



BICYCLE+PEDESTRIAN MASTER PLAN
WHITESTOWN

ADOPTED: AUGUST 8, 2018

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1 EXECUTIVE SUMMARY



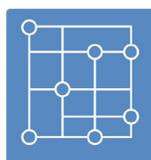
The bicycle and pedestrian master plan provides a comprehensive set of policies and capital improvement projects that, once constructed, will help people walk and bicycle more often for more types of trips.

WHY DOES WHITESTOWN NEED A BIKE + PED PLAN?

WHITESTOWN IS COMPLETING A BICYCLE AND PEDESTRIAN MASTER PLAN TO EXPAND QUALITY OF LIFE OFFERINGS, COMPETE FOR NEW BUSINESSES AND INDUSTRIES, AND DRAW IN NEW RESIDENTS.

Whitestown has a lofty goal - to become one of the most walkable and bikeable communities in Indiana. This plan identifies a network of routes and corridors where multi-modal transportation can and should occur to reach this goal (Figure A). While the creation of walkable and bikable infrastructure is an important step in reaching this goal, Whitestown must also focus on creating a culture centered around walking and biking.

OUR PRIORITIES:



CREATE THE NETWORK

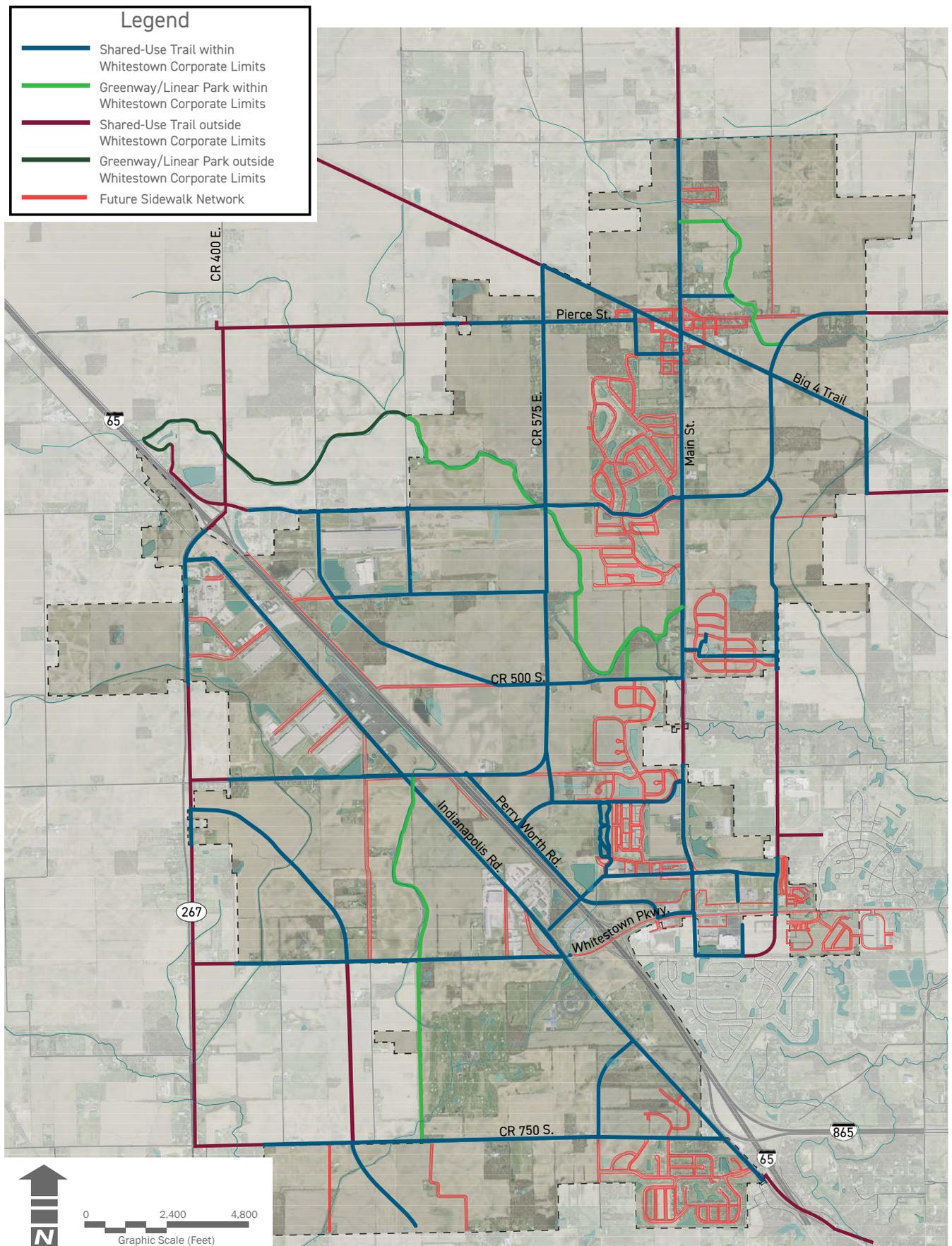
Creating the proper infrastructure is the first step. This plan has identified needed routes and corridors to make the desired connection for a complete multi-modal transportation network. This includes shared-use trails, greenways and linear parks, and sidewalk additions and improvements.



BUILD THE CULTURE

The next step is to build a culture centered around biking and walking to get people motivated to use these alternative modes of transportation for more than leisure. This plan contains recommendations for policy, ordinance, and advocacy actions to encourage the building and strengthening of this new culture and to ensure the built environment supports bicycling and walking as an alternative means of transportation.

FIGURE A - FUTURE BIKE + PEDESTRIAN NETWORK



WHAT ACTIONS NEED TO BE TAKEN TO MAKE THIS PLAN A REALITY?

THE MAIN GOAL FOR THIS PLAN IS TO CREATE A COMPLETE AND EXTENSIVE BICYCLE AND PEDESTRIAN NETWORK. IT IS RECOGNIZED THAT THIS IS A LONG-TERM GOAL, ONE THAT WILL TAKE MANY YEARS AND SMALL STEPS TO ACHIEVE.

There are, however, several actions that can be taken in the short-term to get the process started and go a long way in making the complete network a reality.

This plan has identified four short-term action items:

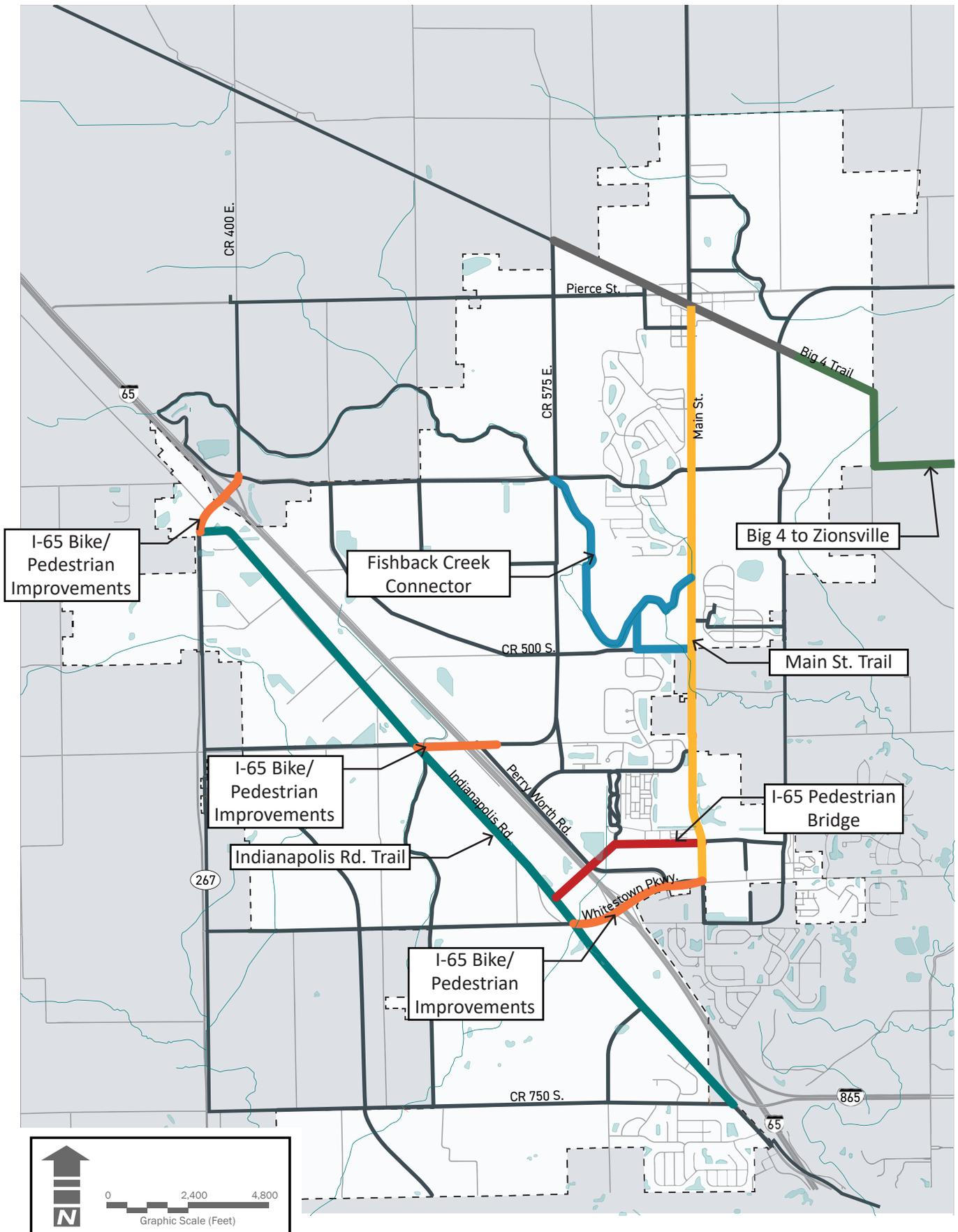
1

CONSTRUCT PRIORITY PROJECTS/ROUTES

Figure B shows the short-term projects that have been identified as priorities for the Master Plan. This includes:

- Providing a major north/south connector trail along Main Street;
- Extending the already well-used Indianapolis Road trail north the the road's terminus;
- Creating a greenway/linear park connector along Fishback Creek;
- Providing safer and more convenient pedestrian and bicycle access across Interstate 65 through interchange enhancements and a stand-alone pedestrian bridge; and
- Extending the Big 4 Trail to Zionsville.

FIGURE B - PRIORITY PROJECTS



2

UPDATE DEVELOPMENT ORDINANCES

Whitestown's development standards currently only require sidewalks with new developments. These standards should be updated to support the goals of this plan, including:

- Require developers to build shared-use trails when they are within or adjacent to proposed developments.
- Update sidewalk and trail standards to be consistent between this plan, the Thoroughfare Plan, and the Unified Development Ordinance.
- Require town projects to follow the same requirements as any other new development.

3

BEGIN PROGRAMMING TO SUPPORT A CULTURE OF WALKING AND BICYCLING

A culture of walking and bicycling takes more than connecting sidewalks. Recommended short-term priorities include:

- Partner with local schools to develop Safe Routes to Schools Master Plans in order to encourage more students to walk and bike to school, and to make it safer for them to do so.
- Develop an annual calendar of programming events.

4

ADVOCATE FOR WALKING AND BICYCLING AS PART OF LOCAL AND REGIONAL PROJECTS

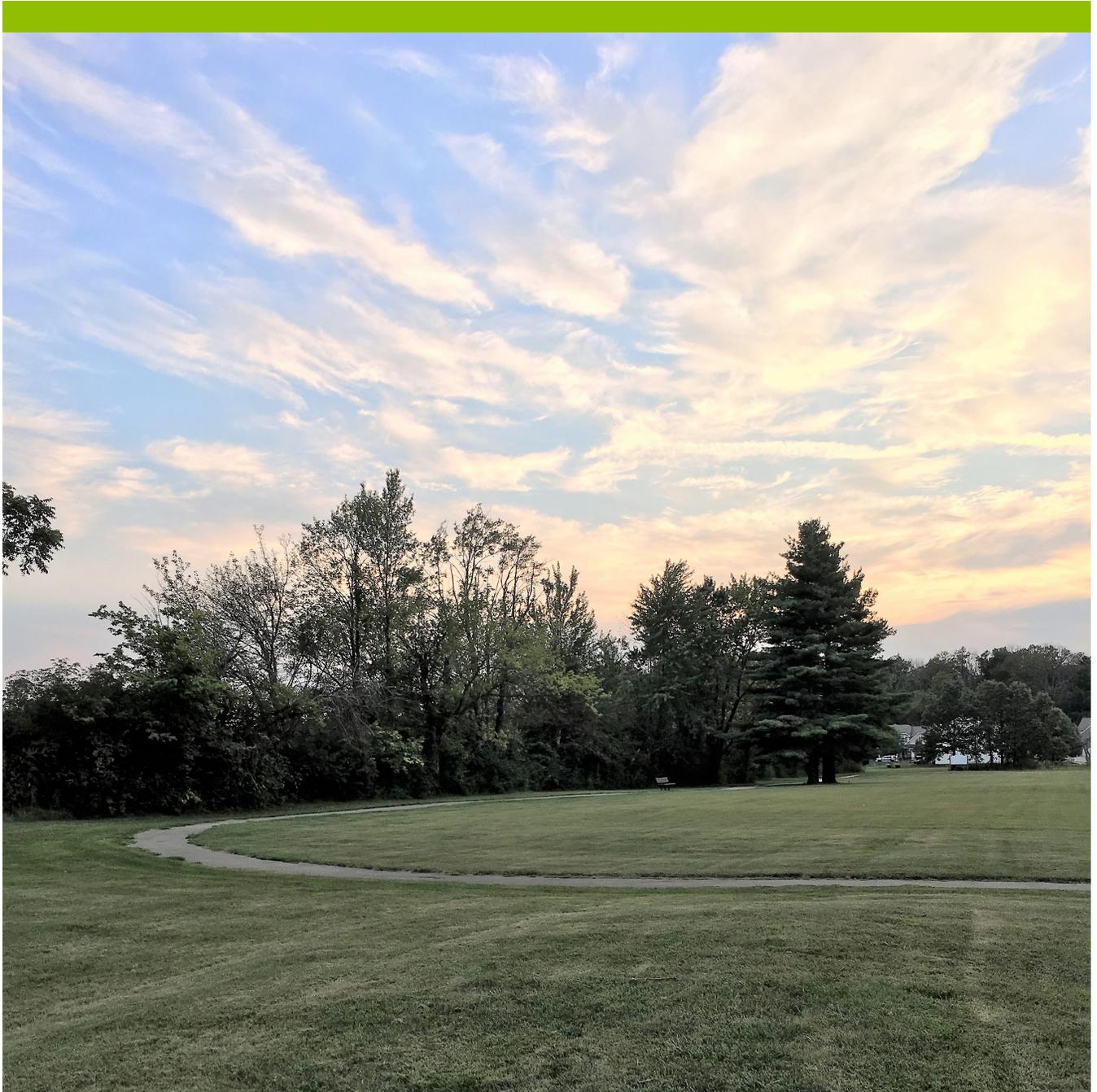
Whitestown should take a strong position in advocating for bicycle and pedestrian accommodation as part of local and regional projects. This should include:

- On developer projects, Whitestown should utilize its Technical Advisory Committee review process to ensure bicycle and pedestrian standards are followed in all new developments.
- Whitestown should advocate for regional bicycle and pedestrian infrastructure projects by serving on planning committees, providing input during participation events, and by providing input as a Consulting Party on federally funded projects.



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2 INTRODUCTION



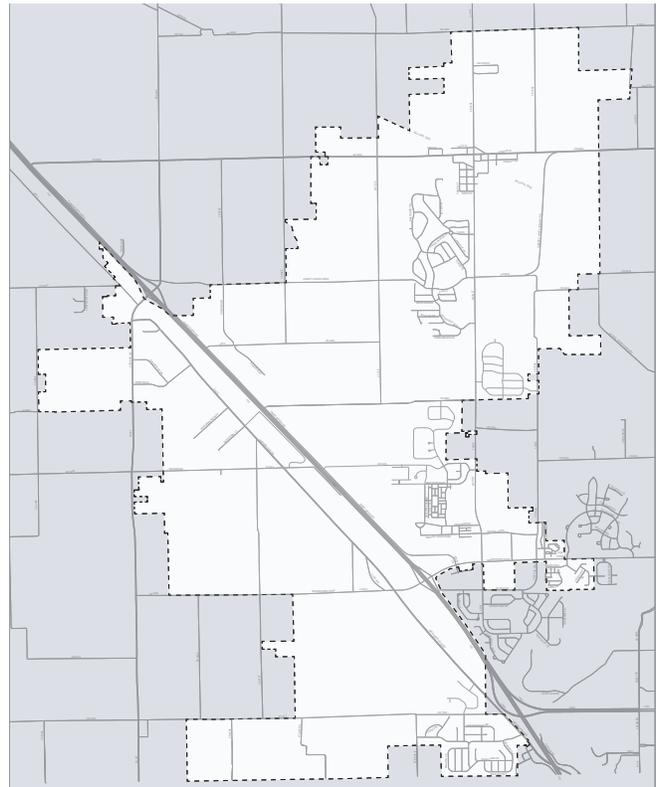
This plan started with a demanding goal. Whitestown leaders want the community to be one of the most walkable and bikeable communities in Indiana. By establishing this plan before rapid growth builds out key remaining corridors, Whitestown can be well-positioned to achieve this goal. This plan outlines goals, policies, programming and infrastructure projects that will help Whitestown realize this goal.

WHAT ARE THE BOUNDARIES FOR WHITESTOWN?

THE PRIMARY STUDY AREA FOR THIS PLAN IS THE CURRENT CORPORATE LIMITS OF WHITESTOWN (SEE FIGURE C).

Since Whitestown has an irregular boundary, multiple trail corridors weave in and out of the town's corporate limits. In these situations, improvements needed to make important connections are often recommended in areas beyond Whitestown's jurisdiction.

FIGURE C - STUDY AREA



A large, white, spherical water tower stands against a clear blue sky. The tower is supported by a complex network of white metal legs and cross-braces. The top of the tower is a rounded dome with a ladder leading up to it. The text "Whitestown" is written in a large, bold, black font across the middle of the dome, with "Est. 1851" written in a smaller font below it. The lighting suggests a bright, sunny day, with shadows cast across the tower's surface.

Whitestown

Est. 1851

HOW WAS THIS PLAN PUT TOGETHER?

THIS PLAN WAS OVERSEEN BY THE WHITESTOWN BICYCLE AND PEDESTRIAN ADVISORY BOARD. FORMED IN 2016, THIS BOARD WAS ESTABLISHED TO MAKE RECOMMENDATIONS THAT ENCOURAGE BICYCLE AND PEDESTRIAN TRANSPORTATION THROUGHOUT WHITESTOWN.

A total of four planning meetings with the Board were held during the development of the plan, all of which were open to the public.

Public input was sought in several ways throughout the course of the plan. An online public survey was conducted. A public website was established to provide a transparent process. Additionally, public input was sought by setting up a booth at a local festival. More information on public participation can be found in Section 4 of this plan.

This plan was completed in conjunction with other community plans. These plans were completed concurrently, and findings from each plan were coordinated. Completing these plans at the same time allowed the town to identify a more effective bicycle and pedestrian network. This was possible because the town was able to integrate walking and biking infrastructure with the location of future parks, future roadways, future sidewalk repairs and Legacy Core investments.

CONCURRENT PLANS:



2017 Sidewalk Asset Management Plan: Created an inventory of the condition of existing sidewalks and trails, and established a prioritized maintenance plan.



2017 Legacy Core Plan: Developed a plan for reinvestment in the original town limits.



2018-2022 Parks & Recreation Master Plan: Established an updated 5 year master plan for parks and recreation.

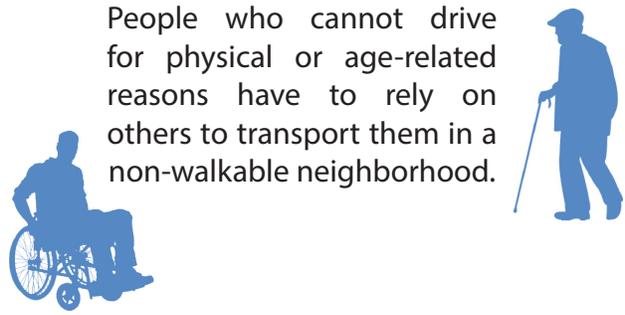


2017 Thoroughfare Plan: Developed a long-term plan for the buildout of transportation infrastructure in the community.

WHAT IS IN THE PLAN?

- 1 EXECUTIVE SUMMARY - This section includes a brief overview of key findings from the plan.
- 2 INTRODUCTION - This section provides an overview of the intent for the plan and its content.
- 3 EXISTING CONDITIONS AND ANALYSIS - This section provides an overview of the current condition of bicycle and pedestrian facilities. Relevant information regarding land use and development patterns are also included.
- 4 PUBLIC PARTICIPATION - This section provides an overview of public participation efforts, and the input received.
- 5 VISION, GOALS AND OBJECTIVES - This section provides a summary of the goals and objectives established during this plan.
- 6 DESIGN STANDARDS - In this section, recommended standards for the development of bicycle and pedestrian facilities are provided.
- 7 DEVELOPMENT PLAN - The Development Plan section includes a summary of recommended bicycle and pedestrian infrastructure facilities.
- 8 POLICY, ORDINANCE AND ADVOCACY - This section of the plan lays out recommendations for building a social and political culture that supports walking and bicycling.
- 9 IMPLEMENTATION PLAN - This final section of the plan prioritizes recommendations, and sets out an action plan for implementing short-term improvements.

WHY ARE BIKING AND WALKING IMPORTANT TO THE WHITESTOWN COMMUNITY?



People who cannot drive for physical or age-related reasons have to rely on others to transport them in a non-walkable neighborhood.

People who live in walkable communities are

2X

more likely to get enough physical activity compared to those who don't.



Transportation is the second-largest expense for American households, costing more than food, clothing and health care.

Walkable neighborhoods make getting around more affordable for all members of the community.

In concentrated, walkable neighborhoods with plenty of shops and restaurants, people are more likely to stop in when compared to car-centric environments - demonstrating greater tax revenue per square foot than any other type of development.



In a growing number of communities, the level of walking is considered an indicator of a community's livability - a factor that has a profound impact on attracting businesses and workers as well as tourism. In cities and towns where people can regularly be seen out walking, there is a palpable sense that these are safe and friendly places to live and visit.



Studies completed in five different states (FL, MS, TX, WA, WI) show walking and biking to school increased by **37%** after sidewalks and crosswalks were improved.

