2.79236	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50296	PF Power Coefficient (p)	0.68598
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	739	-	-	40.0

Vehicle Results			
Average Speed, mi/h	40.0	Percent Followers, %	65.5
Segment Travel Time, minutes	0.21	Adj. Follower Density, followers/mi/ln	9.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	89 - WHITESTOWN PARKWAY EB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1135	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.67

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.77587	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44113	PF Power Coefficient (p)	0.69839
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	23.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	79.3
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	23.3
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	89 - WHITESTOWN PARKWAY WB BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2650
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	714	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.74877	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44158	PF Power Coefficient (p)	0.69643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2650	-	-	38.7

Vehicle Results			
Average Speed, mi/h	38.7	Percent Followers, %	68.0
Segment Travel Time, minutes	0.78	Adj. Follower Density, followers/mi/ln	12.6
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	90 - WHITESTOWN PARKWAY EB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1409	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.83

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.0
Speed Slope Coefficient (m)	2.75887	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42853	PF Power Coefficient (p)	0.69936
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	31.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	37.9

Vehicle Results			
Average Speed, mi/h	37.9	Percent Followers, %	83.7
Segment Travel Time, minutes	0.93	Adj. Follower Density, followers/mi/ln	31.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	90 - WHITESTOWN PARKWAY WB BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3107
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	8.5

Demand and Capacity			
Directional Demand Flow Rate, veh/h	820	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.48

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.3
Speed Slope Coefficient (m)	2.66673	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42899	PF Power Coefficient (p)	0.69248
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3107	-	-	37.0

Vehicle Results			
Average Speed, mi/h	37.0	Percent Followers, %	71.2
Segment Travel Time, minutes	0.95	Adj. Follower Density, followers/mi/ln	15.8
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	91: WHITESTOWN PARKWAY BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2715	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1550
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	36.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	E
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2194	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1252
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	29.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	92 - WHITESTOWN PARKWAY BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	3273	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1246
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	29.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2194	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1252
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	30.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	93: WHITESTOWN PARKWAY BT PERRY WORTH ROAD AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	45.0	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2664	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1521
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.80

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.6
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	34.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.7	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2127	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1214
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.64
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.7
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	28.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	94: WHITESTOWN PARKWAY BT 650 E/S MAIN STREET AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	43.6	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2219	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1267
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.67

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	29.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.1		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	16
Free-Flow Speed (FFS), mi/h	44.0	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1436	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	820
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.43
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	18.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.1		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	95: WHITESTOWN PARKWAY BT HEARTLAND DRIVE AND VETERANS DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	43.4	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2153	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1229
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	43.4
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	28.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1527	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	872
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	20.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/22/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	96: WHITESTOWN PARKWAY BT 700 E AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	42.8	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1981	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1131
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.8
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	26.4
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	D
Access Point Density Adjustment (f_A)	1.8		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	11.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	13
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1766	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1008
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	3.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	97 - PROPOSED RONALD REAGAN CORRIDOR NB BT 750 S AND WHITESTOWN PARKWAY	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.9	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1292	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	738
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1978
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1978
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.2		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.9	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1373	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	784
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1978
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1978
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.2		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	98 - INDIANAPOLIS ROAD NWB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1512	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.89

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	32.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	39.0

Vehicle Results			
Average Speed, mi/h	39.0	Percent Followers, %	84.9
Segment Travel Time, minutes	1.09	Adj. Follower Density, followers/mi/ln	32.9
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	98 - INDIANAPOLIS ROAD SEB BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3741
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1752	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	1.03

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.3
Speed Slope Coefficient (m)	2.83565	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41327	PF Power Coefficient (p)	0.70651
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3741	-	-	39.9

Vehicle Results			
Average Speed, mi/h	-	Percent Followers, %	-
Segment Travel Time, minutes	-	Adj. Follower Density, followers/mi/ln	-
Vehicle LOS	F		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	99: FUTURE MINOR COLLECTOR EB BT DEVELOPMENT AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	950
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	148	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.09

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.6
Speed Slope Coefficient (m)	1.78966	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40216	PF Power Coefficient (p)	0.59025
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	950	-	-	23.1

Vehicle Results			
Average Speed, mi/h	23.1	Percent Followers, %	36.5
Segment Travel Time, minutes	0.47	Adj. Follower Density, followers/mi/ln	2.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	99: FUTURE MINOR COLLECTOR WB BT DEVELOPMENT AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	950
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	25	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	0	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.00

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	23.6
Speed Slope Coefficient (m)	1.78966	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.40216	PF Power Coefficient (p)	0.59025
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	950	-	-	23.6

Vehicle Results			
Average Speed, mi/h	23.6	Percent Followers, %	0.0
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	100 - INDIANAPOLIS ROAD NWB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.4

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1251	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.74

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.7
Speed Slope Coefficient (m)	2.80071	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42289	PF Power Coefficient (p)	0.70306
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	26.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	38.8

Vehicle Results			
Average Speed, mi/h	38.8	Percent Followers, %	81.1
Segment Travel Time, minutes	0.97	Adj. Follower Density, followers/mi/ln	26.2
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	100 - INDIANAPOLIS ROAD SEB BT 750 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3311
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	40	Access Point Density, pts/mi	1.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	1238	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.73

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.9
Speed Slope Coefficient (m)	2.86575	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.42101	PF Power Coefficient (p)	0.70759
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	25.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3311	-	-	39.9

Vehicle Results			
Average Speed, mi/h	39.9	Percent Followers, %	80.8
Segment Travel Time, minutes	0.94	Adj. Follower Density, followers/mi/ln	25.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	101 - 750 S EB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	23.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	113	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	35.5
Speed Slope Coefficient (m)	2.43464	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.49818	PF Power Coefficient (p)	0.65768
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	35.1

Vehicle Results			
Average Speed, mi/h	35.1	Percent Followers, %	30.0
Segment Travel Time, minutes	0.22	Adj. Follower Density, followers/mi/ln	1.0
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	101 - 750 S WB BT LIMITS AND 425 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	670
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	172	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	1.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	670	-	-	40.5

Vehicle Results			
Average Speed, mi/h	40.5	Percent Followers, %	36.3
Segment Travel Time, minutes	0.19	Adj. Follower Density, followers/mi/ln	1.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	102 - 750 S EB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.2

Demand and Capacity			
Directional Demand Flow Rate, veh/h	389	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.23

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.1
Speed Slope Coefficient (m)	2.69642	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46498	PF Power Coefficient (p)	0.68795
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	53.5
Segment Travel Time, minutes	0.60	Adj. Follower Density, followers/mi/ln	5.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	102 - 750 S WB BT 425 E AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2037
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	215	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.73165	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.46470	PF Power Coefficient (p)	0.69056
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2037	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	39.8
Segment Travel Time, minutes	0.58	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	103 - 750 S EB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	272	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.16

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	40.1

Vehicle Results			
Average Speed, mi/h	40.1	Percent Followers, %	46.1
Segment Travel Time, minutes	0.18	Adj. Follower Density, followers/mi/ln	3.1
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	103 - 750 S WB BT PROPOSED AND 475 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	629
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	223	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.13

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.4
Speed Slope Coefficient (m)	2.75442	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50386	PF Power Coefficient (p)	0.68329
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	629	-	-	40.3

Vehicle Results			
Average Speed, mi/h	40.3	Percent Followers, %	41.7
Segment Travel Time, minutes	0.18	Adj. Follower Density, followers/mi/ln	2.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	104 - 750 S EB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.6

Demand and Capacity			
Directional Demand Flow Rate, veh/h	347	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.20

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.74177	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38969	PF Power Coefficient (p)	0.69469
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	48.6
Segment Travel Time, minutes	1.94	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	104 - 750 S WB BT 475 E AND 600 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	6559
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	426	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.25

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.2
Speed Slope Coefficient (m)	2.75261	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.38962	PF Power Coefficient (p)	0.69550
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	6559	-	-	38.5

Vehicle Results			
Average Speed, mi/h	38.5	Percent Followers, %	53.6
Segment Travel Time, minutes	1.94	Adj. Follower Density, followers/mi/ln	5.9
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	105 - 750 S EB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	298	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.18

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.7
Speed Slope Coefficient (m)	2.75127	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41555	PF Power Coefficient (p)	0.70042
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	39.3

Vehicle Results			
Average Speed, mi/h	39.3	Percent Followers, %	45.4
Segment Travel Time, minutes	1.07	Adj. Follower Density, followers/mi/ln	3.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	105 - 750 S WB BT 600 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3709
Lane Width, ft	10	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	5.7

Demand and Capacity			
Directional Demand Flow Rate, veh/h	546	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.0
Speed Slope Coefficient (m)	2.71198	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.41584	PF Power Coefficient (p)	0.69752
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	8.7
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3709	-	-	38.1