By providing appropriate pedestrian facilities and amenities, communities enable the interaction between neighbors and other citizens that can strengthen relationships and contribute to a **healthy sense of identity and place.**



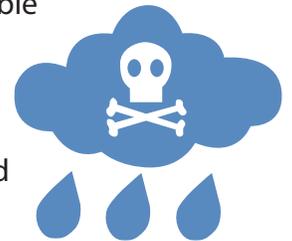
According to the EPA, transportation is responsible for nearly

80%

of carbon monoxide and

55%

of nitrogen oxide emissions in the U.S.



EVERY DAY, cars and trucks burn **MILLIONS** of barrels of oil, a non-renewable energy source.

Studies show that for every

10 minutes

a person spends in a daily car commute, time spent in community activities falls by

10%



60% of pollution created by automobile emissions

happens in the first few minutes of operation, before pollution control devices can work effectively. Since "cold starts" create high levels of emissions...



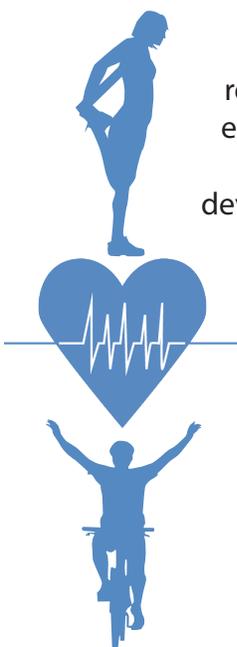
shorter car trips are more polluting on a per-mile basis than longer trips.

The CDC reports that regular moderate intensity exercise with a healthy diet may reduce one's risk of developing type 2 diabetes by

40-60%

Just three hours of cycling per week may reduce the risk of heart disease and stroke by

50%



SOURCES:

- Smartgrowthamerica.org
- Strongtowns.org
- [The National Complete Streets Coalition](http://TheNationalCompleteStreetsCoalition.org)
- Walkscore.com
- [2015 National Association of Realtors survey](http://2015NationalAssociationofRealtors.org)
- [National Recreation and Parks Association](http://NationalRecreationandParksAssociation.org)
- Activelivingresearch.org
- Pedbikeinfo.org

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3 EXISTING CONDITIONS + ANALYSIS



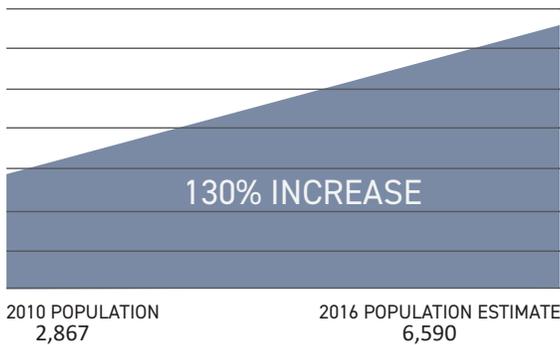
This section of the plan is intended to provide an overview of the town, key demographic trends, and existing bicycle and pedestrian facilities.

WHAT ARE THE DEMOGRAPHIC TRENDS?

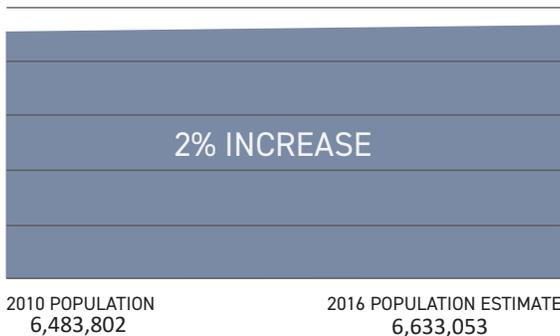
MOST NOTABLE WITHIN THIS DATA IS THE TOWN'S QUICK POPULATION GROWTH.

In 2000, Whitestown's population was 471 persons. By 2010, the town had completed annexations to grow from 175 acres in size to 12,344 acres (see Figure D). The 2010 population had grown to 2,867 persons. The US Census Bureau estimated the town's 2016 population to be 6,590, demonstrating that the town is continuing to grow.

WHITESTOWN POPULATION GROWTH

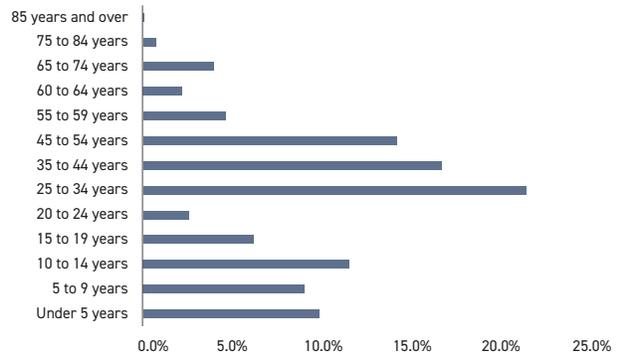


INDIANA POPULATION GROWTH



Whitestown's population is much younger than state averages. The median age for Whitestown is 7.6 years younger than the state of Indiana.

WHITESTOWN POPULATION (2015 AMERICAN COMMUNITY SURVEY)



INDIANA POPULATION (2015 AMERICAN COMMUNITY SURVEY)

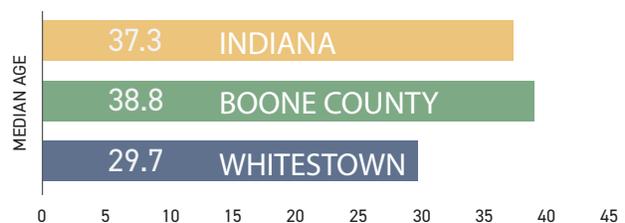
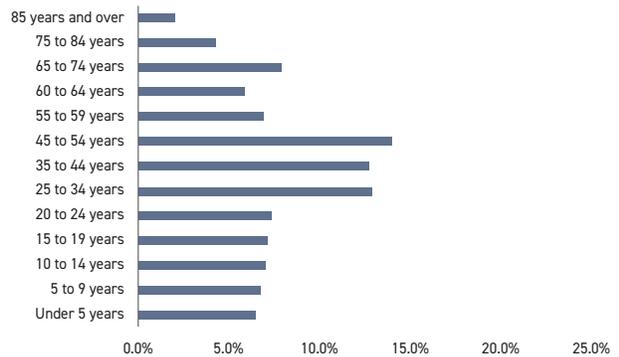
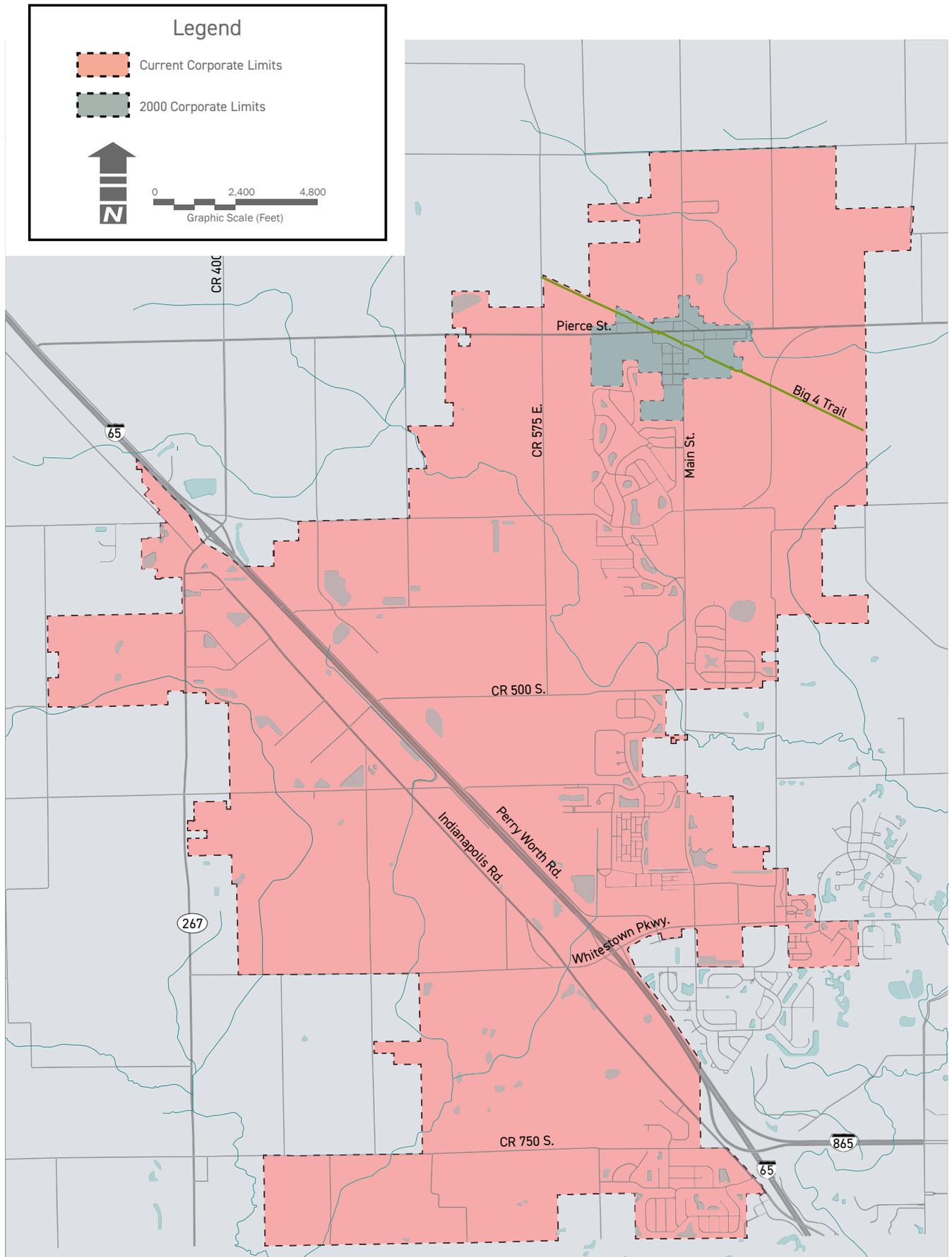


FIGURE D - 2000 CORPORATE LIMITS AND CURRENT CORPORATE LIMITS



WHAT IS ALREADY IN PLACE?

SIDEWALK INVENTORY

A Sidewalk Asset Management Plan was developed concurrently with this study. This document included an inventory and condition assessment for sidewalk and trail infrastructure in the community. The inventory noted that the community has 41.3 miles of sidewalks as of August 2017. A summary of the inventory can be found below, and a map of existing facilities can be found in Figure E.

Since most sidewalk and trail infrastructure has been developed since 2000, the condition assessment confirmed that most sidewalks and trails are in good condition. Deficiencies noted in the report were:

- Lack of sidewalks in the Legacy Core
- Poor condition of sidewalks in the Legacy Core
- Non-compliant sidewalk curb ramps throughout the town
- Spot defects throughout the town

53.4 miles of sidewalks and trails

41.3 miles of concrete sidewalks

12.1 miles of asphalt trails

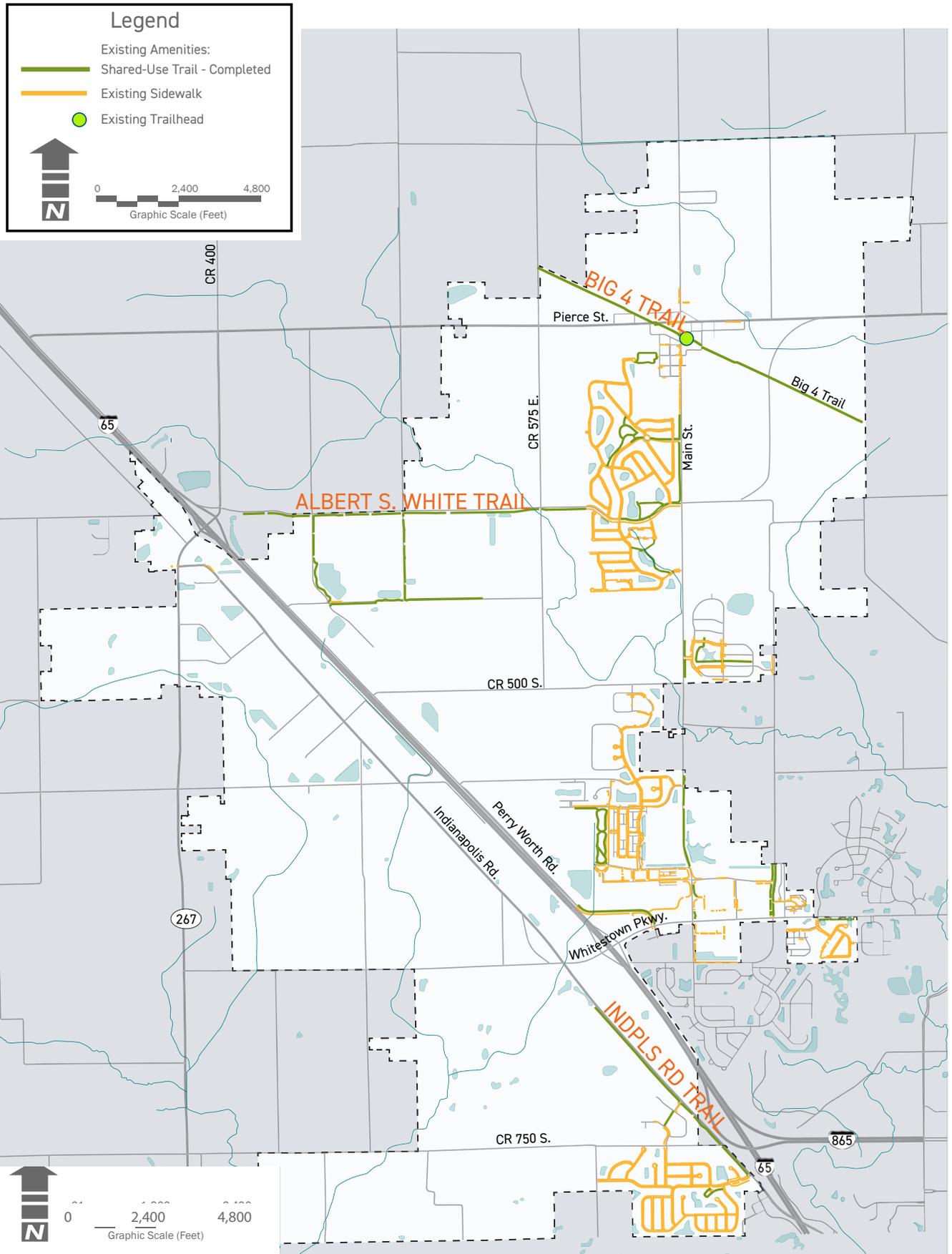


TRAIL INVENTORY

The Sidewalk Asset Management Plan identified that the town has 12.1 miles of asphalt trails as of August 2017. Some of the longer existing trails include:

- **Big 4 Trail:** The Big 4 Trail, previously known as the Farm Heritage Trail, is currently in progress with several small portions completed between Lebanon and Thorntown, including a 2.4 mile section through the Legacy Core in Whitestown. Built on the rail bed of the former Big Four Railroad, the trail will eventually span 50 miles. The Big Four Railroad began serving the region in 1852, and in 1861, Abraham Lincoln traveled this route on his way to his presidential inauguration. The trail route travels through Indiana hardwood forests, corn and soybean fields, and several small, historic Indiana towns. This shared-use trail will serve as an important focal point for the redevelopment of the old downtown – the Legacy Core – of Whitestown, as well as the main east-west connector for the bicycle and pedestrian network. To the west, the trail does not resume until Patterson Street in Lebanon, a distance of seven miles. Planning is currently underway by Lebanon and Boone County to make this connection.
- **Albert S. White Trail:** A shared-use trail is currently located on the south side of Albert S. White Drive. This trail extends from SR 267 in the west to Main Street. At Main Street, it connects to an existing trail fronting the Walker Farms neighborhood and extending north toward the Legacy Core.
- **Indianapolis Road Trail:** A shared-use trail is currently located on the south side of Indianapolis Road. The trail begins at the entrance to Eagle’s Nest neighborhood and extends north to the Traders Point Christian Church entrance. South of Eagle’s Nest, Indianapolis Boulevard has bike lanes available.

FIGURE E - EXISTING SIDEWALK AND TRAIL NETWORK



WHAT DESTINATIONS ARE PEOPLE TRYING TO GET TO?

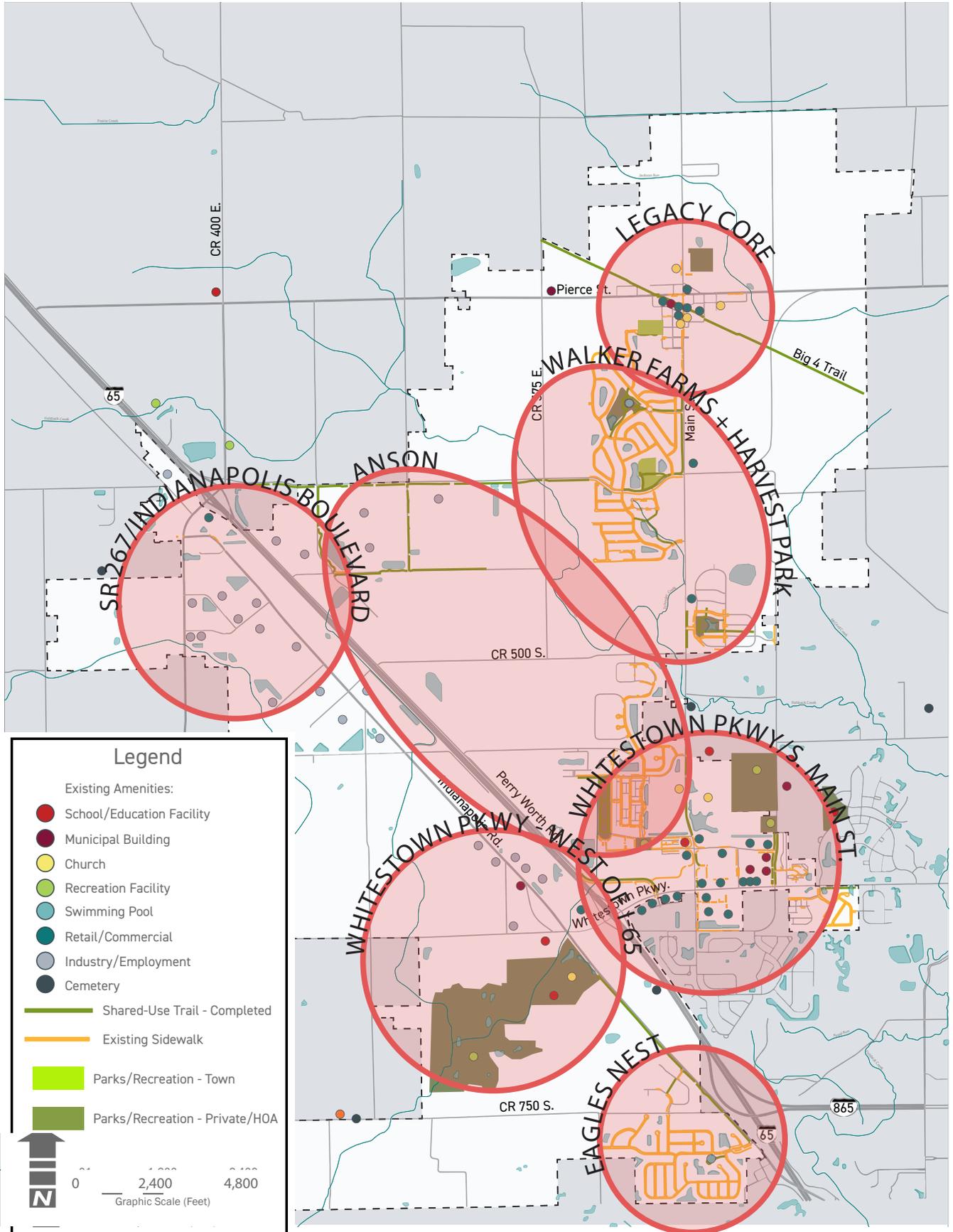
A BICYCLE AND PEDESTRIAN PLAN IS ULTIMATELY ABOUT MAKING CONNECTIONS AMONG THE PLACES WHERE PEOPLE LIVE, WORK, SHOP AND PLAY.

Figure F presents a map of existing destinations within the community.

Destinations are concentrated into the following areas:

- Legacy Core: This includes restaurants, churches, businesses and single family housing.
- Whitestown Parkway/South Main Street: This area includes multi-family residential development, churches, big box shopping areas and restaurants.
- Whitestown Parkway – West of I-65: This area includes businesses and churches.
- SR 267/Indianapolis Boulevard: This area includes a truck stop and various existing industries.
- Walker Farms + Harvest Park: Walker Farms is the largest suburban neighborhood in Whitestown.
- Anson: Anson is a large planned unit development consisting of industrial/distribution warehouses, manufacturing and multi-family housing developments.
- Eagle's Nest: This community is currently cut off from the east side of Whitestown by the Interstate 65 corridor.

FIGURE F - EXISTING COMMUNITY DESTINATIONS



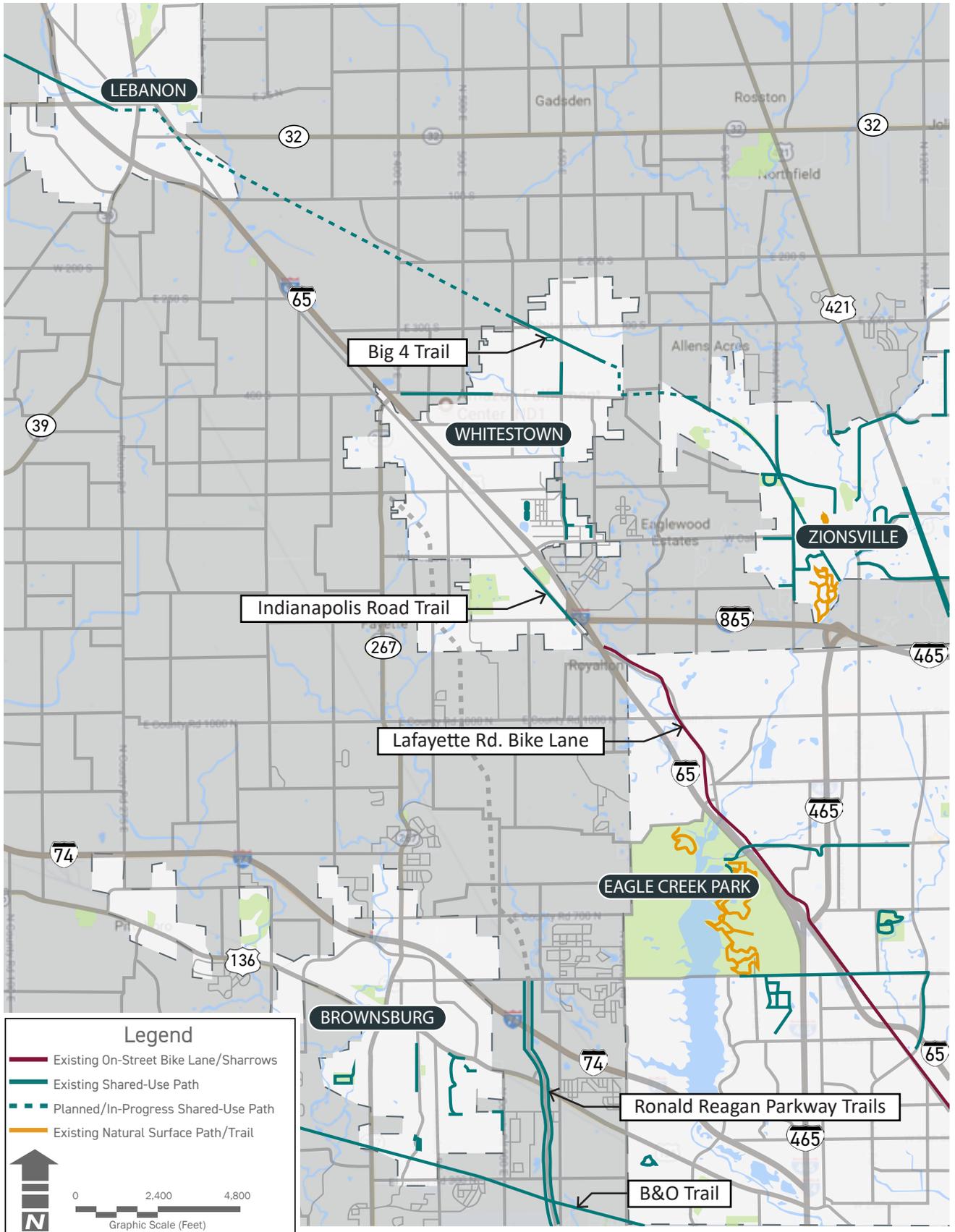
WHAT REGIONAL CONNECTIONS ARE POSSIBLE?

THERE ARE CURRENTLY NO SHARED-USE TRAILS OR BIKE LANES THAT CONNECT BEYOND WHITESTOWN TO OTHER COMMUNITIES.

A map of regional connection opportunities is provided in Figure G, and discussed further in the Trails Inventory section of this chapter. Regional connectivity has been proposed in related plans. See the Related Projects and Plans heading in this section for more information.

This plan recognizes that connectivity does not only pertain to the places within the Whitestown Corporate limits. It is equally important to evaluate the potential connections to regional and state-wide destinations when making plans for a complete shared-use trail network. Moving towards this goal and planning a well-connected network depends on the cooperation of multiple jurisdictions. This plan recognizes this need, and suggests that Whitestown lead the way in facilitating discussions between the various governmental partners within this well-connected network.

FIGURE G - REGIONAL CONNECTIVITY



WHAT ELSE IS BEING PLANNED?

FOLLOWING IS A SUMMARY OF VARIOUS PROJECTS AND PLANS RELATING TO BICYCLE AND PEDESTRIAN FACILITIES. THESE ARE ALL IN VARIOUS STAGES OF DEVELOPMENT. KEY PROJECTS ARE IDENTIFIED ON THE MAP IN FIGURE H.

I-65 BICYCLE AND PEDESTRIAN BRIDGE

The town of Whitestown commissioned a study to examine alternatives for a new bicycle/pedestrian bridge over I-65 in the vicinity of the Whitestown Parkway interchange. This study is herein incorporated into this document for reference. A copy of the plan and recommendations is included in the Appendix.

I-65 MIDPOINT INTERCHANGE

Plans are currently underway to develop a third I-65 interchange for Whitestown. The interchange would be located midway between Whitestown Parkway and SR 267. The exact location and alignment of the interchange is currently being developed. The construction of this new interchange provides an opportunity to construct a pedestrian/bicycle friendly crossing over I-65.

146TH STREET CONNECTOR

In 2018, construction is expected to begin on a connector roadway between CR 300 S (146th Street/Pierce Street) and CR 400 S. (Albert S. White Drive). This connecting corridor will be located east of the Legacy Core and Main Street. The project is being developed by Boone County, and bicycle/pedestrian facilities are not currently being developed along the corridor. Whitestown's goal is to see bicycle/pedestrian facilities added to this corridor.

2015 CENTRAL INDIANA REGIONAL BIKEWAYS PLAN

This plan was developed by the Indianapolis Metropolitan Planning Organization (MPO). Related to Whitestown, the plan recommends that Pierce Street (east of Main Street) be developed as a bikeway.

RONALD REAGAN PARKWAY

By early 2018, Ronald Reagan Parkway will connect I-74 and I-70. Plans are currently underway to extend the corridor from I-74 to I-65. As proposed, the corridor would roughly parallel SR 267 to the east. In Boone County, it is currently planned to curve to the west and intersect with existing SR 267 near CR 550 S. In Hendricks County, the corridor has trails on one or more sides of the roadway. However, a decision has not been made relating to pedestrian/bicycle accommodation in Boone County. Whitestown's goal is to see trails along the full length of this corridor.

I-65/ALBERT S. WHITE DRIVE INTERCHANGE IMPROVEMENTS

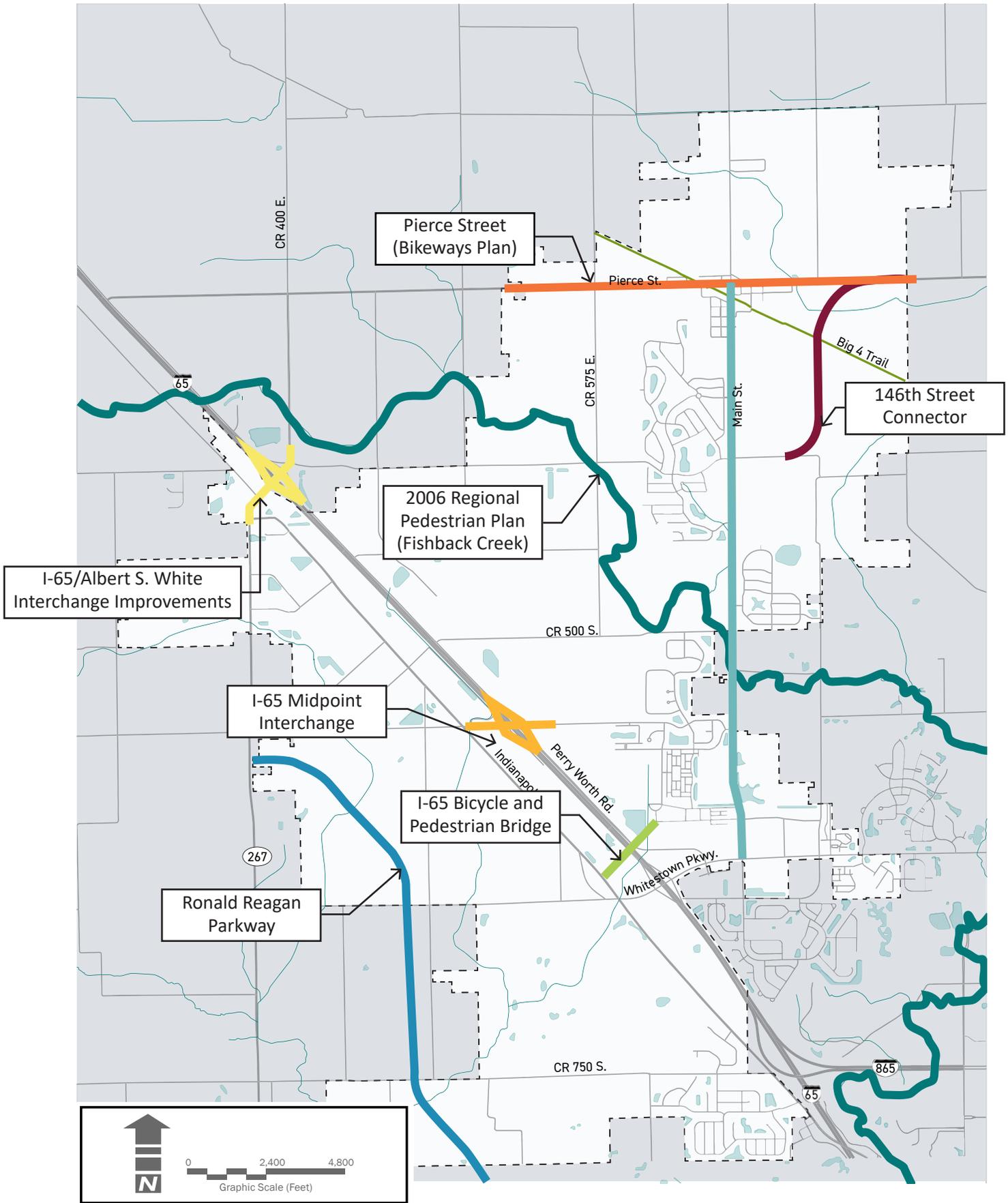
Plans are currently underway by INDOT to upgrade this interchange. This provides an opportunity to provide new bicycle and pedestrian infrastructure as part of the crossing.

2006 REGIONAL PEDESTRIAN PLAN

This plan was developed by the Indianapolis MPO, and recommends the following facilities:

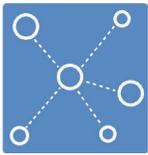
- Shared-Use Path (Outside of Road Right-of-Way)
 - Following Fishback Creek
- Shared-Use Path (With Road Right-of-Way)
 - Along most roadways throughout Whitestown
- Pedestrian Corridor
 - Whitestown Road (east of Main Street)
 - Main Street (from Whitestown Road to CR 500 N)
 - CR 500 N (from Main Street to I-65)
- Pedestrian District
 - Legacy Core
 - Anson/South Main Street/
 - Whitestown Boulevard

FIGURE H - KEY RELATED PROJECTS



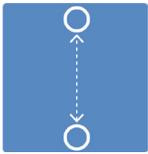
SUMMARIZING THE ISSUES

FOLLOWING IS A SUMMARY OF KEY ISSUES IDENTIFIED DURING THE INVENTORY AND ASSESSMENT PHASE.



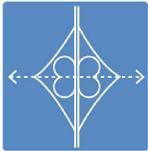
LACK OF REGIONAL CONNECTIVITY

- The Big 4 Trail does not continue past Whitestown corporate limits
- The Indianapolis Road Trail does not continue north of Trader's Point campus or south of the Eagle's Nest neighborhood, and does not connect to bike lanes to the south.



NEED FOR NORTH-SOUTH CONNECTIVITY

- Main Street is not suitable for bicycling or pedestrians
- Main Street at CR 500 S and Fishback Creek has jurisdictional complications
- CR 525 could serve as a north-south connector, but does not currently provide meaningful connections



NEED FOR SAFE I-65 CROSSING(S)

- Flow Through Lane at Whitestown Parkway causes unsafe conditions for road cyclists
- There is no separated bicycle or pedestrian infrastructure at either existing I-65 interchange



LACK OF BIKE/PED INFRASTRUCTURE IN LEGACY CORE

- Sidewalks are missing or in poor condition
- No trails lead into the Legacy Core, aside from the Big 4 Trail



GAPS IN DEVELOPED BICYCLE AND PEDESTRIAN INFRASTRUCTURE

- Developed areas have sidewalks that do not interconnect
- Current trails do not connect to each other



LACK OF RECREATIONAL TRAILS OUTSIDE OF ROAD RIGHT-OF-WAY

- All current trails are located along the road right-of-way
- There are no nature trails or pathways



HWC presented the findings from the online public survey and the public input session at the Boone County Flavor Fest to the Bicycle & Pedestrian Advisory Board. Members of the community joined the meeting to listen to the results and give additional input.

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4 PUBLIC PARTICIPATION



In order to get a clear understanding and complete picture of the desires and needs of the residents of Whitestown, the community was given several opportunities to provide feedback to the design team.

WHAT DID THE COMMUNITY HAVE TO SAY?

COMMUNITY MEMBERS WERE GIVEN THE OPPORTUNITY TO PROVIDE FEEDBACK FOR THE BICYCLE & PEDESTRIAN MASTER PLAN THROUGH AN ONLINE SURVEY.

The number of participants totaled 443, with over 80% being Whitestown residents. A summary of the results is provided here.

We want more separation between walking and biking paths from the vehicular traffic - more shared-use trails would be great.

There needs to be more education and awareness so drivers stop and yield for pedestrians and cyclists.

We don't walk directly from home, work or school to a destination because there are too many gaps in the pedestrian network, and the places we need to go are too far away.

The walkways need more character, shade and pedestrian-scale lighting.

Kids need safe access to parks and schools. Widened sidewalks, raised crosswalks and traffic calming measures would help.



WALKING

5. How often do you walk in Whitestown? Choose 1: (Note – include dog walking, walking in the park or around the neighborhood, walking to lunch from work, etc. Do NOT include trips from a parking lot to a building.) 

- Every day
- A few (2-5) times per week
- A few times per month
- Almost never

Walking and biking are good for my health, the environment and the local economy. Also, walking and biking are more fun than driving!

We mostly walk for exercise, leisure or to walk the dog.

There is too much traffic to feel comfortable biking on the road.

We need bicycle and pedestrian improvements on major street corridors, bridges and overpasses. We need to be able to get across the interstate!

We want better pedestrian and bicycle access to our commercial centers.



WHAT WAS MAPPED OUT BY THE COMMUNITY?

HWC FACILITATED PUBLIC INPUT ACTIVITIES WITH THE PUBLIC AS PART OF THE BOONE COUNTY FLAVOR FEST.

Approximately 100-150 people visited HWC's booth through the course of the evening on Friday, September 15, 2017 and provided input on the town planning projects. Discussions covered the Bicycle and Pedestrian Master Plan, the Parks and Recreation Master Plan and the Legacy Core Plan.

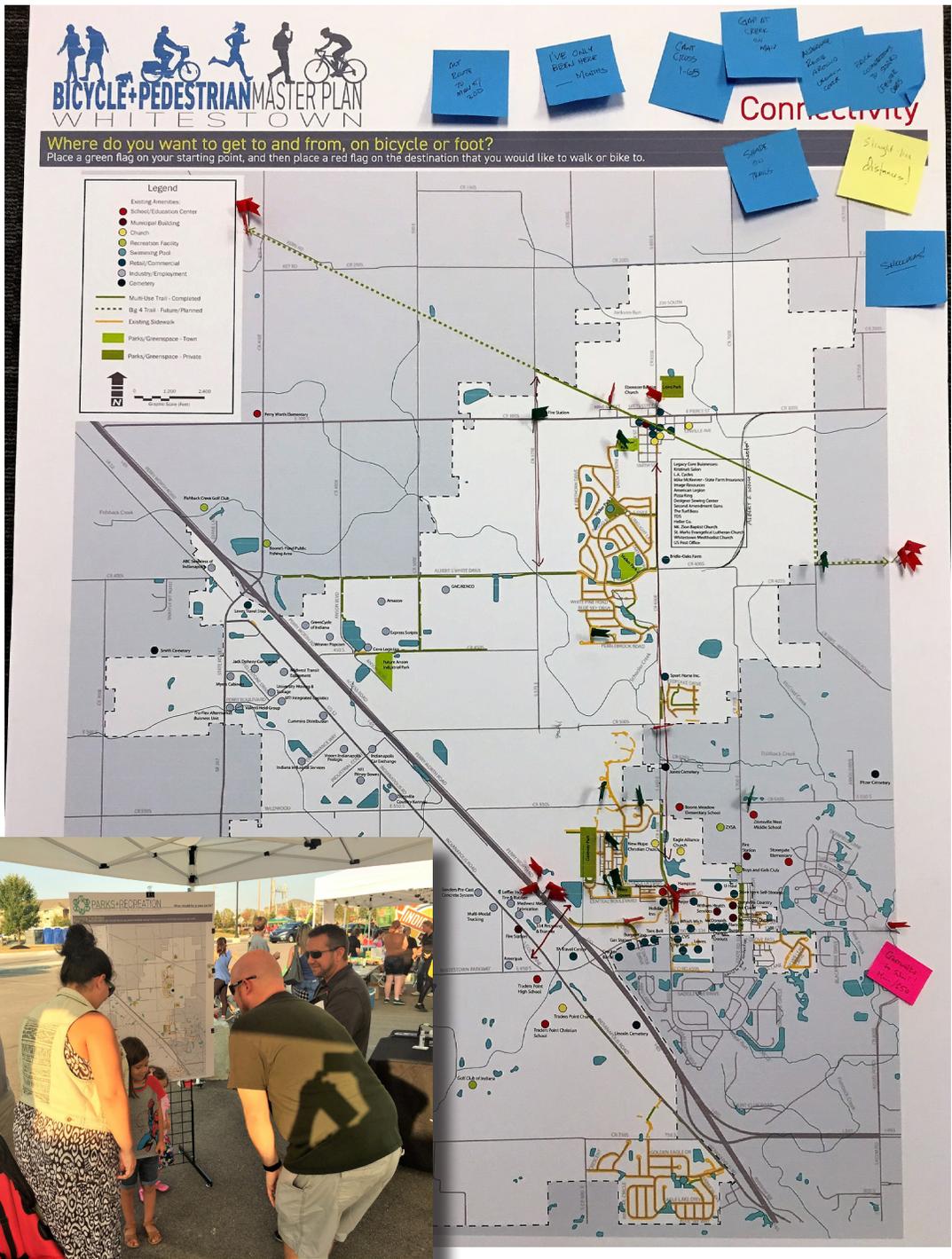
KEY ISSUES:

Need for a north/south route to connect housing, shopping and the Big 4 Trail

Improve Main Street/CR 300 S for use by road cyclists, or provide and alternate route

Make commercial developments more bike and pedestrian friendly, including providing routes that do not conflict with automobile traffic and by designing better road crossings

Create a bike- and pedestrian-friendly crossing at I-65



Most of the feedback received echoed that which was given in the public survey. This further validates the main concerns and issues that HWC identified through the inventory and analysis process.

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5 VISION, GOALS + OBJECTIVES

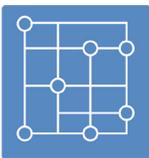


Whitestown's vision is to be the most walkable and bikeable community in the state of Indiana. We want to become a place where walking and biking is the preferred method of travel within the community. For those that must commute outside of Whitestown to work, we want to be a place where you park your car after work and then walk and bike to destinations.

WHAT ARE THE GOALS FOR THIS PLAN?

VISION

WHITESTOWN'S VISION IS TO BE THE MOST WALKABLE AND BIKEABLE COMMUNITY IN THE STATE OF INDIANA. WE WANT TO BECOME A PLACE WHERE WALKING AND BIKING IS THE PREFERRED METHOD OF TRAVEL WITHIN THE COMMUNITY. FOR THOSE THAT MUST COMMUTE OUTSIDE OF WHITESTOWN TO WORK, WE WANT TO BE A PLACE WHERE YOU PARK YOUR CAR AFTER WORK, AND THEN WALK AND BIKE TO DESTINATIONS.



GOAL: NETWORK

WHITESTOWN WILL DEVELOP A COMPREHENSIVE BICYCLE AND PEDESTRIAN INFRASTRUCTURE NETWORK WHICH MINIMIZES PRIORITIZATION OF CARS FOR LOCAL TRAVEL NEEDS.

- Make bicycling and walking more attractive than driving for trips of three miles or less.
- Fill in gaps in pedestrian and bicycle networks within and between existing neighborhoods, and connect these residential areas to areas of recreation, employment, commerce and education.
- Build pedestrian and bicycle facilities on new roadways, and retrofit older roadways to complete the pedestrian and bicycle system - using routes and facility designs identified in this plan.
- Include shared-use paths along new and reconstructed arterial and major collector streets.
- Provide a continuous sidewalk network along all town streets.
- Provide a safe route to school for all students on foot or by bicycle - within a two-mile radius of each educational facility.
- Provide main north/south and east/west connectors. Utilize the Big 4 Trail as the main east/west connector.
- Provide sidewalks on both sides of neighborhood streets - and trails on at least one side of all major roadways.



GOAL: SAFETY + EQUITY

WHITESTOWN WILL BUILD A SYSTEM THAT ADDRESSES THE NEEDS AND SAFETY OF ALL USERS REGARDLESS OF AGE, ABILITY, RACE, ETHNICITY, OR INCOME.

- Provide safe bicycle and pedestrian crossings for Interstate 65, connecting the east and west sides of Whitestown. This crossing should keep trail users completely separate from vehicular traffic and be well-lit for visibility.
- When space allows, a shared-use trail is the preferred method of providing bicycle and pedestrian travel. Separated bike lanes and cycle tracks in conjunction with sidewalks should be used when there is not enough right-of-way for a trail. On-street bike lanes and sharrows should be a last resort - but are preferable to no facilities at all.
- Ensure the bicycle and pedestrian infrastructure is accessible to people with disabilities.
- Crosswalks should be clearly marked and crossing signals provided at intersection and trail crossings. Road crossings for trails and sidewalks should be minimized through thorough route development and design.



GOAL: SUPPORT FACILITIES

WHITESTOWN WILL PROVIDE SUPPORT FACILITIES IN ADDITION TO THE PEDESTRIAN AND BICYCLE NETWORK THAT ENCOURAGE WALKING AND BICYCLING.

- Require high quality, flexible, and secure bicycle parking at all destinations, and ensure bicycle parking is considered when park, school, and other public facilities are planned.
- Provide support facilities for employees who are commuting by walking or bicycling (such as showers, lockers, and bike parking/storage).
- Improve the quality of the pedestrian environment by including facilities such as planter strips and street trees in the design or reconstruction of streets, and consider preservation of existing trees whenever possible.
- Provide wayfinding tools for pedestrians and bicyclists, as well as ample lighting and safety signage.
- Incorporate traffic calming measures to reduce vehicle speeds and decrease the amount of parking provided for vehicles, while increasing the amount of bicycle facilities (repair stations, bicycle parking, and shelter).
- Provide trailhead facilities at convenient intervals within the community with convenient access to restrooms, bike repair stations, benches, drinking water, and air pumps.



GOAL: BIKE + PED FRIENDLY DEVELOPMENTS

WHITESTOWN WILL REQUIRE DEVELOPMENTS OF ALL TYPES TO CREATE BICYCLE AND PEDESTRIAN FRIENDLY ENVIRONMENTS.