Vehicle Results			
Average Speed, mi/h	38.1	Percent Followers, %	60.5
Segment Travel Time, minutes	1.11	Adj. Follower Density, followers/mi/ln	8.7
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	106 - PROPOSED RONALD REAGAN CORRIDOR NB BT LIMITS AND 750 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.7	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1084	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	619
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1974
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1974
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.7
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.4		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.6
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	10
Free-Flow Speed (FFS), mi/h	48.7	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1279	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	730
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1974
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1974
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	48.7
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.4		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	107 - 600 E NB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	84	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.05

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	39.8
Speed Slope Coefficient (m)	2.66772	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50464	PF Power Coefficient (p)	0.67688
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	39.8

Vehicle Results			
Average Speed, mi/h	39.8	Percent Followers, %	24.5
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	0.5
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	107 - 600 E SB BT LIMITS AND 750 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1321
Lane Width, ft	9	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	65	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.04

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.8
Speed Slope Coefficient (m)	2.72192	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.50430	PF Power Coefficient (p)	0.68094
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1321	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	20.9
Segment Travel Time, minutes	0.37	Adj. Follower Density, followers/mi/ln	0.3
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	108 - INDIANAPOLIS ROAD NWB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	10
Speed Limit, mi/h	40	Access Point Density, pts/mi	17.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	778	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.46

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	44.0
Speed Slope Coefficient (m)	2.89704	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48404	PF Power Coefficient (p)	0.69658
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	41.5

Vehicle Results			
Average Speed, mi/h	41.5	Percent Followers, %	71.2
Segment Travel Time, minutes	0.43	Adj. Follower Density, followers/mi/ln	13.4
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	108 - INDIANAPOLIS ROAD SEB BT 750 S AND LIMITS	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1556
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	6.8

Demand and Capacity			
Directional Demand Flow Rate, veh/h	761	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	40.9
Speed Slope Coefficient (m)	2.73173	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48917	PF Power Coefficient (p)	0.68512
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1556	-	-	38.6

Vehicle Results			
Average Speed, mi/h	38.6	Percent Followers, %	70.9
Segment Travel Time, minutes	0.46	Adj. Follower Density, followers/mi/ln	14.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	109 - 600 E (575 REALIGNED) NB BT 200 S AND 100 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5304
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	470	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	48.1
Speed Slope Coefficient (m)	3.16659	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37599	PF Power Coefficient (p)	0.72714
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	5.6
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5304	-	-	46.0

Vehicle Results			
Average Speed, mi/h	46.0	Percent Followers, %	54.8
Segment Travel Time, minutes	1.31	Adj. Follower Density, followers/mi/ln	5.6
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	10/24/2025
Agency	EMCS, INC.	Analysis Year	2035
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	109 - 600 E (575 REALIGNED) SB BT 200 S AND 100 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	5304
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	45	Access Point Density, pts/mi	1.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	374	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.22

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	48.1
Speed Slope Coefficient (m)	3.16659	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37599	PF Power Coefficient (p)	0.72714
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5304	-	-	46.2

Vehicle Results			
Average Speed, mi/h	46.2	Percent Followers, %	49.0
Segment Travel Time, minutes	1.30	Adj. Follower Density, followers/mi/ln	4.0
Vehicle LOS	B		

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10-Year - Improved

AM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	15 - 700 E NB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	488	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.29

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.5
Speed Slope Coefficient (m)	2.78094	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44182	PF Power Coefficient (p)	0.69861
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	39.7

Vehicle Results			
Average Speed, mi/h	39.7	Percent Followers, %	58.3
Segment Travel Time, minutes	0.75	Adj. Follower Density, followers/mi/ln	7.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	15 - 700 E SB BT 300 S AND PROPOSED	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	547	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.5
Speed Slope Coefficient (m)	2.56279	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44118	PF Power Coefficient (p)	0.68196
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	35.7

Vehicle Results			
Average Speed, mi/h	35.7	Percent Followers, %	61.5
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	9.4
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	18: PIERCE STREET/300 S EB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	24.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	415	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.7
Speed Slope Coefficient (m)	1.71098	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.30607	PF Power Coefficient (p)	0.60015
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	20.6

Vehicle Results			
Average Speed, mi/h	20.6	Percent Followers, %	53.7
Segment Travel Time, minutes	1.75	Adj. Follower Density, followers/mi/ln	10.8
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	18 - PIERCE STREET/300 S WB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	284	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.5
Speed Slope Coefficient (m)	1.53754	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25429	PF Power Coefficient (p)	0.58037
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	17.7

Vehicle Results			
Average Speed, mi/h	17.7	Percent Followers, %	45.3
Segment Travel Time, minutes	2.04	Adj. Follower Density, followers/mi/ln	7.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	19 - PIERCE STREET/300 S EB BT MAIN ST AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	28.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	504	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.7
Speed Slope Coefficient (m)	1.65384	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.30502	PF Power Coefficient (p)	0.59047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	19.6

Vehicle Results			
Average Speed, mi/h	19.6	Percent Followers, %	58.2
Segment Travel Time, minutes	1.53	Adj. Follower Density, followers/mi/ln	15.0
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	19 - PIERCE STREET/300 S WB BT MAIN ST AND 700 E	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	249	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.15

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.3
Speed Slope Coefficient (m)	1.51970	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.26297	PF Power Coefficient (p)	0.57491
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	17.6

Vehicle Results			
Average Speed, mi/h	17.6	Percent Followers, %	43.3
Segment Travel Time, minutes	1.71	Adj. Follower Density, followers/mi/ln	6.1
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	20 - PIERCE STREET/300 S EB BT 700 E AND ALBERT S WHITE DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	246	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.14

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.2
Speed Slope Coefficient (m)	1.93058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43393	PF Power Coefficient (p)	0.60659
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	4.4
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	25.4

Vehicle Results			
Average Speed, mi/h	25.4	Percent Followers, %	45.8
Segment Travel Time, minutes	0.25	Adj. Follower Density, followers/mi/ln	4.4
Vehicle LOS	B		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	20 - PIERCE STREET/300 S WB BT 700 E AND ALBERT S WHITE DR	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	18.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	511	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.5
Speed Slope Coefficient (m)	1.67448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37122	PF Power Coefficient (p)	0.57643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	20.4

Vehicle Results			
Average Speed, mi/h	20.4	Percent Followers, %	60.6
Segment Travel Time, minutes	0.31	Adj. Follower Density, followers/mi/ln	15.2
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestwon	Time Analyzed	AM
Project Description	21 - ALBERT S WHITE DR BT 300S AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	12.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	12
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1095	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	625
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	3.1		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	12
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1171	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	668
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	24 - 450 E BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	31	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	18
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.01

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	0.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	3.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	174	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	100
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.05
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	2.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.8		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	25 - 500 E BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	356	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	203
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.11

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	2.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	6.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	683	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	390
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	28 - MAIN STREET BT 700 E/GINGER WAY AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	6.2
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	264	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	150
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.08

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	3.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.6		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.2
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	515	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	294
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.15
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.6		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	30 - ALBERT S WHITE DR BT PROPOSED AND 300 S PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	880	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	502
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1327	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	758
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	31 - ALBERT S WHITE DR BT 700 E AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1185	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	676
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.36

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1698	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	970
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.51
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	22.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	32: ALBERT S WHITE DRIVE BT I-65 AND 400 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2130	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	811
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.43

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	19.2
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2080	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	792
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/2/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	33: ALBERT S WHITE DRIVE BT 400 E AND 450 E/ ANSON BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	3.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1550	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	590
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1625	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	618
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	36 - ALBERT S WHITE DR EB BT 575 E AND 650 E PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.9	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	876	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	500
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.6		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.3	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1463	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	835
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.3
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	37 - 400 S/ALBERT S WHITE DRIVE BT 650 E AND 700 E/GINGER WAY	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1243	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	710
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	392	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	224
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.12
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.5		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	45 - 700 E NB BT 400 S/ Albert S White Drive AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	176	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.10

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	2.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	31.2

Vehicle Results			
Average Speed, mi/h	31.2	Percent Followers, %	38.6
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	2.2
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	45 - 700 E SB BT 400 S AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	353	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.21

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.7

Vehicle Results			
Average Speed, mi/h	30.7	Percent Followers, %	53.3
Segment Travel Time, minutes	0.38	Adj. Follower Density, followers/mi/ln	6.1
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	47 - STATE ROAD 267 BT LIMITS AND INDIANAPOLIS ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.7	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	794	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	454
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1932
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1932
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	9.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.4		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.7	Total Lateral Clearance (TLC), ft	11
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1001	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	572
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1932
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1932
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	12.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.4		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	52 - 700 E NB BT LIMITS AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	4.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	114	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.07