- Require high quality, flexible, and secure bicycle parking at all destinations.
- Require developments to interconnect bicycle and pedestrian facilities.
- Provide routes within development for walking and bicycling that minimize roadway/drive crossings.
- Provide incentives for existing businesses and other entities to add bicycle parking facilities and pedestrian amenities.
- Provide support facilities for employees who are commuting by walking or bicycling (such as showers, restrooms, lockers, and bike parking/storage)
- Provide support facilities as part of the design of town center and shopping center developments (such as showers, restrooms, lockers and bike parking/storage)



GOAL: PROGRAMMING + ADVOCACY

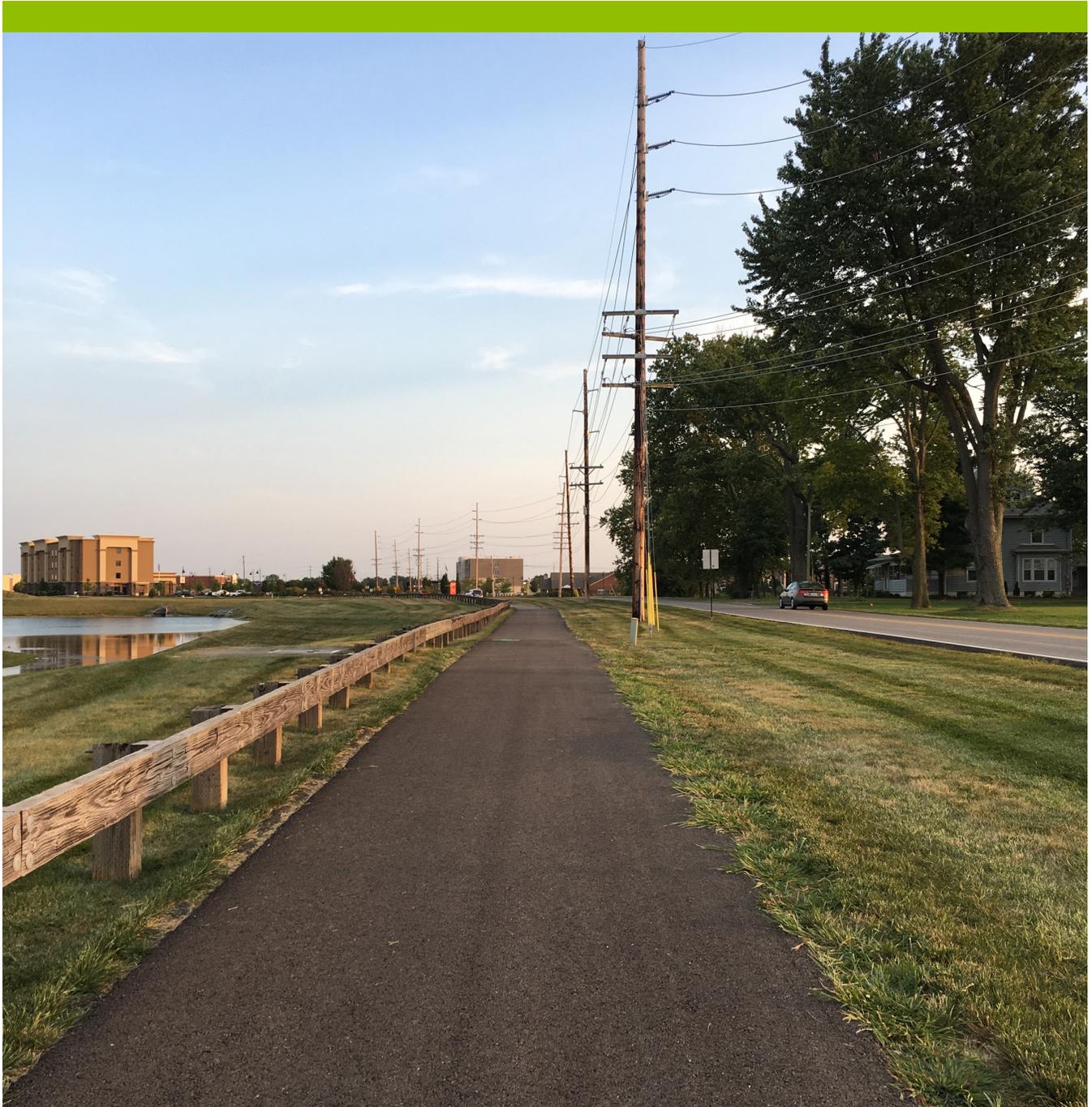
WHITESTOWN WILL PROMOTE A CULTURE OF WALKING AND BIKING IN WHITESTOWN THROUGH EDUCATION, ENFORCEMENT, PROGRAMMING AND ADVOCACY EFFORTS.

- Encourage and support the development of Safe Routes to Schools programming within local school systems.
- Develop and implement local programming that encourages residents to walk and bicycle to destinations.
- Promote enforcement of safe driver behaviors.
- Partner with neighboring communities to connect shared-use trails regionally, and to connect trail corridors interrupted by jurisdictional boundaries.

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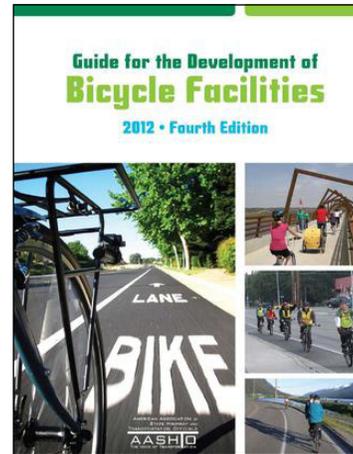
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DESIGN STANDARDS



The bicycle and pedestrian master plan includes design standards that are intended to provide clear guidance for Whitestown staff and developers concerning the town's desired technical and aesthetic ideals for the bicycle and pedestrian trails and walkways.

WHAT ARE THE STANDARDS FOR DESIGN OF THE BIKE + PED NETWORK?

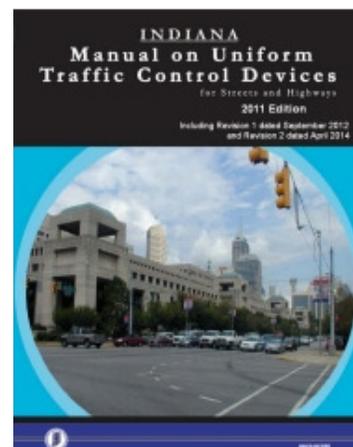
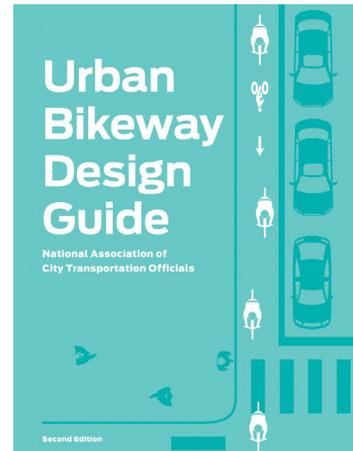


RECOMMENDATIONS FOR PEDESTRIAN AND BICYCLE FACILITIES WERE CREATED TO COMPLETE GAPS IN THE EXISTING SYSTEM AND CREATE NEW FACILITIES THAT MEET THE GOALS OF THIS PLAN.

Particular attention was paid to providing a main north/south connector trails, a connection point across Interstate 65 and a variety to internal loops for recreation.

In general, all bicycle and pedestrian facilities should comply with the latest editions of:

- Guide for the Development of Bicycle Facilities, AASHTO
- NACTO Urban Bikeway Design Guide
- Indiana Manual on Uniform Traffic Control Devices, INDOT



SIDEWALKS

FIGURE I - SIDEWALK STANDARDS



Land Use	Frontage Zone		Pedestrian Zone		Greenspace/ Amenities Zone		Curb	Total Width	
	Preferred	Minimum	Preferred	Minimum	Preferred	Min.		Preferred	Minimum
Suburban Residential	0'	0'	6'	5'	5'	2'	6"	11'-6"	7'-6"
Urban Residential	4'	0'	8'	5'	5'	2'	6"	17'-6"	7'-6"
Commercial	6'	1'	10'	6'	8'	6'	6"	24'-6"	13'-6"
Mixed Use	6'	1'	12'	6'	8'	6'	6"	26'-6"	13'-6"
Industrial	10'	5'	10'	6'	8'	6'	6"	28'-6"	17'-6"

Frontage Zone:

- The Frontage Zone should be maximized to provide space for cafe seating, plazas, and greenspace elements along building facades when possible.
- When the building facade butts up to the edge of the Pedestrian Zone, the effective width of the Pedestrian Zone is reduced by 1' as pedestrians will shy away from the building edge.
- The preferred width of the Frontage Zone to accommodate sidewalk cafe seating is 6'.

Pedestrian Zone:

- Sidewalks should be kept reasonably straight and not meander when possible, as this can create navigational difficulties for users with vision impairments or physical disabilities.
- When constructing or reconstructing sidewalks, all utility access points and obstructions should be relocated outside of the Pedestrian Zone.

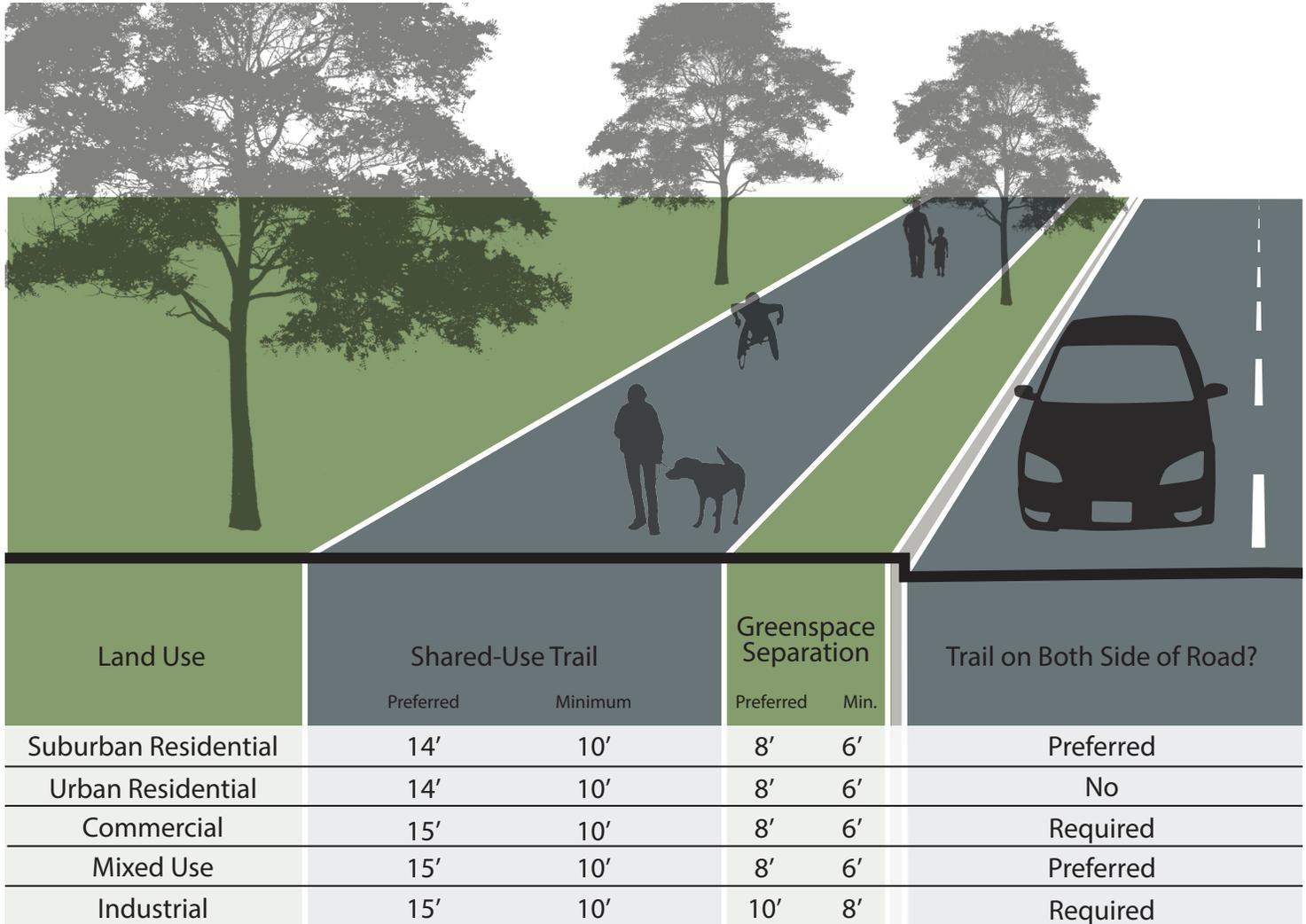
Greenspace/Amenities Zone:

- To create as much of a buffer as possible between the Pedestrian Zone and street traffic, the Greenspace/Amenities Zone should be maximized. When there is not ample space, parked cars can serve as a buffer between the Pedestrian Zone and street traffic.
- On roadways without on-street parking and/or higher speeds, setbacks for utilities, street trees and other sidewalk furnishings should be greater than 24" when possible.
- The minimum width of the Greenspace/Amenities Zone necessary to support standard street tree installation is 3'.
- Utility access points should be located within this zone.

SHARED-USE TRAILS

Shared-use trails provide a safer and more desirable alternative to sidewalks and bike lanes, especially along busy, high-speed roadways. These off-road connections can be used for recreation and commuting, and are a great way to encourage more walking and bicycling.

FIGURE J - SHARED-USE TRAIL STANDARDS



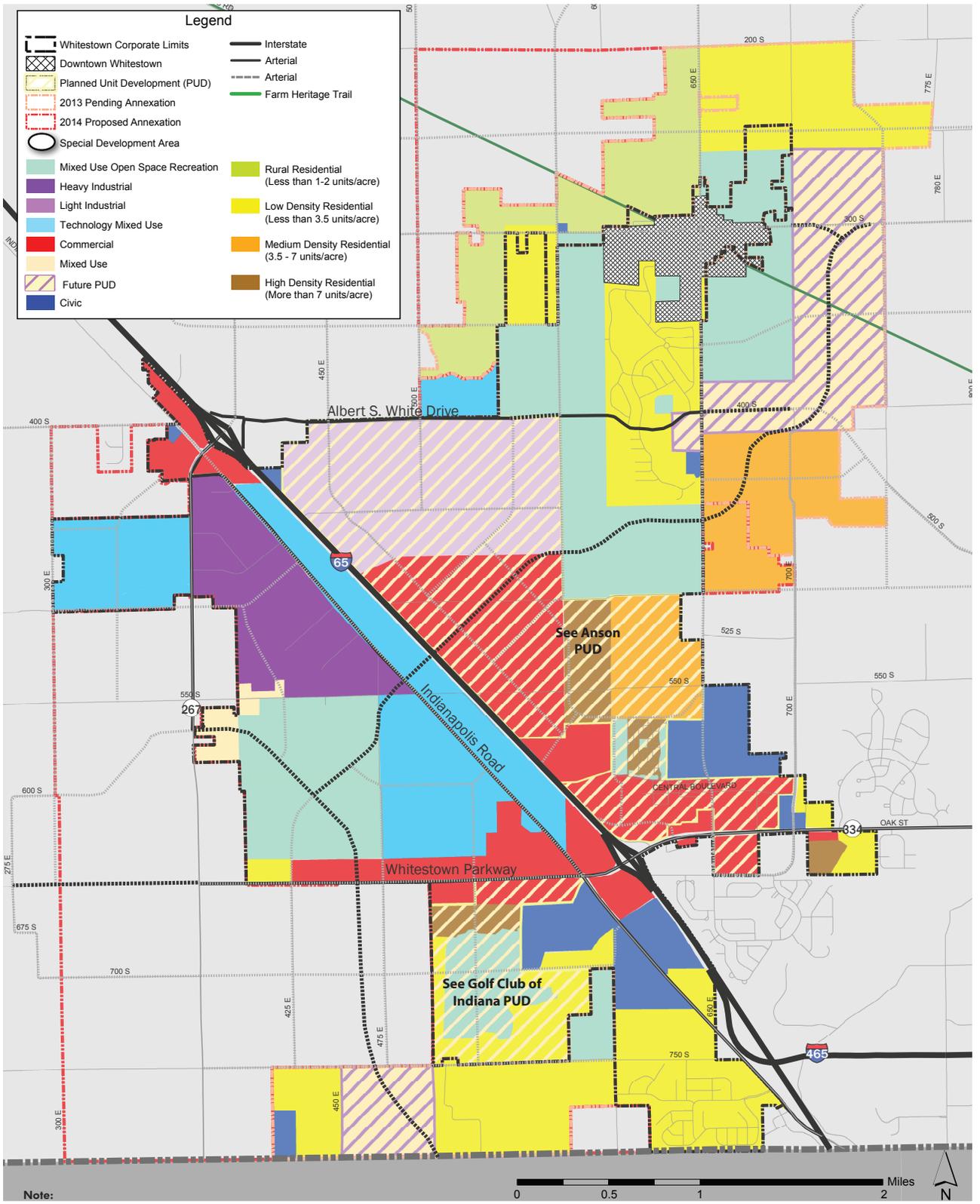
NOTE:

The land use categories in this chart and the Sidewalk standards chart on page 43 are generalizations of the various categories listed in the Future Land Use Map from the Whitestown Comprehensive Plan (Figure K).

- "Suburban Residential" includes Rural Residential and Low Density Residential
- "Urban Residential" includes Medium Density Residential and High Density Residential
- "Commercial" includes Technology Mixed Use, Commercial and Civic
- "Mixed Use" includes Mixed Use and Future PUD
- "Industrial" includes Heavy and Light Industrial

FIGURE K - FUTURE LAND USE MAP FROM THE WHITESTOWN COMPREHENSIVE PLAN

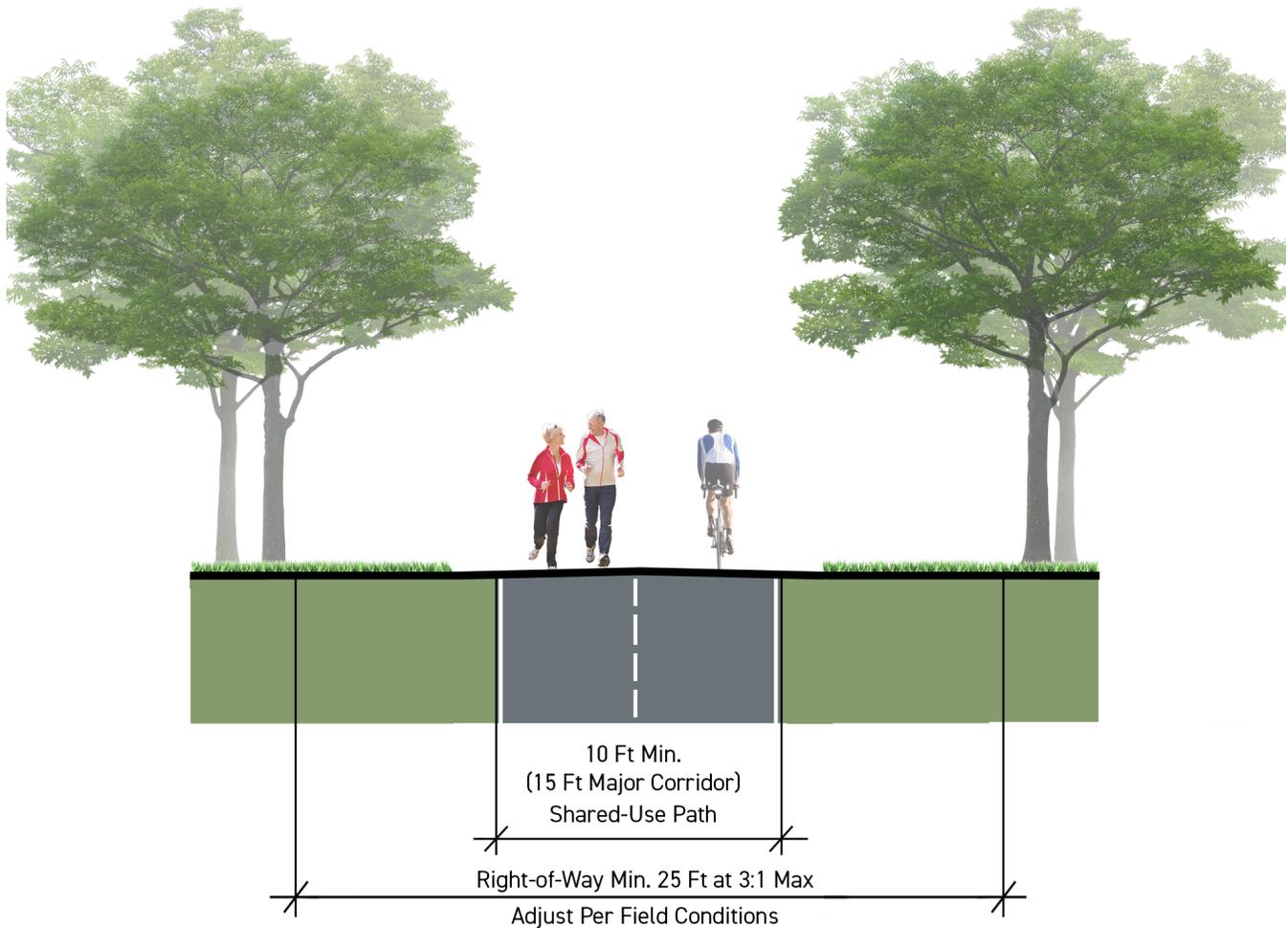
Future Land Use Map (Corporate boundary & 2013 pending annexation)



GREENWAY/LINEAR PARK

Greenways or Linear Parks are a shared-use pathway that is outside of the road right-of-way (in an independent right-of-way). The path has a minimum width of 10' with a minimum 2' clear zone on either side - consisting of a vegetated or gravel shoulder. Greenways and linear parks are trails with an emphasis on maintaining or introducing vegetation and natural habitat. Often, these are established along a natural corridor, such as a stream or ridgeline, or along a man-made corridor, such as an abandoned rail line. These long, narrow green spaces connect parks, natural areas, cultural features, or historic sites with each other and with populated areas.

FIGURE L - TYPICAL GREENWAY/LINEAR PARK SECTION



ON-ROAD FACILITIES

All roadways, except where prohibited by law, are shared by bicycles and motor vehicles. Roadways that carry low traffic volumes, such as neighborhood streets or rural roads, often provide a comfortable bicycling experience. On major roadways, wide curb or outside lanes could be used to provide more space for motorists passing bicyclists, or for bicyclists to maneuver around obstacles like drainage grates or on-street parking. Signs that say SHARE THE ROAD or BICYCLES MAY USE FULL LANE help alert motorists that they may encounter bicyclists and encourage them to be respectful. Markings alert motorists and offer guidance to bicyclists.