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.6
Speed Slope Coefficient (m)	2.78638	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44168	PF Power Coefficient (p)	0.69900
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	41.2

Vehicle Results			
Average Speed, mi/h	41.2	Percent Followers, %	27.1
Segment Travel Time, minutes	0.72	Adj. Follower Density, followers/mi/ln	0.8
Vehicle LOS	A		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	52 - 700 E SB BT LIMITS AND 425 S	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	295	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.84058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44022	PF Power Coefficient (p)	0.70280
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	3.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	41.2

Vehicle Results			
Average Speed, mi/h	41.2	Percent Followers, %	45.7
Segment Travel Time, minutes	0.72	Adj. Follower Density, followers/mi/ln	3.3
Vehicle LOS	B		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	63 - 550 S BT 475 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	678	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	387
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.4	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1226	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	700
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	65: 550 S BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1871	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	712
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2409	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	917
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	68 - 475 E BT PROPOSED AND 550 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	675	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	386
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	955	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	545
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	76: PERRY WORTH ROAD NWB BT MILLS DRIVE AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	412	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.24

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.7
Speed Slope Coefficient (m)	2.26103	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39387	PF Power Coefficient (p)	0.65944
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	30.3

Vehicle Results			
Average Speed, mi/h	30.3	Percent Followers, %	54.0
Segment Travel Time, minutes	1.40	Adj. Follower Density, followers/mi/ln	7.3
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	76: PERRY WORTH ROAD SEB BT MILLS DRIVE AND JUNIORS WAY	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	474	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.7
Speed Slope Coefficient (m)	2.26103	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39387	PF Power Coefficient (p)	0.65944
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	9.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	30.2

Vehicle Results			
Average Speed, mi/h	30.2	Percent Followers, %	57.3
Segment Travel Time, minutes	1.41	Adj. Follower Density, followers/mi/ln	9.0
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	84 - 700 E BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	14.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	38.8	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	368	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	210
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.11

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	38.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.7		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.7	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	635	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	362
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	85 - VETERANS DRIVE BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.3	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	370	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	211
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.11

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	5.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	14.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	38.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	682	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	390
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.21
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	38.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.7		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/2/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	88 - WHITESTOWN PARKWAY BT PROPOSED AND 475 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	568	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	324
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	621	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	354
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	89 - WHITESTOWN PARKWAY BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	666	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	380
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	784	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	448
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	90 - WHITESTOWN PARKWAY BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.7
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	858	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	490
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	11.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.4		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	8.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.4	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1079	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	616
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	2.1		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	91: WHITESTOWN PARKWAY BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1943	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	739
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	17.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2045	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	778
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	18.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	92: WHITESTOWN PARKWAY BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	4	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1609	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	459
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.24

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	10.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2399	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	913
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	22.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/2/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	93: WHITESTOWN PARKWAY BT PERRY WORTH ROAD AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	45.0	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1401	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	533
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	45.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	11.8
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.7	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2318	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	882
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.7
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	20.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	98 - INDIANAPOLIS ROAD BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1303	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	744
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1020	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	582
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	AM
Project Description	100 - INDIANAPOLIS ROAD BT 750 S AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	6.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.9	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1052	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	600
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.6		

Direction 2 Geometric Data			
Direction 2	SEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	750	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	428
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.4		

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PM Peak Hour

HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	15 - 700 E NB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	2.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	811	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.48

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	41.5
Speed Slope Coefficient (m)	2.78094	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44182	PF Power Coefficient (p)	0.69861
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	39.1

Vehicle Results			
Average Speed, mi/h	39.1	Percent Followers, %	71.2
Segment Travel Time, minutes	0.76	Adj. Follower Density, followers/mi/ln	14.8
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	15 - 700 E SB BT 300 S AND PROPOSED PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2625
Lane Width, ft	11	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	18.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	623	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.37

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	37.5
Speed Slope Coefficient (m)	2.56279	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44118	PF Power Coefficient (p)	0.68196
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	11.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2625	-	-	35.6

Vehicle Results			
Average Speed, mi/h	35.6	Percent Followers, %	64.8
Segment Travel Time, minutes	0.84	Adj. Follower Density, followers/mi/ln	11.3
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	18 - PIERCE STREET/300 S EB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	24.3

Demand and Capacity			
Directional Demand Flow Rate, veh/h	590	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.7
Speed Slope Coefficient (m)	1.71098	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.30607	PF Power Coefficient (p)	0.60015
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	17.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	20.4