FIGURE M - ROADS WITH SHARROWS, TYPICAL SECTION

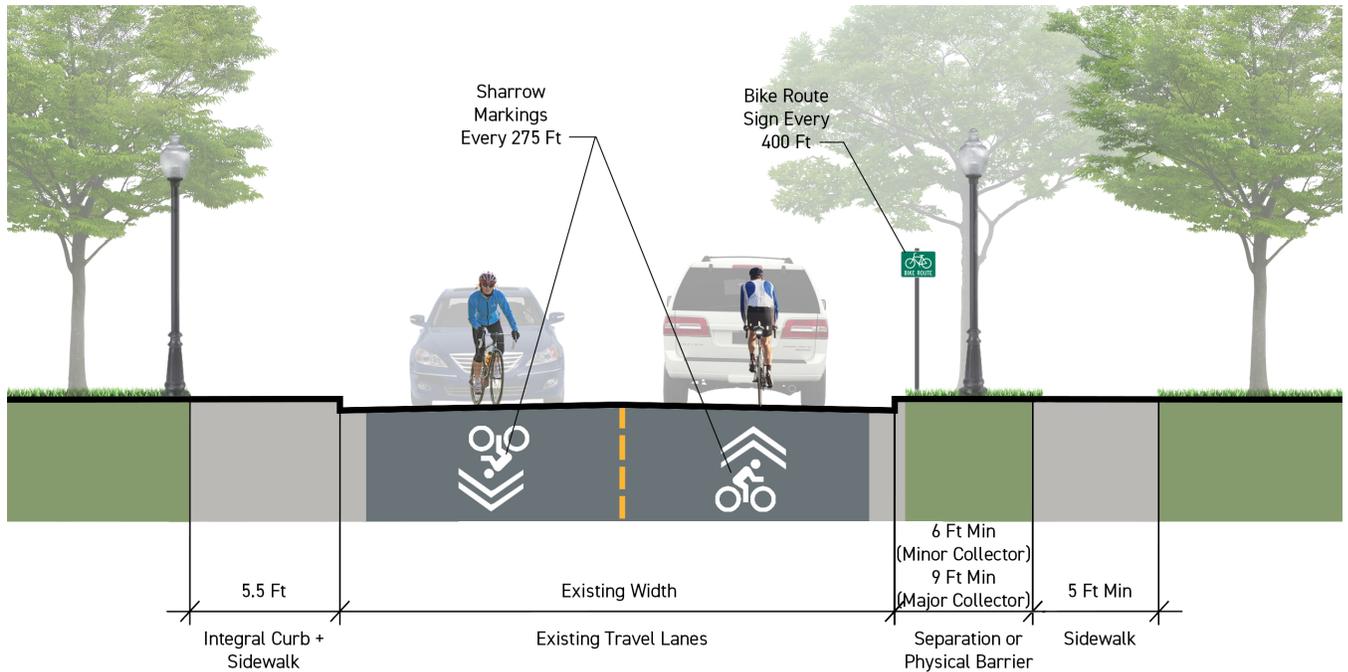
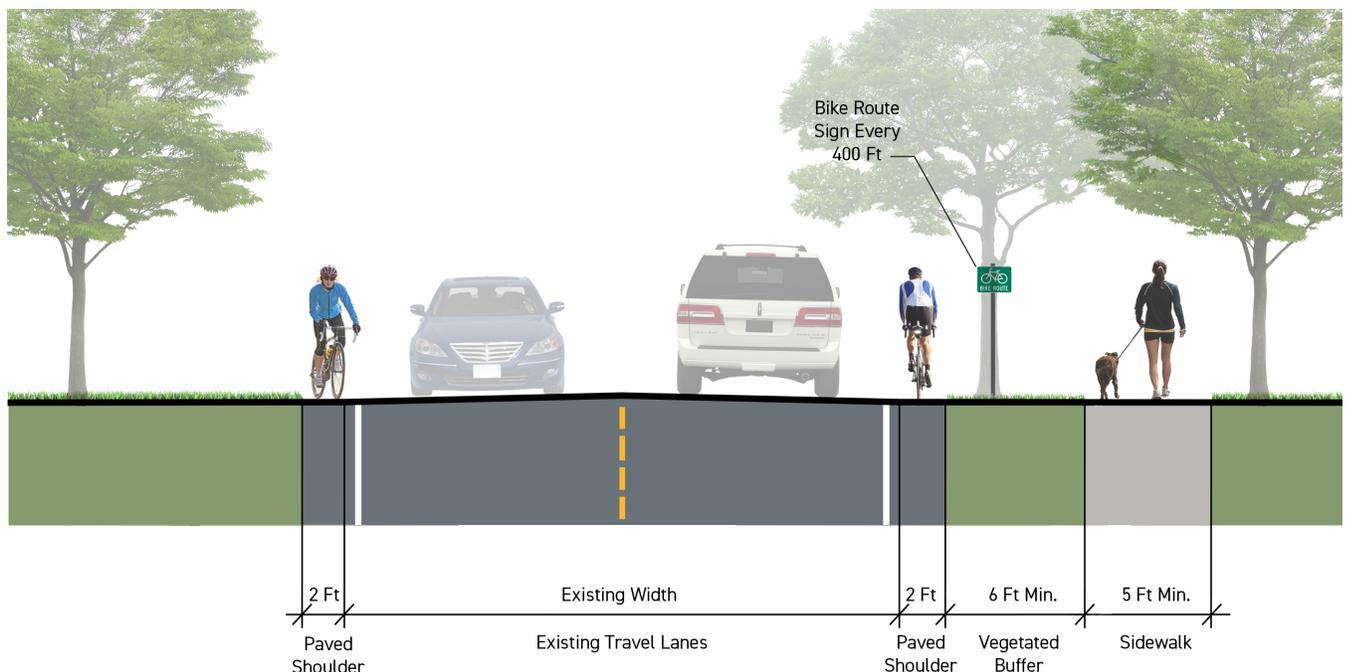


FIGURE N - ROADS WITH SHOULDERS, TYPICAL SECTION



INTERSECTION TREATMENTS

Crosswalks should be designed to offer as much comfort and protection to pedestrians as possible. Marking crosswalks serves two purposes – showing pedestrians the best place to cross the street and warning drivers that pedestrians may be present. All signalized crossings should be striped to reinforce yielding of vehicles turning during a green signal phase. The striping should be as wide as, if not wider than, the connecting walkway, allowing for comfortable passing by pedestrians walking in opposite directions. High-visibility ladder markings are preferred as they are more visible to approaching traffic. Accessible curb ramps are required by the Americans with Disabilities Act (ADA) at all crosswalks. An advanced stop bar should be located at least four feet in advance of the crosswalk to reinforce yielding to pedestrians.

FIGURE 0 - TYPICAL LOCAL, LOW-VOLUME INTERSECTION

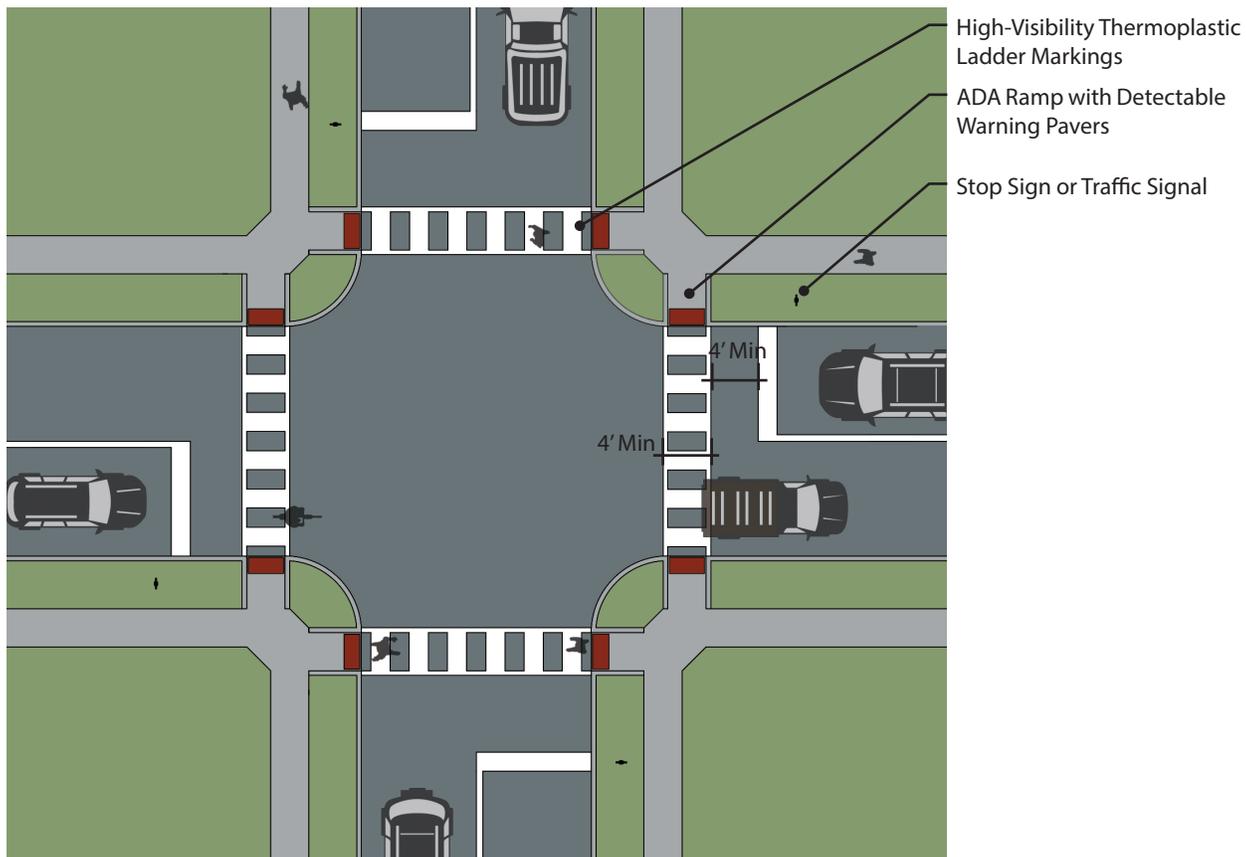
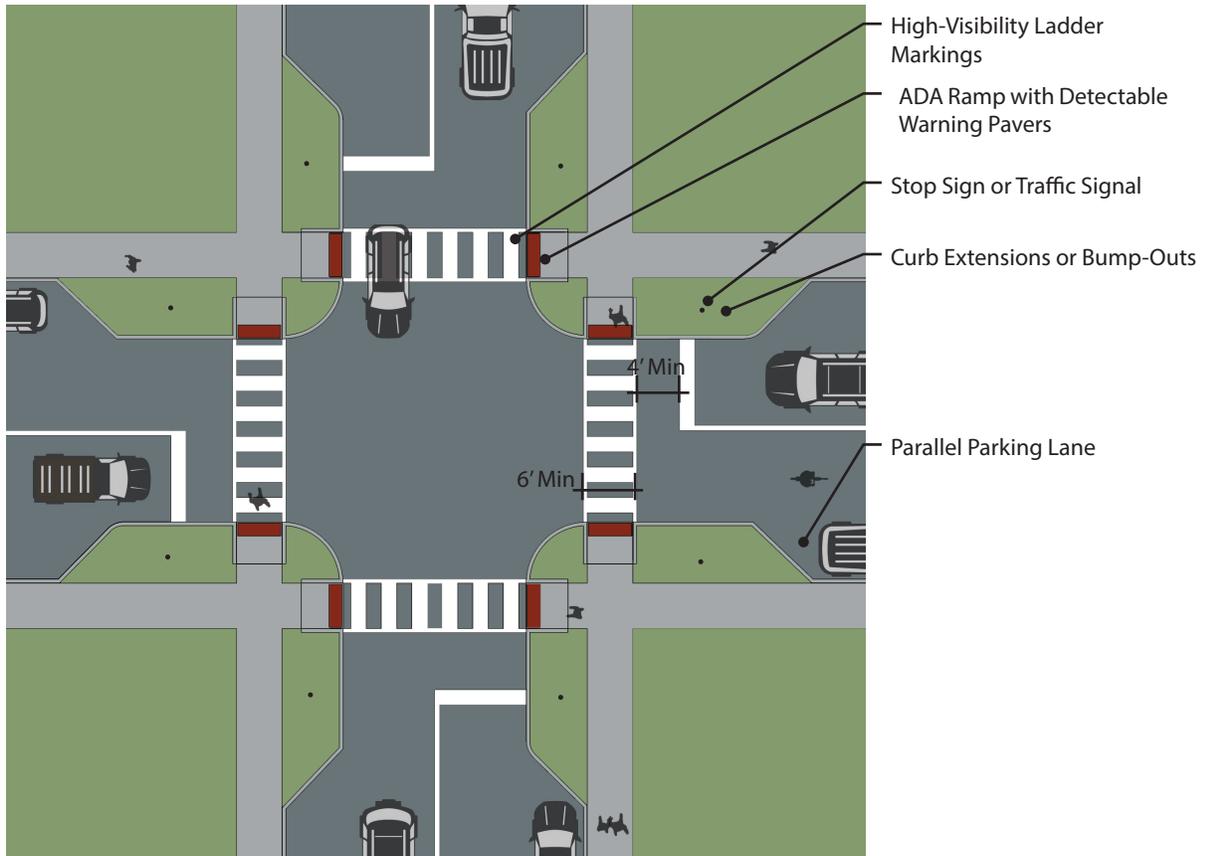


FIGURE P - TYPICAL URBAN INTERSECTION



ENHANCED INTERSECTION ALTERNATIVES

Enhanced pedestrian crossing should be considered on major thoroughfares or higher-volume roadways and need should be determined on a case-by-case basis.



Mid-block crossing with pedestrian refuge median.

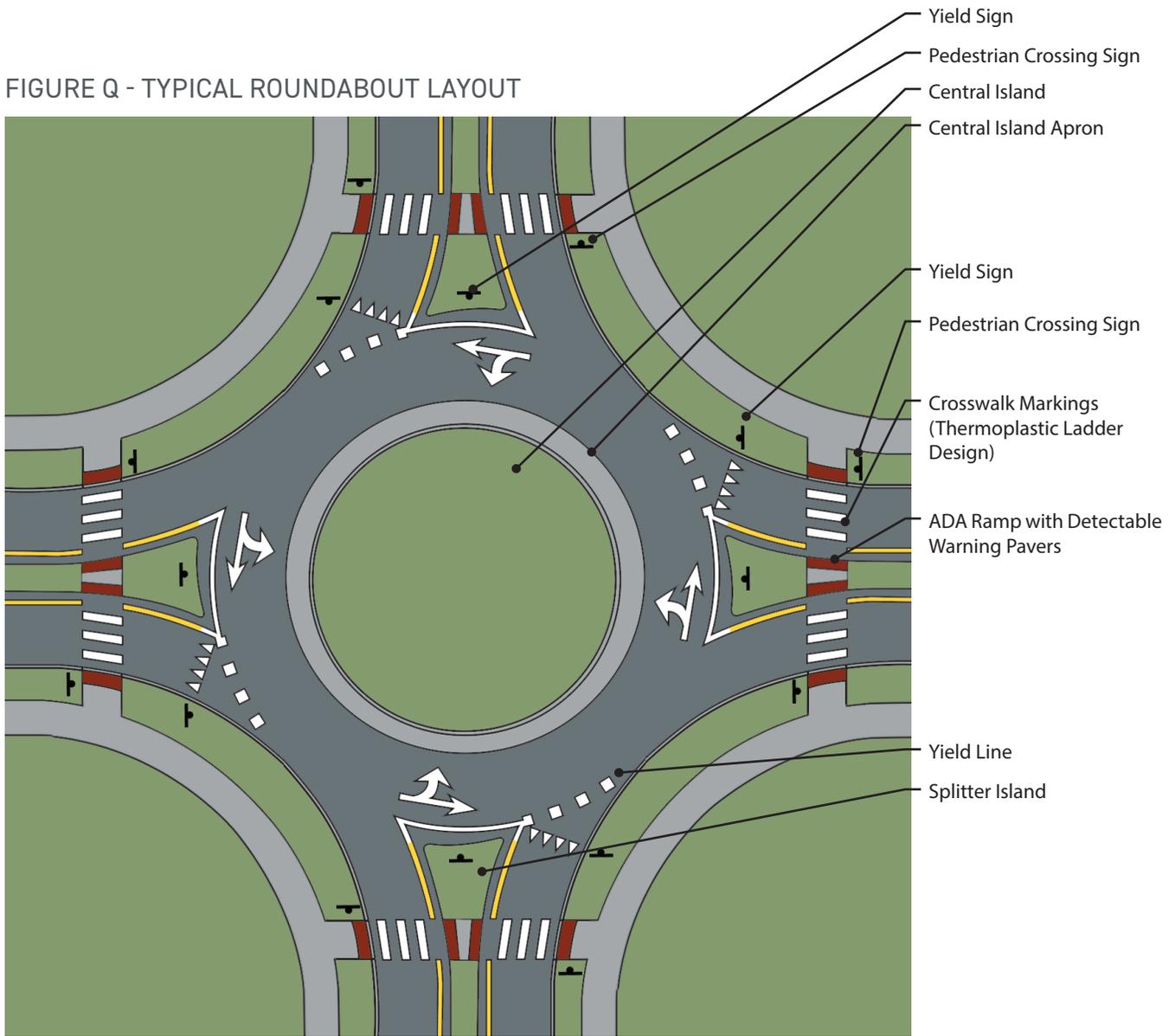


Pedestrian crossing marked with overhead warning signs and flashing beacons (including HAWK or RRFB).

ROUND-A-BOUTPEDESTRIANACCOMMODATION

Roundabouts are low-speed intersections, which not only ease traffic congestion, but also provide benefits to pedestrians. Splitter island refuge areas allow pedestrians to stop and focus on one lane of traffic at a time (one direction at a time).

- It is recommended that roundabout installations be limited to one-lane entrances and exits, and one lane of circulating traffic.
- Pedestrian crossing should be set back 25 feet at a minimum from the yield lines. A splitter island should be included and be at least six feet in width.



DRIVE-WAY ACCESS PEDESTRIAN ACCOMMODATION

Drive-way access for developments are often wide and may consist of three or more lanes of traffic. Pedestrian crossings in these locations should be pulled back from the widened entrance to the point where the entrance radius stops. This allows for crossing at the narrowest point, reducing the amount of time the pedestrian spends in conflict with vehicles. Additionally, a central median should serve as a pedestrian refuge, especially in the case where there are more than two lanes of traffic to cross.

DRIVEWAY ACCESS CURRENT CONDITIONS

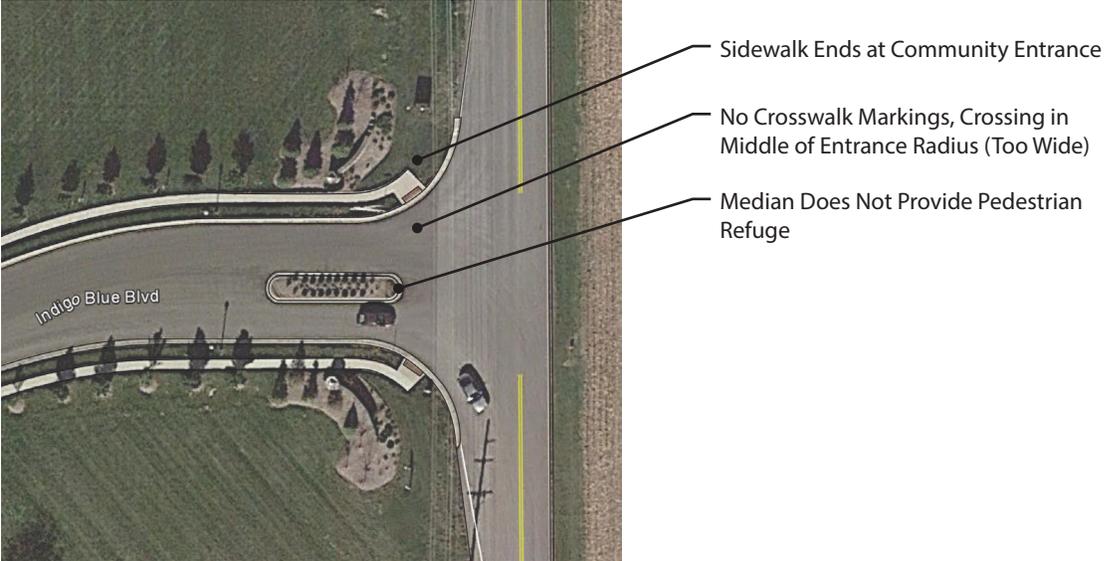
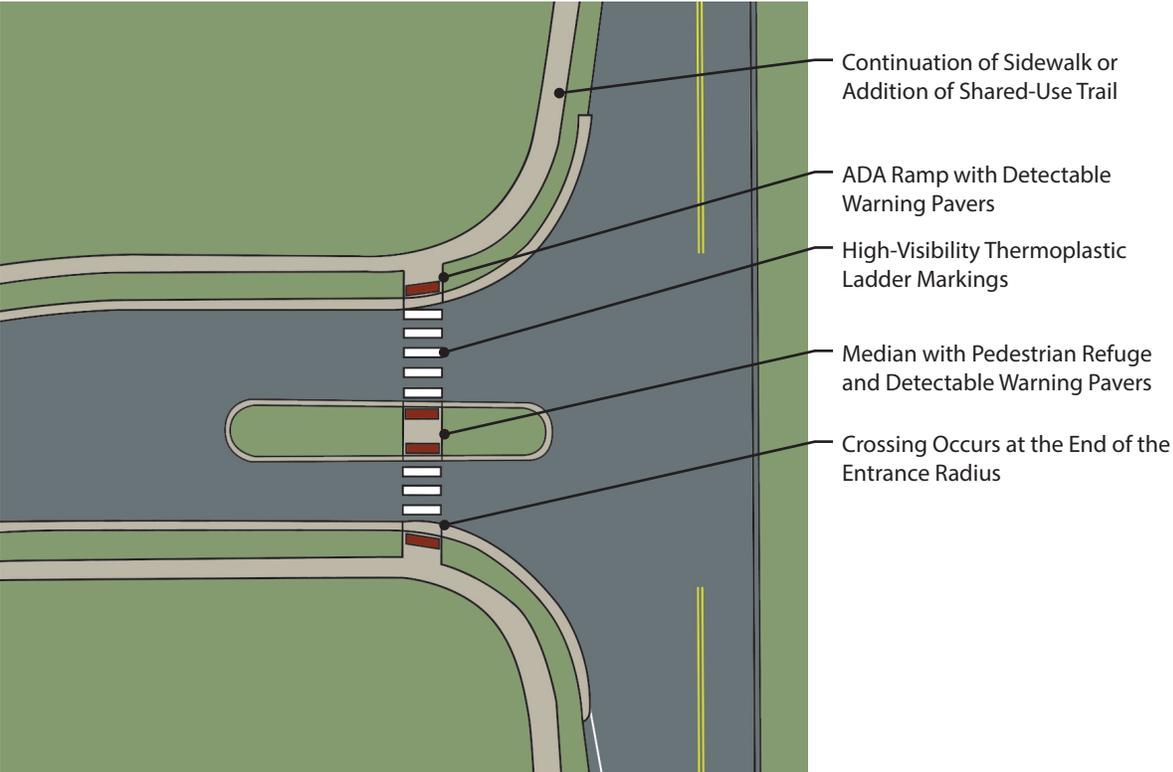


FIGURE R - DRIVEWAY ACCESS PREFERRED CONDITIONS



TRAILHEADS

Trailheads mark the entry point to a particular pathway or trail, and should contain amenities that all users can enjoy, as they offer access to users that do not have a direct connection to the system. Parking should be provided near the main trailheads, with accommodations for at least four vehicles and at least one ADA parking space. Bicycle parking should also be included in the trailhead to provide users with a safe location to lock their bicycle. This increases the opportunities for multi-modal transportation options within the system. Additional amenities appropriate for a trailhead include bicycle repair and airing stations, pet waste disposal systems, trash and recycling receptacles, wayfinding signage and maps, benches, shade structures, and drinking fountains.

Auxiliary trailheads or trail nodes should be located at a point where two or more trails meet up (in the absence of a main trailhead) and should contain signage, seating and a trash and recycling receptacle. Bike parking for at least three bicycles should also be included.



Elmen Park Trailhead - Souix Falls, South Dakota; Shelter with seating, education signage and wayfinding, bicycle parking



Coast to Vines Rail Trail Signage - Adelaide, AU

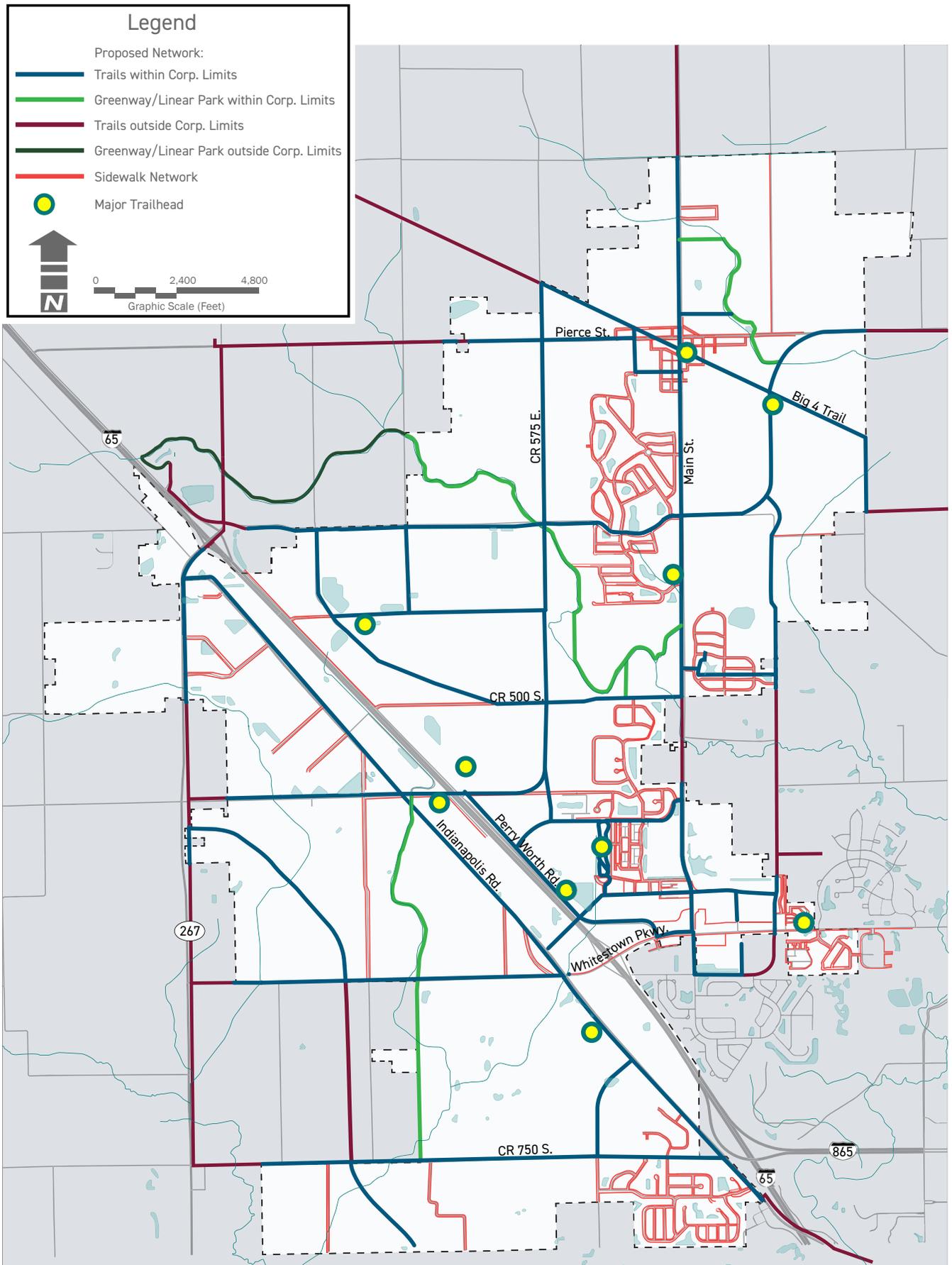


Bike Repair Station



Fall Creek Trailhead - Indianapolis, IN

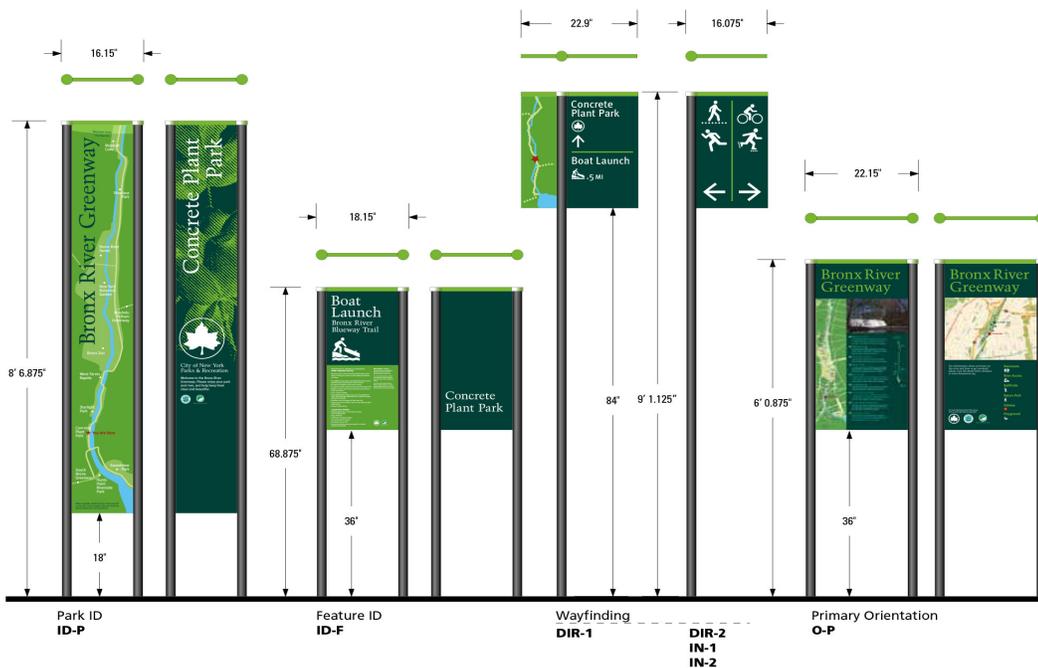
FIGURE S - MAJOR TRAILHEAD LOCATIONS



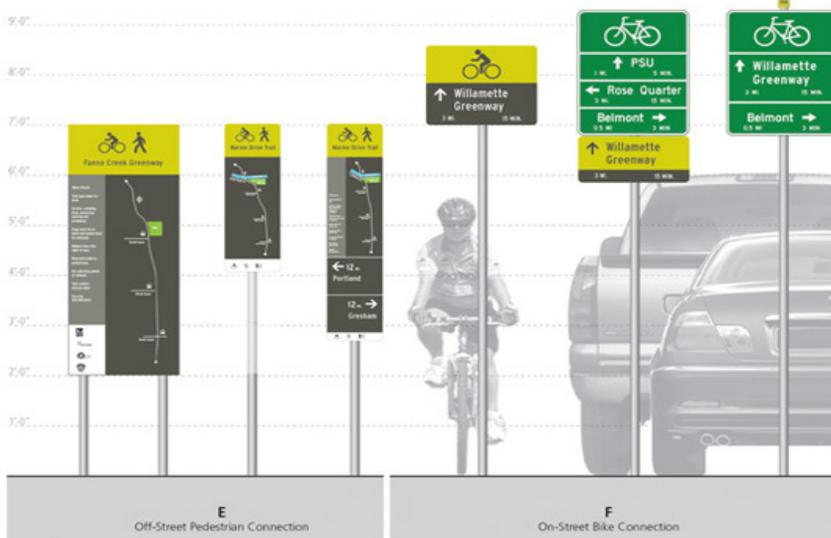
WAYFINDING

A large network of interconnected trails and pathways can become confusing for users, whether they are local residents or visitors/tourists. Therefore, a wayfinding system with a cohesive and standardized design will give users reassurance and enhance their enjoyment of the facilities. The signage should provide clear and pertinent information for users to make good decisions based on their physical condition and technical abilities. Information included on the sign can include the length of the pathway segment, starting elevation, elevation gain and loss along the way, modes of travel appropriate on the pathway, directional at intersections, and distances to various destinations. Design standards will dictate aesthetic and organizational characteristics, such as text color, background color, sign size and shape, post materials, directional graphics, and user graphics. The design standards will be guided by the Manual on Uniform Traffic Control Devices (MUTCD) standards.

EXAMPLE OF WAYFINDING STANDARDS: BRONX RIVER GREENWAY



EXAMPLE OF WAYFINDING STANDARDS: THE INTERTWINE, PORTLAND, OR



BICYCLE PARKING

Providing ample bicycle parking at major destinations and local attractions is essential to the success of a bicycle network. The location of the parking should be in a logical, visible area, but outside of the flow of traffic. Bicycle parking has specific space requirements, dependent on the type of facility being installed, and these requirements should be carefully considered when determining placement. Bike parking should be anchored to concrete and at least three feet from curbs, fences, walls, trees, and fire hydrants. When locating bicycle parking along a walkway, the parking should be oriented so it does not create an obstacle in the pedestrian route or impede ADA requirements. Additionally, the walkway must be at least 10 feet wide to accommodate the bicycle parking facility. The orientation of the bike rack shall be designed so a typical bike does not create an impassable route for pedestrians or impede ADA requirements.

COVERED BIKE PARKING



OPEN BIKE RACKS



LEAD BY EXAMPLE!

- Require bike parking at all developments
- Require bike parking at all city properties
- Require bike parking to be as prominent as handicapped parking spaces

BIKE PARKING AS PUBLIC ART



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7

BICYCLE + PEDESTRIAN MASTER PLAN



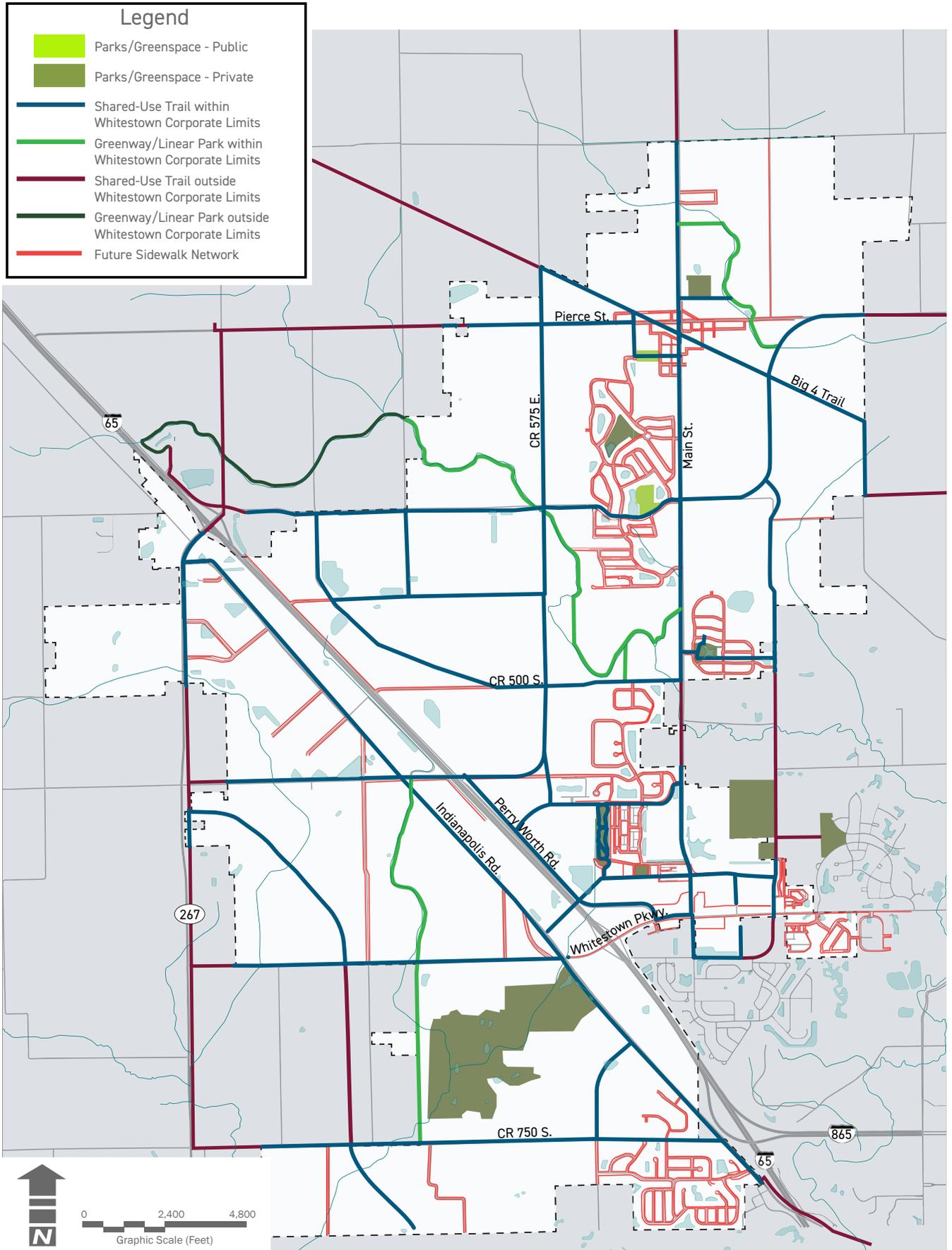
The bicycle and pedestrian master plan provides a comprehensive set of pedestrian and bicycle capital improvement projects that, once constructed, will help people walk and bicycle more often for more types of trips.

WHAT DOES A BIKE + PED NETWORK LOOK LIKE FOR WHITESTOWN?

THIS PLAN HAS TAKEN THE 53.4 MILES OF EXISTING TRAILS AND SIDEWALKS AND EXPANDED THEM TO CREATE A COMPLETE SET OF TRAILS AND WALKWAYS.

The Master Plan (Figure T) is a long-term, comprehensive look at the complete bicycle and pedestrian network. Due to the rapid growth and development the town has seen and continues to experience, it is vital that a long-term vision and plan be set up to guide future growth. As developers come into the town, this vision will serve to guide their plans in the direction in which the town would like to move. A major goal is to have traditional sidewalks on both sides of streets within all developments, and a shared-use trail on at least one side of every major roadway. Much thought was given to making useful connections between points of interest and residential areas - including connecting parks and greenspaces with trails and linear parks. The updated 5-Year Parks and Recreation Master Plan provides a detailed look at all interior park trails.

FIGURE T - FUTURE BIKE + PED NETWORK



WHERE ARE THE SUPPORTING FACILITIES?

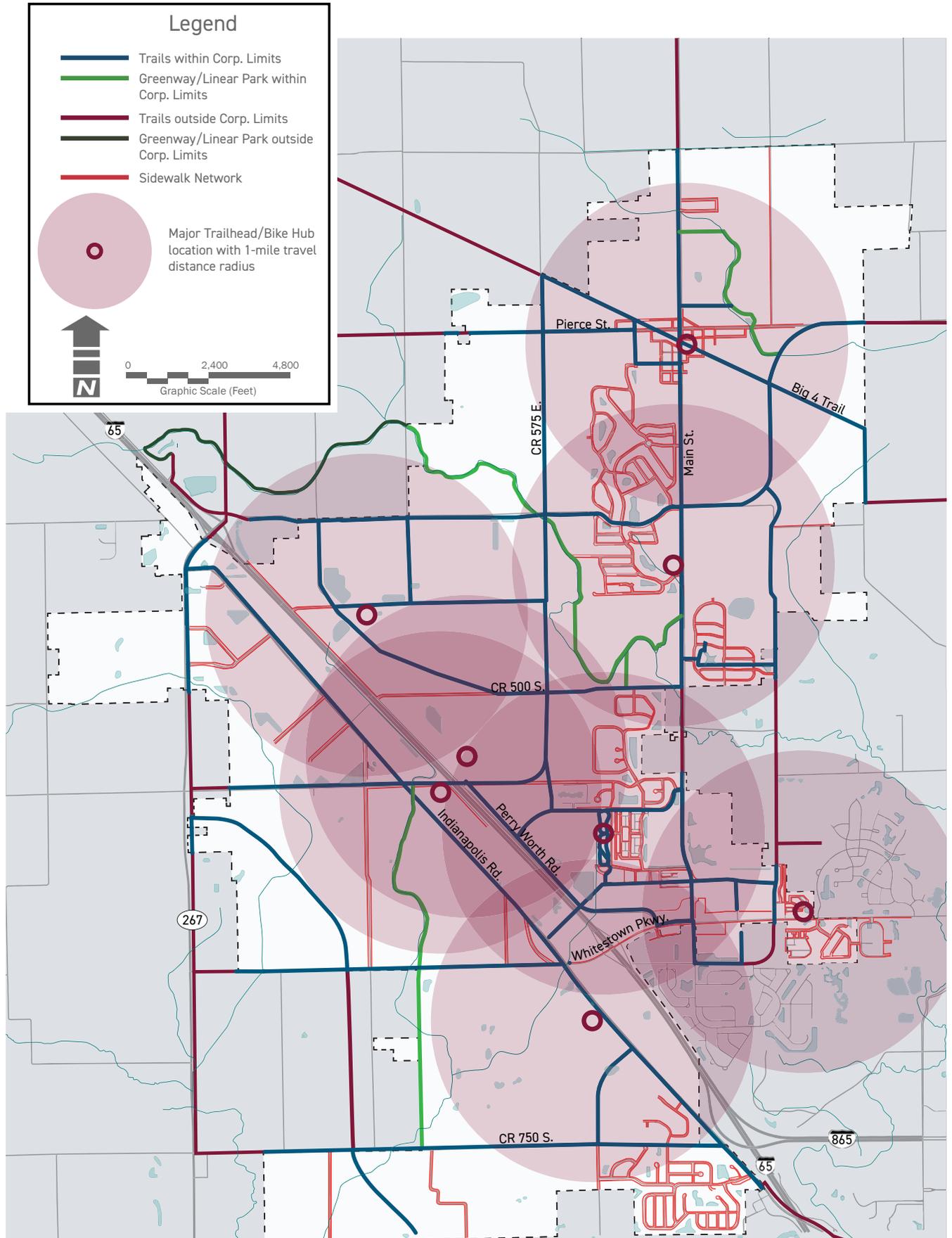
SUPPORTING FACILITIES CAN BE GROUPED TOGETHER INTO 'BIKE HUBS', ALLOWING COMMUTERS AND RECREATIONAL CYCLISTS AN OPPORTUNITY TO REFRESH ONCE THEY HAVE REACHED THEIR DESTINATION.

An ideal bike hub is in a public location, near clusters of amenities or destinations. The bike hub would serve as a major trailhead, and as such, should allow access to at least one, if not several major trail corridors. Supporting facilities that should be included are:

- Parking for at least 8-10 vehicles
- Bicycle parking (preferably covered) with space for at least 10 bicycles
- A bicycle repair station and air pump
- Seating
- Shade
- Trash and recycling receptacles

When possible, a shower and restroom facility is an ideal addition to a bike hub. This allows commuters to freshen up before going into their place of employment. It allows the same opportunity to users who have ridden a long distance and would like to stop to visit local restaurants and shops. Lockers allow users to store valuables if needed. Covered seating areas provide space for groups to meet, such as camps, classes and group rides. Figure U shows the suggested locations for these central hubs.

FIGURE U - BIKE HUB NETWORK



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8

POLICY, ORDINANCE + ADVOCACY



Constructing the infrastructure for bicycle and pedestrian accommodations is just one step toward a complete system. It also requires a comprehensive approach to policy, ordinance and advocacy actions to make the system function.

WHAT ARE THE POLICY, ORDINANCE + ADVOCACY CONSIDERATIONS?

THE POLICY, ORDINANCE AND ADVOCACY RECOMMENDATIONS AIM TO MAKE SURE THAT THE BUILT ENVIRONMENT IN WHITESTOWN SUPPORTS BICYCLING AND WALKING AS ALTERNATIVE MEANS OF TRANSPORTATION WHILE ALSO BUILDING A CULTURE OF WALKING AND BICYCLING IN THE COMMUNITY.

Building projects alone will not create the most walkable and bikable town in Indiana. Instead, the town needs to implement supportive policies to guide decision making, they need to update ordinances to require outstanding bicycle- and pedestrian-friendly developments, and the community needs to become a leader in advocating for bicycle and pedestrian accommodation in Boone County, central Indiana, and beyond.



THIS PLAN BECOMES A POLICY DOCUMENT THAT INFLUENCES OTHER LOCAL DECISIONS.

Assess speed limits on major thoroughfares to determine if speed reduction is a possibility to foster greater bicycle and pedestrian safety. Work with the Redevelopment Commission to purchase and redevelop land to promote higher density, pedestrian-friendly districts within the community.

THIS PLAN IS REVIEWED AND UPDATED REGULARLY.

To ensure the plan remains valid, it is important to review it and make sure it reflects current community desires, new best practices, etc.

THIS PLAN BECOMES A POLICY DOCUMENT USED TO UPDATE THE STREET DESIGN STANDARDS FOR THE TOWN.

Section 6, Design Standards, of this document lists the recommendations for the design of sidewalks, shared-use trails, greenways/linear parks, and pedestrian and bicycle support facilities. These recommendations should be used to update the Street Design Standards.