Vehicle Results			
Average Speed, mi/h	20.4	Percent Followers, %	61.4
Segment Travel Time, minutes	1.77	Adj. Follower Density, followers/mi/ln	17.8
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	18 - PIERCE STREET/300 S WB BT 600 E (575 REALIGNED) AND MAIN STREET	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3177
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.1

Demand and Capacity			
Directional Demand Flow Rate, veh/h	283	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.17

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.5
Speed Slope Coefficient (m)	1.53754	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.25429	PF Power Coefficient (p)	0.58037
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	7.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3177	-	-	17.7

Vehicle Results			
Average Speed, mi/h	17.7	Percent Followers, %	45.3
Segment Travel Time, minutes	2.04	Adj. Follower Density, followers/mi/ln	7.2
Vehicle LOS	C		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	19 - PIERCE STREET/300 S EB BT MAIN ST AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	28.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	667	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	20.7
Speed Slope Coefficient (m)	1.65384	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.30502	PF Power Coefficient (p)	0.59047
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	22.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	19.4

Vehicle Results			
Average Speed, mi/h	19.4	Percent Followers, %	64.2
Segment Travel Time, minutes	1.55	Adj. Follower Density, followers/mi/ln	22.1
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/11/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	19 - PIERCE STREET/300 S WB BT MAIN ST AND 700 E PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2644
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	37.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	473	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.28

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	18.3
Speed Slope Coefficient (m)	1.51970	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.26297	PF Power Coefficient (p)	0.57491
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	15.3
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2644	-	-	17.3

Vehicle Results			
Average Speed, mi/h	17.3	Percent Followers, %	56.0
Segment Travel Time, minutes	1.74	Adj. Follower Density, followers/mi/ln	15.3
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	20 - PIERCE STREET/300 S EB BT 700 E AND ALBERT S WHITE DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	767	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	26.2
Speed Slope Coefficient (m)	1.93058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.43393	PF Power Coefficient (p)	0.60659
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	22.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	24.6

Vehicle Results			
Average Speed, mi/h	24.6	Percent Followers, %	70.5
Segment Travel Time, minutes	0.26	Adj. Follower Density, followers/mi/ln	22.0
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	20 - PIERCE STREET/300 S WB BT 700 E AND ALBERT S WHITE DR PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	558
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	25	Access Point Density, pts/mi	18.9

Demand and Capacity			
Directional Demand Flow Rate, veh/h	876	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.52

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	21.5
Speed Slope Coefficient (m)	1.67448	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.37122	PF Power Coefficient (p)	0.57643
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	31.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	558	-	-	20.0

Vehicle Results			
Average Speed, mi/h	20.0	Percent Followers, %	71.9
Segment Travel Time, minutes	0.32	Adj. Follower Density, followers/mi/ln	31.5
Vehicle LOS	E		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestwon	Time Analyzed	PM
Project Description	21 - ALBERT S WHITE DR BT 300S AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	12.2
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	12
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1474	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	842
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	3.1		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	12
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1596	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	911
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.7
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	24 - 450 E BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.6	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	344	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	196
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.10

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	4.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	3.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	763	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	436
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.8		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	25 - 500 E BT ALBERT S WHITE DR AND LIMITS PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	602	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	344
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.18

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	2.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	6.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	197	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	112
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.06
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	2.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	28 - MAIN STREET BT 700 E/GINGER WAY AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	6.2
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	733	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	418
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.22

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.6		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.2
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	660	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	377
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.6		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	30 - ALBERT S WHITE DR BT PROPOSED AND 300 S PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1326	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	757
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1406	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	802
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	31 - ALBERT S WHITE DR BT 700 E AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1877	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1072
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	25.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1848	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1055
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	32: ALBERT S WHITE DRIVE BT I-65 AND 400 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2647	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1007
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	23.9
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2690	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1024
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.54
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.3
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/2/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	33: ALBERT S WHITE DRIVE BT 400 E AND 450 E/ ANSON BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	3.9
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	41.2	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1959	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	746
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	11.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.2	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2001	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	762
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	1.9	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.1
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	36 - ALBERT S WHITE DR EB BT 575 E AND 650 E PM	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.9	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1222	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	698
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.7
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.6		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.3	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1413	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	806
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.3
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	19.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	37 - 400 S/ALBERT S WHITE DRIVE BT 650 E AND 700 E/GINGER WAY	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1537	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	878
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	20.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1789	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1022
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.54
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	45 - 700 E NB BT 400 S/ Albert S White Drive AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	838	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.49