Currently, the Street Design Standards require a 9' separation between the 10' HMA Trail and the Roadway for a Minor Collector Street, and a 6' separation between the 10' HMA Trail and the Roadway for a Major Collector Street. It is recommended that these be switched to better reflect the needed separation for the busier roadway.

POLICY RECOMMENDATIONS

WHITESTOWN UDO + SUBDIVISION CONTROL ORDINANCE			
TOPIC	REFERENCE	CURRENT CONTENT	SUGGESTED CHANGES
ZONING DISTRICTS	Chapter 2	No reference to pedestrian access standards within any zoning district	Add pedestrian access requirements in development standards tables: Sidewalks and trails per Town design standards
PUD ZONING DISTRICTS	Chapter 2.13	No reference to pedestrian access standards for any new adopted PUD	PUD sidewalk and trail requirements shall be met; any new PUD established within Town should reflect or enhance Town sidewalk and trail design standards
OVERLAY DISTRICT	Chapter 3.1	No reference to pedestrian access standards within designated overlay districts	Require sidewalk or trail as determined by Bike and Ped Master Plan
USE STANDARDS	Chapter 5	One reference to a four foot sidewalk width requirement within mobile home park land use; No other reference to pedestrian access standards within any land use	Include walkway requirements after #5, Access to Primary or Secondary Streets section
SUBDIVISIONS	Chapter 6	No reference to pedestrian standards within any subdivision (Commercial/Industrial/Residential)	Require sidewalk or trail as determined by Bike and Ped Master Plan: This includes commercial, industrial, and major and minor residential subdivisions
AMENITY CENTER STANDARDS	Chapter 7.2	No reference to pedestrian standards within any subdivision (Commercial/Industrial/Residential)	Require a minimum of a 5' sidewalk connection to amenities within developments
ARCHITECTURAL STANDARDS	Chapter 7.3	No reference to location or requirement of pedestrian access throughout development	As a minimum requirement, sidewalks shall be provided in front yard facades for homes on perimeter or internal lots; corner lots shall require two connecting sidewalks on front or side facade of home
DENSITY INCENTIVES: COMMERCIAL AND INDUSTRIAL SUBDIVISIONS	Chapter 7.4	No requirement or standard for pedestrian access	Require or incentivize bike hubs within commercial/industrial subdivisions based on acreage/size of development
DENSITY INCENTIVES: RESIDENTIAL SUBDIVISIONS	Chapter 7.4	No reference of incentives to developers for connection to existing or adjacent sidewalk or trail networks	Incentivize additional trail lengths within development; or extend trail or sidewalk extensions to allow for connections beyond development or for anticipated future connection
SIDEWALKS AND TRAILS	Chapter 7.13.G	Sidewalks required on both sides of Major Collector, Minor Collector, subcollector, feeder, or access street upon which development occurs. The Administrator, PC, or Plat Committee may allow a minimum five (5) foot wide asphalt trail as an alternate. When possible, trails should be provided within the subdivision and should complement the sidewalk system. Trails shall be comprised of asphalt and shall maintain a minimum width of five (5) feet.	Update text to match design standards matrix; minimum sidewalk width should be 5' and minimum trail width should be 10'

WHAT IS THE WHITESTOWN COMPLETE STREETS POLICY?

COMPLETE STREETS ARE DESIGNED AND OPERATED TO ENABLE SAFE ACCESS FOR ALL USERS, INCLUDING PEDESTRIANS, BICYCLISTS, MOTORISTS AND TRANSIT RIDERS OF ALL AGES AND ABILITIES.

Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. The Whitestown Complete Streets policy is intended to promote the development of safer, more reliable, more efficient, and more integrated and connected multi-modal transportation systems within the town, promoting access, health, and mobility for numerous users.

This policy was consulted in the creation of the Bicycle and Pedestrian Master Plan, and many of the goals and objectives in both documents are closely aligned.

WHITESTOWN COMPLETE STREETS VISION:

This Complete Streets Policy ("Policy") is intended to promote the development of safer, more reliable, more efficient and more integrated and connected multi-modal transportation systems within the town of Whitestown, Indiana, which should promote access, health, and mobility for numerous users.



PROMOTION OF MULTIMODAL TRANSPORTATION

This portion of the policy aims to assess whether a planned road project can accommodate multimodal transportation, including pedestrians, bicyclists and motorists, as well as users of varying ages and abilities. If the planned project does not accommodate the various modes of transportation, the town must attempt to work such accommodations into the plans. This aligns with the Bicycle and Pedestrian Master Plan's goal of "Safety and Equity" as well as the goal of "Bike and Ped Friendly Developments."

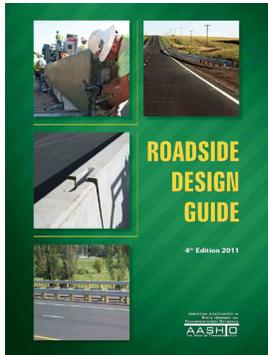


APPROACH TO PROJECTS

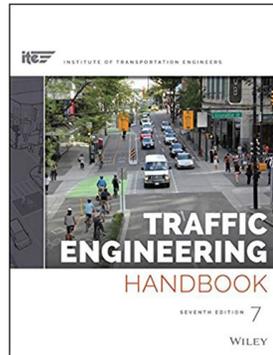
Transportation projects, whether they be the construction of new streets, rehabilitation of older streets, or repairs to current streets, should be seen as an opportunity to promote the development of safer, more accessible streets for users of various modes of transportation. In the event that the right-of-way does not accommodate various modes of transportation, the town is to take reasonable steps to design, develop or install improvements to accommodate them. This policy supports several of the Master Plan's goals.

 DESIGN

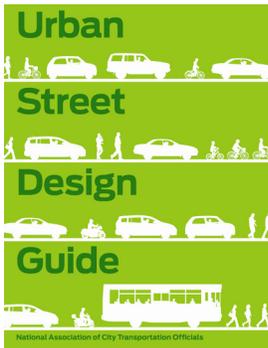
Both the Complete Streets policy and the Bicycle and Pedestrian Master Plan look to several design standards developed by other organizations as guideposts. Included are the following:



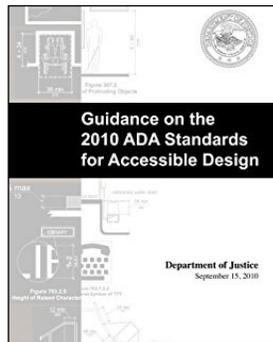
American Association of State Highway and Transportation Officials (AASHTO)



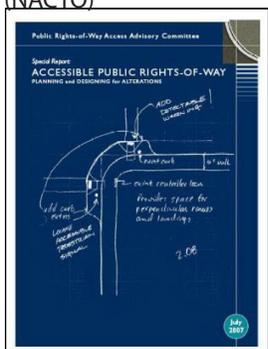
Institute of Transportation Engineers Traffic Engineering Handbook (ITE)



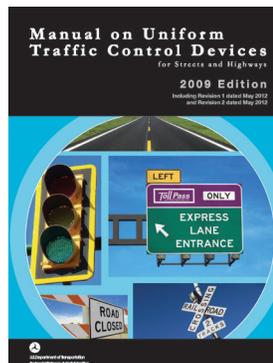
National Association of City Transportation Officials Urban Street Design Guide (NACTO)



The Department of Justice Americans with Disabilities Act Accessibility Guidelines (ADA)



Public Rights-of-Way Accessibility Guidelines (PROWAG)



Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)

 COMMUNITY SENSITIVITY

The goal of this policy is to be sensitive to the local context and character, recognizing that the needs of users may vary based upon location, community type, and corridor type. It also aims to align with the transportation and land use goals of specific areas. The Bicycle and Pedestrian Master Plan incorporates these aims, sharing the goal of offering multiple solutions to promote multi-modal transportation throughout the whole of Whitestown.

 EXCEPTIONS

The Complete Streets Policy recognizes that it may not be possible, in all cases, to accommodate multi-modal transportation. The generally accepted reasons for these exceptions are listed in the Complete Streets Policy Ordinance included in the Appendix. The Bicycle and Pedestrian Master Plan took these into consideration and attempted to find reasonable alternatives to solve the problems when a connection in the complete network could not be made.

 PERFORMANCE EVALUATION

A list of benchmarks and evaluation criteria was compiled in the Complete Streets Policy to measure the overall success of the program. This list can be found with the Policy Ordinance in the Appendix. It is recommended that these performance measures be applied to the Bicycle and Pedestrian Master Plan, in order to continue to improve the plan as changes are made and the town grows.

HOW SHOULD WHITESTOWN SUPPORT DECISIONS OUTSIDE OF THEIR CONTROL?

DEVELOPING A BICYCLE- AND PEDESTRIAN-FRIENDLY COMMUNITY REQUIRES ADVOCATING FOR SUPPORTING PROJECTS OUTSIDE OF WHITESTOWN'S DIRECT CONTROL.

For multiple reasons, some aspects of providing bicycle and pedestrian accommodation are outside of Whitestown's direct control. Boone County and INDOT control some of the right-of-ways within the town and projects that occur within them. Additionally, Zionsville controls right-of-way along a portion of the routes needed to connect Whitestown destinations.

As a result, creating a bicycle and pedestrian friendly community will require the town to work cooperatively with other authorities to encourage the development of necessary infrastructure within and outside the town's borders.

1

ADVOCATE FOR CONNECTIVITY OUTSIDE OF WHITESTOWN'S JURISDICTION

One of the key challenges for Whitestown is that it has an irregularly shaped corporate boundary. In many places, the boundary excludes sections of roadways along proposed pathway routes. In these cases, Whitestown will need to work with Zionsville or Boone County to develop continuous and connected bicycle and pedestrian infrastructure along these corridors. In the proposed development plan in Section 7, the corridor's outside of Whitestown's control are shown in red.

Priorities for infrastructure development outside the town's direct control are outlined earlier in this section and include:

- Main Street – from CR 500 S to CR 550 S: This is needed to provide a continuous north-south trail route through the community.
- CR 700 E – from Central Boulevard north to CR 550 S: This is important to connect Whitestown residents to Zionsville Youth Soccer Association (ZYSA) facilities, Boys and Girls Club facilities, Zionsville West Middle School and Stonegate Elementary.

2

ADVOCATE FOR REGIONAL CONNECTIONS

It is also important to understand that providing a bicycle and pedestrian friendly community also means having regional connections to which you can walk and bicycle. Whitestown should take a strong role in advocating for the development of these corridors. Key regional connections are described in Section 9, and include:

- Big Four Trail: Encourage the short term development of a connection to Zionsville. In the medium term, encourage the extension of the trail to Lebanon.
- Ronald Reagan Parkway: Encourage the development of trails along Ronald Reagan Parkway as it is developed in order to provide connections between Whitestown and the western suburbs of Indianapolis.
- Indianapolis Road: Encourage the development of bicycle and pedestrian facilities along Indianapolis Road south of Whitestown. The short term priority is to connect Whitestown's existing trail to bicycle lanes further to the south.

3

ADVOCATE FOR BICYCLE AND PEDESTRIAN ACCOMODATION IN INFRASTRUCTURE PROJECTS LED BY OTHERS

The Indiana Department of Transportation (INDOT) controlsultimatedecisionmakingrelated to the I-65 corridor and interchange development. Boone County controls the 146th Street connector currently, and it is expected that the county will control the Ronald Reagan Parkway right-of-way. Accordingly, it is important that the town work with these entities to encourage the development of high quality bicycle and pedestrian facilities within these corridors. Priorities include:

- I-65 Interchanges: Whitestown should encourage the development of bicycle and pedestrian accommodation in the upgrade of existing interchanges and the construction of the new proposed mid-point interchange.
- 146th Street Connector: This project does not currently have bicycle or pedestrian accommodation. It will be important to work with Boone County to add this in after initial construction is complete.
- Ronald Reagan Parkway: As this is developed, it is important to provide bicycle and pedestrian accommodations along this key corridor.

WHAT SPECIFIC ADVOCACY STEPS CAN BE UNDERTAKEN?

THROUGH ITS BICYCLE AND PEDESTRIAN ADVISORY BOARD, ITS TOWN COUNCIL AND TOWN MANAGER, WHITESTOWN SHOULD ADVOCATE FOR THE DEVELOPMENT OF SUPPORTIVE BICYCLE AND PEDESTRIAN FACILITIES IN AND AROUND WHITESTOWN.

There are a variety of methods for advocating for the desired improvements described within this plan. The following describe two advocacy actions that can be undertaken by the town and community members:



UTILIZE THE FEDERAL HIGHWAY ADMINISTRATION CONSULTING PARTY PROCESS TO PROVIDE INPUT ON PROJECTS OUTSIDE OF WHITESTOWN'S DIRECT JURISDICTION

For projects funded with Federal Highway Administration dollars, the Indiana Department of Transportation (INDOT) and other units of government are required to complete environmental assessments. This process requires them to solicit input from consulting parties. Anyone with an interest in the project can sign up to be a consulting party. Consulting parties provide non-binding input that will be considered during the development of projects.

Steps to providing input as a consulting party:

- Identify projects (1) that involve federal funds, and (2) where bicycle and pedestrian facilities should be considered
- Submit letter to INDOT and/or the local unit of government requesting to be listed as a consulting party
- You will be included on a distribution list for project information related to environmental review
- Review and provide a written response to information received on the proposed project, and recommend changes to meet the intent of this plan and local bicycle and pedestrian policies/standards
- Attend consulting party meetings, when held, to reinforce written responses.



INCLUDE A BICYCLE AND PEDESTRIAN ADVISORY BOARD MEMBER AS PART OF THE TECHNICAL ADVISORY COMMITTEE (TAC) REVIEW PROCESS FOR ALL NEW DEVELOPMENTS TO ADVOCATE FOR BICYCLE AND PEDESTRIAN ACCOMODATION ON LOCAL PROJECTS

The review process for all new developments in Whitestown includes a review by the Technical Advisory Committee (TAC). The TAC includes representatives from public safety, utilities and other city staff. A TAC meeting is then held with the developer to coordinate issues and concerns with the proposed improvements.

Steps to providing input as a consulting party:

- Amend ordinances and/or policies to include a Bicycle and Pedestrian Advisory Board member as part of the TAC
- You will be included on a distribution list for project information related to new developments
- Review and provide a written response to information received on the proposed project, and recommend changes to meet the intent of this plan and local bicycle and pedestrian policies/standards
- Attend consulting party meetings to reinforce written responses.

HOW SHOULD PROMOTION AND EDUCATION BE ADDRESSED?

THE TOWN SHOULD DEVELOP ANNUAL PROGRAMMING FOCUSED ON ENCOURAGING WALKING AND BICYCLING.

Creating a culture of walking and bicycling can start with community-wide activities to promote walking and bicycling. It is recommended that the town adapt current programming to include more emphasis on walking and bicycling, and to add more supportive programming activities. Activities and ideas could include:

- Bicycle Rodeo
- Walking Mileage contests
- Free/discounted admission to town events if you walk or bike there
- Walk to the parks/ball game events

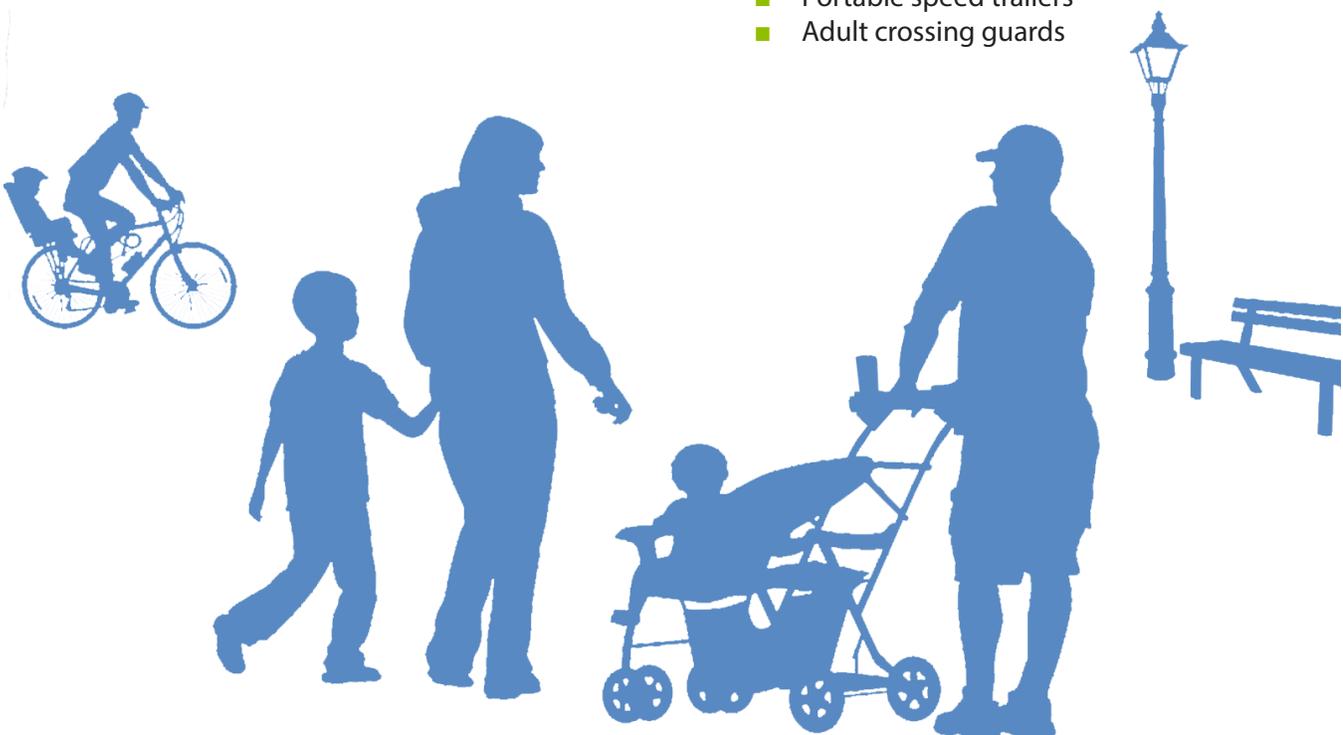
THE WHITESTOWN POLICE DEPARTMENT SHOULD DEVELOP PROGRAMMING TO ENCOURAGE DRIVER BEHAVIORS THAT ENCOURAGE AWARENESS OF BICYCLES AND PEDESTRIANS

Many enforcement strategies should be considered, including:

- Enhanced enforcement periods
- Portable speed trailers
- Adult crossing guards

CREATING A CULTURE OF WALKING AND BIKING REQUIRES EDUCATION, ENCOURAGEMENT AND ENFORCEMENT.

The plan itself may not encourage more activity by Whitestown residents. This section outlines key recommendations for programming activities that support a culture of walking and bicycling.



THE TOWN SHOULD PARTNER WITH LOCAL ELEMENTARY AND MIDDLE SCHOOLS TO IMPLEMENT SAFE ROUTES TO SCHOOLS PROGRAMMING

Safe Routes to Schools (SRTS) is a national program to encourage more students to walk and bicycle to school, and to make it safer to do so. Significant resources are available to those interested in developing SRTS programming at www.saferoutesinfo.org.

The place to begin with SRTS is by developing a Safe Routes to Schools Master Plan. Funding is available through INDOT to complete these studies, which outline education, encouragement, enforcement and engineering strategies for walking and biking.

Possible strategies that this type of plan could address include:

- Parent/driver educational materials
- Walk/Bike to School Day events
- Student education on school zone safety, proper attire, safe walking habits
- Supervised walking to school programs, such as walking school buses.
- Safety patrols

DEVELOP A COORDINATED PROGRAMMING CALENDAR

The town, schools, parks and law enforcement should coordinate to develop an annual programming calendar. At the start, it is not necessary to have activities every month. Even just having one annual event during National Walk to School Day is a great place to begin. A sample programming calendar is provided below.

SAMPLE PROGRAMMING CALENDAR

JANUARY	Indoor walking events at schools
FEBRUARY	Spring Walking Poster Competition - can be used to advertise for spring events
MARCH	Spring/wet weather education programming
APRIL	City Walking Mileage Contest
MAY	National Bike to School Day Event
JUNE	Walk to the park/ball games events
JULY	Bicycle Rodeo
AUGUST	Distribute Safe Routes to Schools materials to parents
SEPTEMBER	Law Enforcement Enhanced Enforcement period
OCTOBER	National Walk to School Day events (1st Wed. in Nov.) / Halloween 5K
NOVEMBER	School zone safety education
DECEMBER	Winter Walks

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9 IMPLEMENTATION PLAN

Identifying high priority routes for bicycle and pedestrian infrastructure improvements and additions ensures that the town's limited resources can be allocated wisely. Short- and medium-term projects are those that have been determined to have the greatest potential impact if constructed first.



WHAT ARE THE NETWORK PRIORITIES FOR THE BIKE + PED MASTER PLAN?

ONCE THE MASTER PLAN WAS DEVELOPED, PRIORITY ROUTES AND NETWORKS WERE ESTABLISHED TO PHASE THE DEVELOPMENT OF THE NETWORK AS A WHOLE.

Short-term priorities were identified as those routes that are more likely to become a reality within the next five years. Medium-term priorities are those routes that could become part of new developments or could gain momentum with the local government within the next 10-15 years. The long-term priority is to complete the network, and achieve the goal of Whitestown becoming one of the most walkable and bikeable communities in Indiana.

SIDEWALKS

Sidewalks should be installed as new roads are constructed. Updates to existing sidewalks should be a high priority - fixing broken concrete, updating ADA accommodations, and filling in gaps in the network. New community developments must construct sidewalks along all residential and commercial roadways. The end goal is for all Whitestown roadways to have some form of pedestrian accommodation along their length.



LONG-TERM:
WITHIN 20+ YEARS

- A completely walkable and bikeable network for Whitestown!