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	20.5
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	73.4
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	20.5
Vehicle LOS	E		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	45 - 700 E SB BT 400 S AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	1030
Lane Width, ft	12	Shoulder Width, ft	3
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	525	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.9
Speed Slope Coefficient (m)	2.23952	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.48194	PF Power Coefficient (p)	0.63942
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	10.8
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1030	-	-	30.4

Vehicle Results			
Average Speed, mi/h	30.4	Percent Followers, %	62.5
Segment Travel Time, minutes	0.39	Adj. Follower Density, followers/mi/ln	10.8
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	47 - STATE ROAD 267 BT LIMITS AND INDIANAPOLIS ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.7	Total Lateral Clearance (TLC), ft	11

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1128	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	644
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1932
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1932
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	13.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.4		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	50.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	46.7	Total Lateral Clearance (TLC), ft	11
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1080	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	616
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1932
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1932
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	46.6
Total Lateral Clearance Adj. (f_{LLC})	0.4	Density (D), pc/mi/ln	13.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.4		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	52 - 700 E NB BT LIMITS AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	760	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.45

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.84058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44022	PF Power Coefficient (p)	0.70280
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	13.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	40.2

Vehicle Results			
Average Speed, mi/h	40.2	Percent Followers, %	69.5
Segment Travel Time, minutes	0.74	Adj. Follower Density, followers/mi/ln	13.1
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	52 - 700 E SB BT LIMITS AND 425 S PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	2626
Lane Width, ft	12	Shoulder Width, ft	2
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	450	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.26

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	42.6
Speed Slope Coefficient (m)	2.84058	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.44022	PF Power Coefficient (p)	0.70280
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	6.2
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2626	-	-	40.8

Vehicle Results			
Average Speed, mi/h	40.8	Percent Followers, %	56.0
Segment Travel Time, minutes	0.73	Adj. Follower Density, followers/mi/ln	6.2
Vehicle LOS	C		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	63 - 550 S BT 475 E AND INDIANAPOLIS ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1209	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	690
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.36

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.2
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.4	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	902	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	515
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.27
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	65: 550 S BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2619	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	997
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.52

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	22.6
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	8
Free-Flow Speed (FFS), mi/h	44.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2785	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1060
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	44.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	24.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	68 - 475 E BT PROPOSED AND 550 S	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1004	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	573
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.30

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	13.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	954	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	544
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	12.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	76 - PERRY WORTH ROAD NWB BT JUNIORS WAY AND MILLS DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	675	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.40

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.7
Speed Slope Coefficient (m)	2.26103	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39387	PF Power Coefficient (p)	0.65944
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	14.9
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	29.9

Vehicle Results			
Average Speed, mi/h	29.9	Percent Followers, %	65.9
Segment Travel Time, minutes	1.42	Adj. Follower Density, followers/mi/ln	14.9
Vehicle LOS	D		

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HCS Two-Lane Highway Report

Project Information			
Analyst	DAD	Date	11/12/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	76 - PERRY WORTH ROAD SEB BT JUNIORS WAY AND MILLS DRIVE PM	Units	U.S. Customary

Segment 1

Vehicle Inputs			
Segment Type	Passing Constrained	Length, ft	3732
Lane Width, ft	11	Shoulder Width, ft	6
Speed Limit, mi/h	30	Access Point Density, pts/mi	7.0

Demand and Capacity			
Directional Demand Flow Rate, veh/h	579	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.92	Total Trucks, %	5.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.34

Intermediate Results			
Segment Vertical Class	1	Free-Flow Speed, mi/h	31.7
Speed Slope Coefficient (m)	2.26103	Speed Power Coefficient (p)	0.41674
PF Slope Coefficient (m)	-1.39387	PF Power Coefficient (p)	0.65944
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	12.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	3732	-	-	30.0

Vehicle Results			
Average Speed, mi/h	30.0	Percent Followers, %	62.2
Segment Travel Time, minutes	1.41	Adj. Follower Density, followers/mi/ln	12.0
Vehicle LOS	D		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	84 - 700 E BT CENTRAL BLVD AND LIMITS	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	14.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	38.8	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1162	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	664
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	38.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	3.7		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	7.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.7	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	634	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	362
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.19
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.6
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	1.9		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	85 - VETERANS DRIVE BT WHITESTOWN PARKWAY AND CENTRAL BLVD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	5.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.3	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1069	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	610
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.2
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.3		

Direction 2 Geometric Data			
Direction 2	SB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	14.9
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	38.8	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	601	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	343
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.18
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	38.8
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	3.7		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/2/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	88 - WHITESTOWN PARKWAY BT PROPOSED AND 475 E	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	731	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	418
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.22

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	9.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	556	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	318
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.17
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	7.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.0		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	89 - WHITESTOWN PARKWAY BT 475 E AND COMMERCE DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.5	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1044	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	596
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.5
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	14.0
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.0
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	657	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	375
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.20
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	8.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	0.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	90 - WHITESTOWN PARKWAY BT COMMERCE DRIVE AND INDIANAPOLIS ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.7
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.1	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1296	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	740
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.39

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	17.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.4		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	8.5
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.4	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	754	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	430
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.23
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.4
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	10.6
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	A
Access Point Density Adjustment (f_A)	2.1		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	91: WHITESTOWN PARKWAY BT INDIANAPOLIS ROAD AND I-65	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2715	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1033
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.54

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	24.5
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2194	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	835
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	19.8
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.2		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	11/25/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	92: WHITESTOWN PARKWAY BT I-65 AND PERRY WORTH ROAD	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	4	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	4.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.3	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	3273	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	934
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.49

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.2
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	22.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	1.2		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.3
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	41.1	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2194	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	835
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	41.1
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	20.3
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/2/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	93: WHITESTOWN PARKWAY BT PERRY WORTH ROAD AND HEARTLAND DRIVE	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	EB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	0.0
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	45.0	Total Lateral Clearance (TLC), ft	12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	2664	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	1014
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	45.0
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	22.5
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.0		

Direction 2 Geometric Data			
Direction 2	WB		
Number of Lanes (N), ln	3	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	9.1
Median Type	Divided	Left-Side Lateral Clearance (LC_R), ft	20
Free-Flow Speed (FFS), mi/h	42.7	Total Lateral Clearance (TLC), ft	12
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	2127	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	810
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.43
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.7
Total Lateral Clearance Adj. (f_{LLC})	0.0	Density (D), pc/mi/ln	19.0
Median Type Adjustment (f_M)	0.0	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	2.3		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/4/2025
Agency	EMCS, INC.	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	98 - INDIANAPOLIS ROAD BT WHITESTOWN PARKWAY AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1391	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	794
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.42

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	18.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

Direction 2 Geometric Data			
Direction 2	SEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	2.1
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.0	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1612	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	920
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.0
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	21.9
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	C
Access Point Density Adjustment (f_A)	0.5		

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HCS Multilane Highway Report

Project Information			
Analyst	DAD	Date	12/1/2025
Agency	EMCS, INC	Analysis Year	2035 - Improvements
Jurisdiction	Town of Whitestown	Time Analyzed	PM
Project Description	100 - INDIANAPOLIS ROAD BT 750 S AND PROPOSED	Units	U.S. Customary

Direction 1 Geometric Data			
Direction 1	NWB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	6.4
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	40.9	Total Lateral Clearance (TLC), ft	8

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity			
Volume (V) veh/h	1151	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	657
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35

Direction 1 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	40.9
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	16.1
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	1.6		

Direction 2 Geometric Data			
Direction 2	SEB		
Number of Lanes (N), ln	2	Terrain Type	Level
Measured or Base Free-Flow Speed	Base	Percent Grade, %	-
Base Free-Flow Speed (BFFS), mi/h	45.0	Grade Length, mi	-
Lane Width, ft	12.0	Access Point Density, pts/mi	1.6
Median Type	Undivided	Left-Side Lateral Clearance (LC_R), ft	6
Free-Flow Speed (FFS), mi/h	42.1	Total Lateral Clearance (TLC), ft	8
Direction 2 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Capacity			
Volume (V) veh/h	1139	Heavy Vehicle Adjustment Factor (f_{HV})	0.952
Peak Hour Factor	0.92	Flow Rate (V_p), pc/h/ln	650
Total Trucks, %	5.00	Capacity (c), pc/h/ln	1900
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1900
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34
Direction 2 Speed and Density			
Lane Width Adjustment (f_{LW})	0.0	Average Speed (S), mi/h	42.1
Total Lateral Clearance Adj. (f_{LLC})	0.9	Density (D), pc/mi/ln	15.4
Median Type Adjustment (f_M)	1.6	Level of Service (LOS)	B
Access Point Density Adjustment (f_A)	0.4		

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