MEDIUM-TERM:
WITHIN 10-15 YEARS

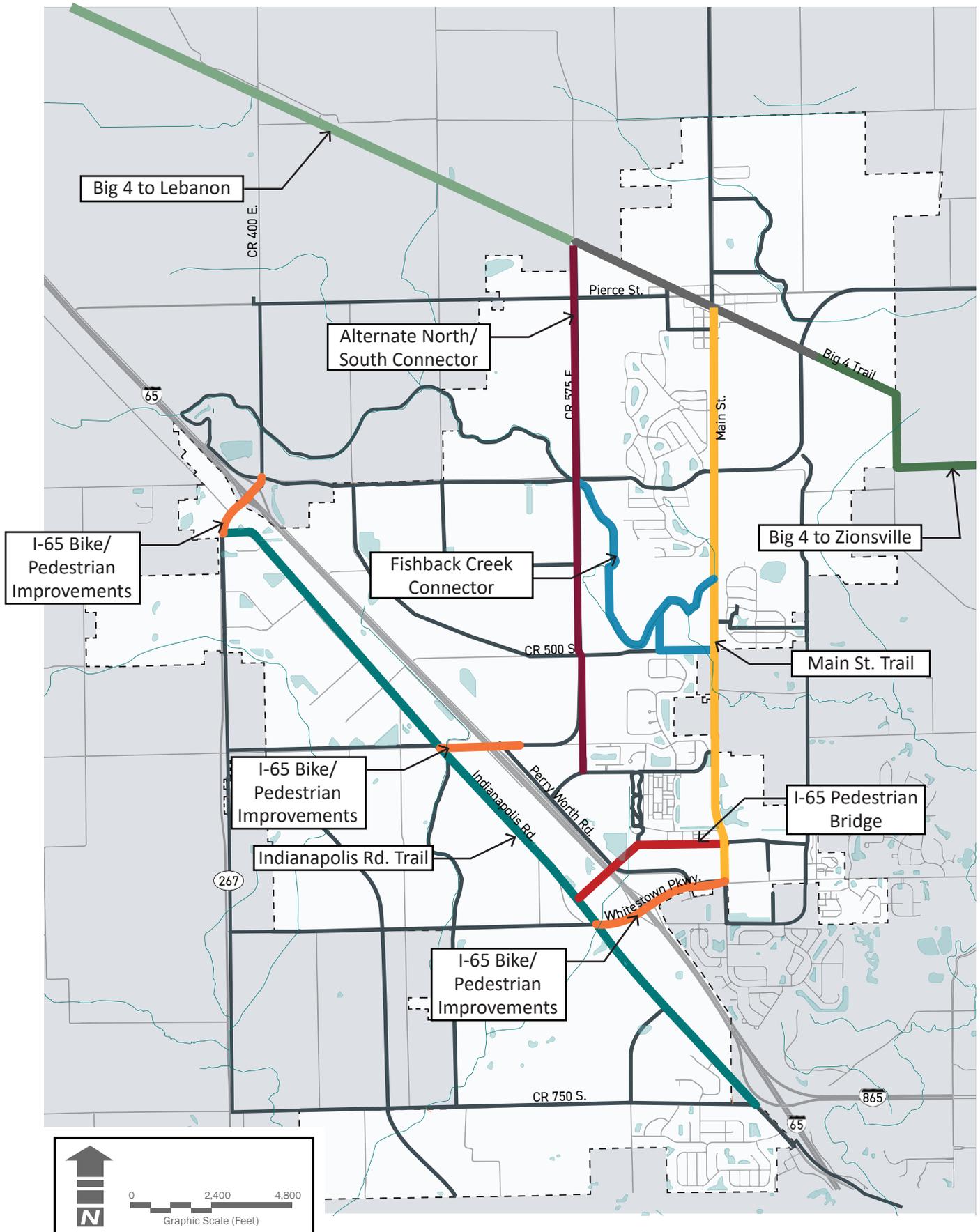
- Alternate North/South Connector
- Big 4 to Lebanon



SHORT-TERM:
WITHIN 5 YEARS

- Indianapolis Road Trail
- Main Street Trail
- I-65 Bike/Pedestrian Improvements
- I-65 Pedestrian Bridge
- Fishback Creek Connector
- Big 4 to Zionsville

FIGURE V - PRIORITY PROJECTS (SHORT- AND MEDIUM-TERM)



INDIANAPOLIS ROAD TRAIL

ROUTE: Indianapolis Road Trail

START: Trader's Point Church Entrance

END: SR 267

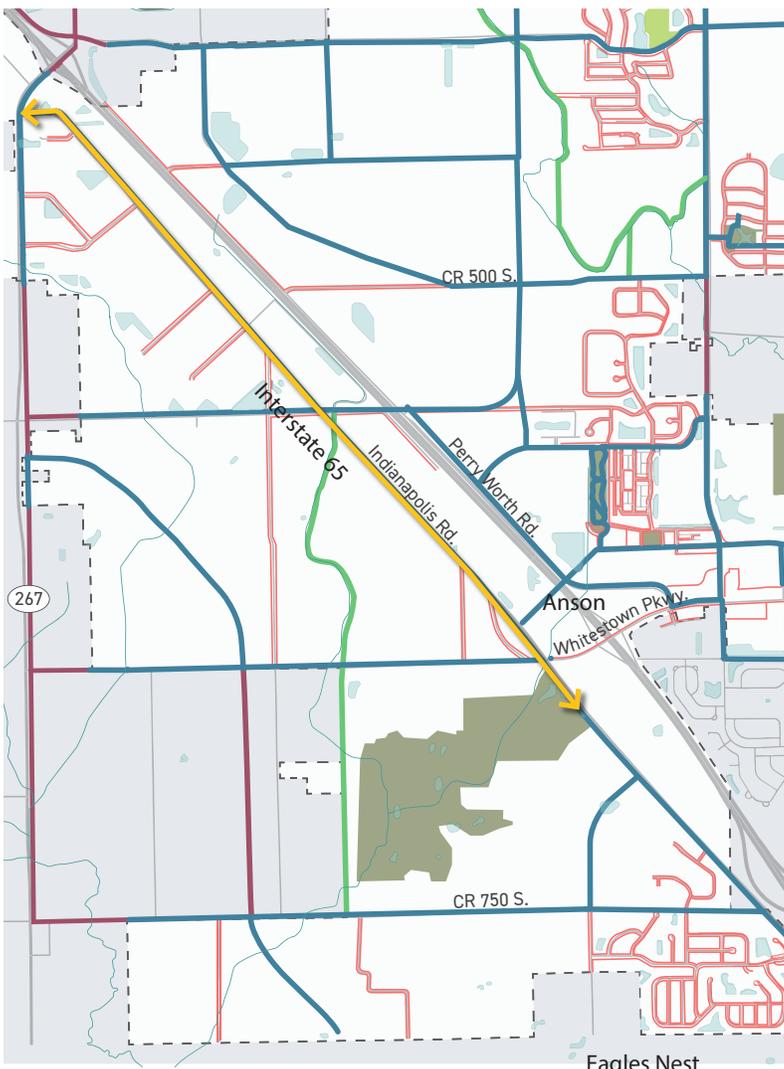
LENGTH:

PATHWAY TYPE: 10' wide shared-use trail initially, 14' ideal long-term width goal

COST:

FUNDING: Local (TIF)

DESCRIPTION: This continuation of the Indianapolis Road Trail is a much needed extension of this already well-traveled pathway. It will serve as an essential connection point between the business and industry on the north end of the road and the school and neighborhoods on the south end.



Indianapolis Road shared-use trail, looking north toward Traders Point Church and the northern terminus of the trail.

MAIN STREET TRAIL

ROUTE: Main Street Trail

START/END: Boone Meadow Elementary School north to Walker Farms. Walker Farms north to Big 4 Trailhead in the Legacy Core.

LENGTH:

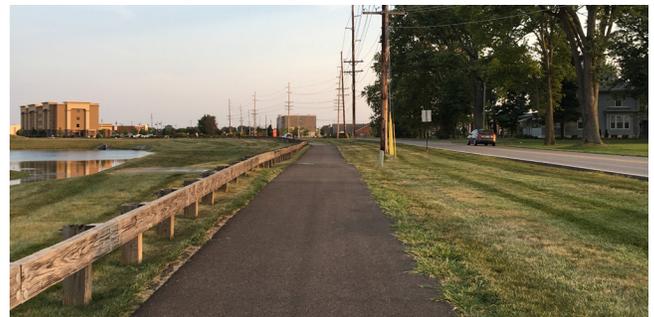
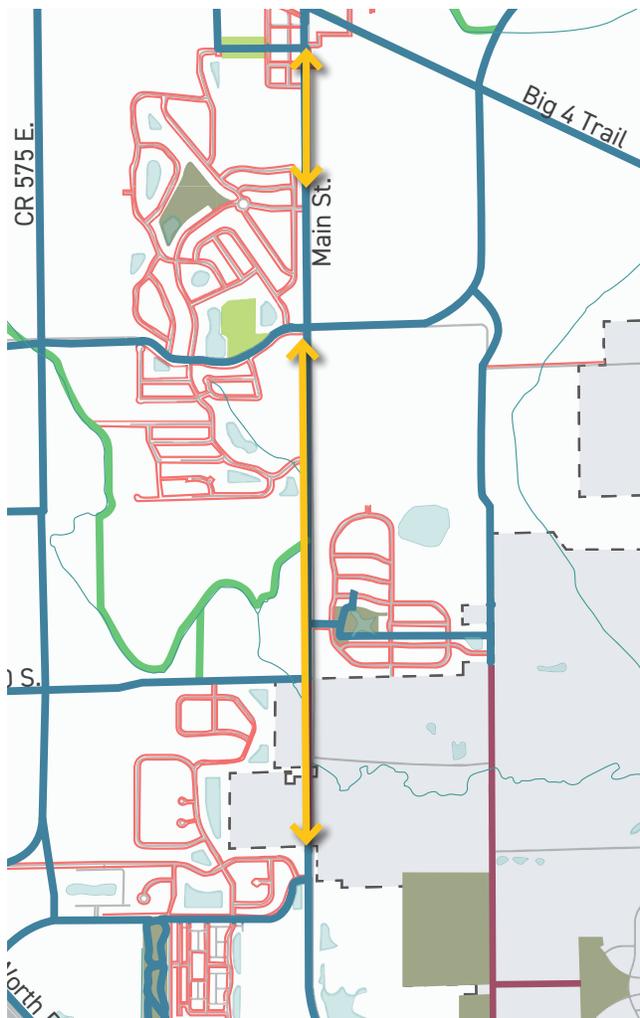
PATHWAY TYPE: 10' wide shared-use trail initially, 14' ideal long-term width goal

COST:

FUNDING: INDOT

DESCRIPTION: Main Street (CR 650 E) is the ideal route for a north/south trail connection between the commercial activity along Whitestown Parkway and the Legacy Core and Big 4 Trail. Current trail portions need to be connected and new widened sidewalks in the Legacy Core need to be added to accomplish this connection.

It is important to note that the trail between Boone Meadow Elementary School and Harvest Park is outside of Whitestown's corporate limits. Whitestown will need to work with Zionsville to complete this section of the trail.



Shared-use trail along Main Street. This trail runs along the east side of the street, starting at Whitestown Parkway and ending at Boone Meadow Elementary School.



The shared-use trail along Main Street in front of the Walker Farms community ends at the edge of the property and becomes a narrow sidewalk through the Legacy Core.

I-65 BIKE/PEDESTRIAN IMPROVEMENTS

CROSSING LOCATIONS: Whitestown Parkway, Albert S. White Dr. (CR 400 E) and CR 500

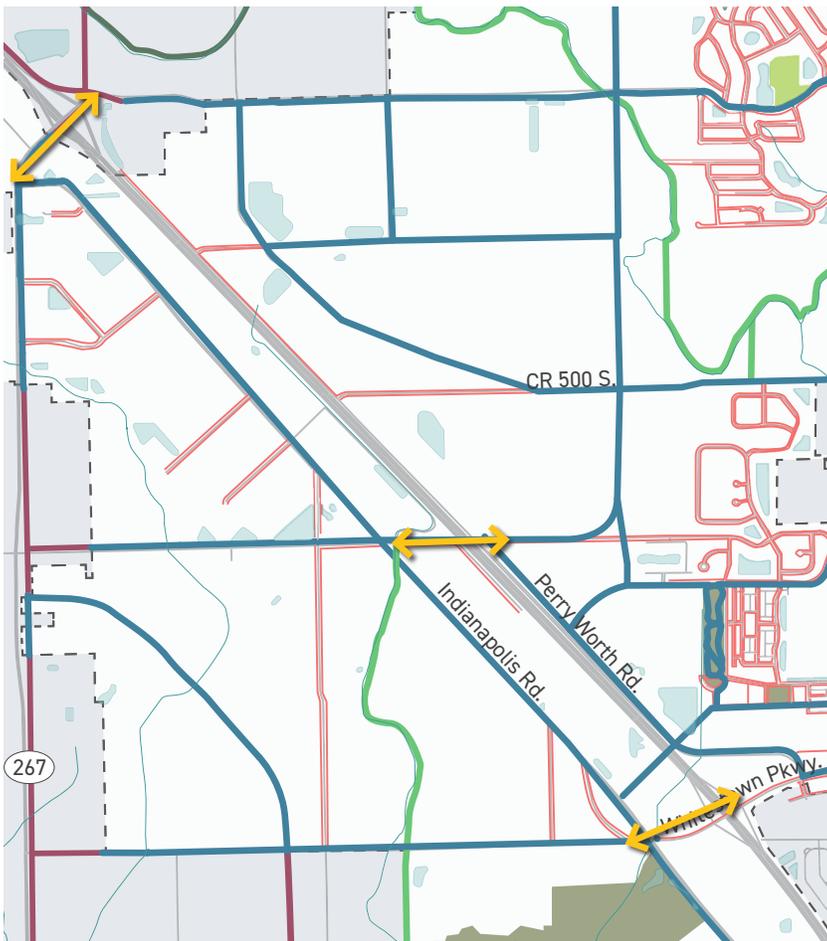
PATHWAY TYPE:

COST:

FUNDING:

DESCRIPTION: Whitestown desperately needs a safe and convenient access point for pedestrians and cyclists to cross Interstate 65. This goal should be achieved through retrofitting pedestrian and bicyclist accommodations on the current interchanges and through the addition of accommodations with the new mid-point interchange. The best option for this connection point is at the new midpoint interchange, as this can be rolled into the larger construction project.

Bicycle and pedestrian accommodation through the interchanges should involve a minimal number of roadway crossings. If possible, full-grade separated crossings should be provided.



The I-65 Interchange at Whitestown Parkway has no pedestrian accommodation and is not a safe crossing point.

I-65 PEDESTRIAN BRIDGE

ROUTE: Stand-alone pedestrian bridge from Whitestown Pkwy to Central Blvd

START: Indianapolis Road Trail at Whitestown Pkwy

END: Central Boulevard

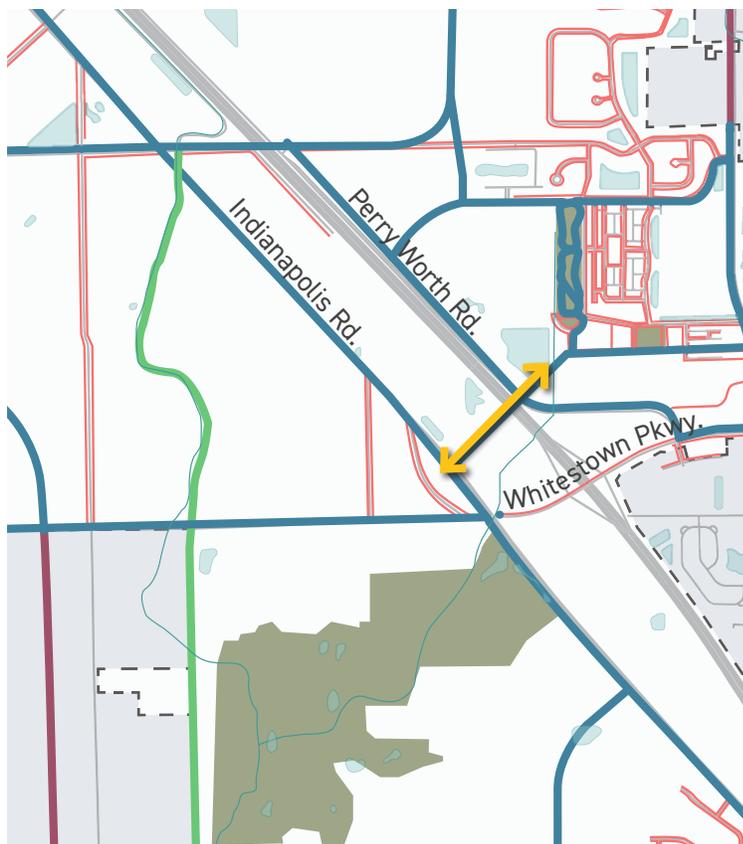
LENGTH:

PATHWAY TYPE: 14-18' wide shared-use trail and pedestrian bridge

COST:

FUNDING:

DESCRIPTION: As an alternative crossing point for Interstate 65, this stand-alone bridge would take pedestrians and cyclists from the Indianapolis Road Trail at Whitestown Pkwy on the west side, to Central Boulevard on the east side of the interstate.



FISHBACK CREEK CONNECTOR

ROUTE: Along Fishback Creek between CR 575 E and CR 500 S

START: The point where Fishback Creek crosses CR 575 E

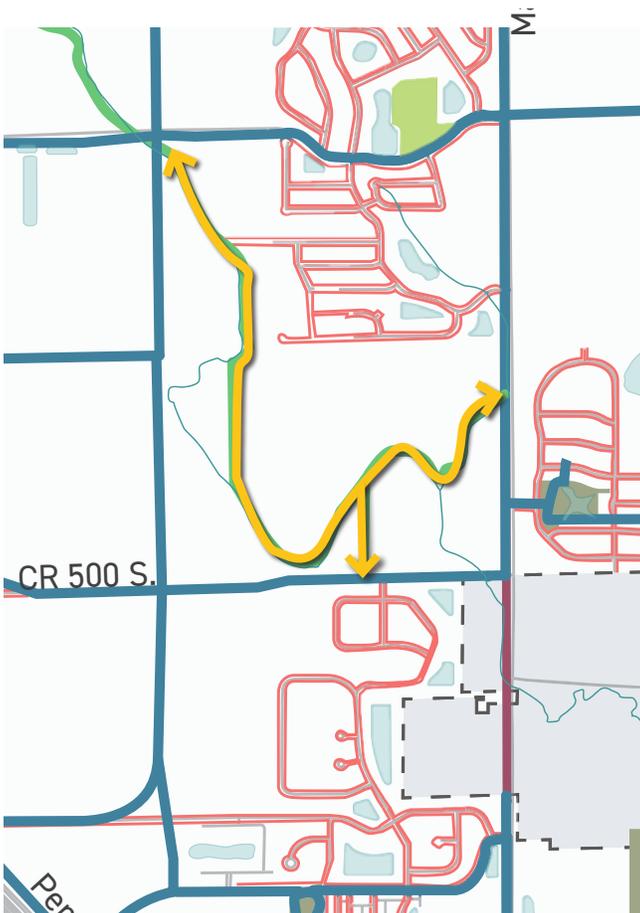
END: The point where Fishback Creek crosses CR 500 S

PATHWAY TYPE: 10' shared-use trail initially, 15' ideal long-term width goal

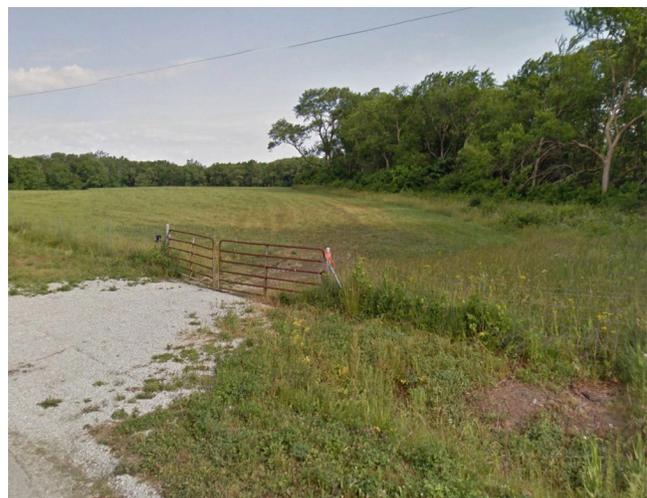
COST:

FUNDING:

DESCRIPTION: To make progress toward the goal of creating shared-use trails outside of the road right-of-way, a trail portion will be created along Fishback Creek, connecting CR 575 E and CR 500 S. This trail will create an unique trail corridor that will also serve as an important north/south connector.



Fishback Creek at the crossing of CR S 575 E.



Fishback Creek as it runs along fields adjacent to CR E 500 S.

BIG 4 TO ZIONSVILLE

ROUTE: Along CR400 S to the Whitestown corporate limits, north along CR 800 E

START: The western end of the Zionsville portion of the Big 4 Trail

END: The eastern end of the Whitestown portion of the Big 4 Trail

LENGTH: 4,600 ft

PATHWAY TYPE: 10' shared-use rail trail initially, 15' ideal long-term width goal

COST:

FUNDING:

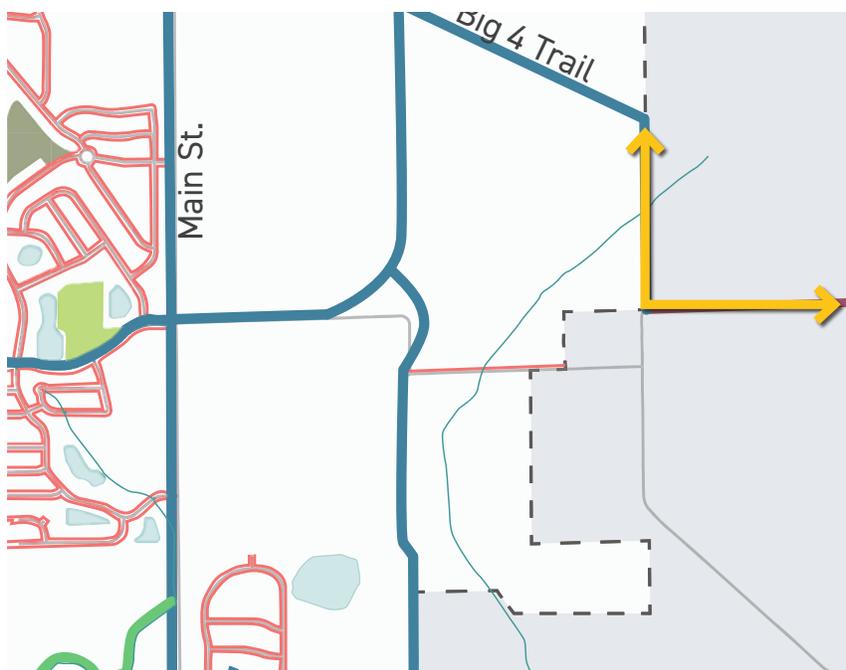
DESCRIPTION: While Whitestown has fully built out the Big 4 Trail within its corporate limits, it does not connect beyond Whitestown. To the east, there is currently a gap of approximately 6,800 feet before the trail resumes in Zionsville. A neighborhood is currently under construction between the trail in Zionsville and CR 800 E, which will shorten the gap to approximately 4,600 feet. The section of former rail bed between CR 800 E and the Whitestown corporate limits is privately owned and used for access. Therefore, the most feasible route will likely be routing the trail along CR 400 South to the Whitestown corporate limits before extending to the north.

While this connection is outside Whitestown's jurisdiction, it is an important priority for Whitestown as it would connect to over 20 miles of trail in Zionsville, and thereby connect to locations in Hamilton County.

It is noted that this section of trail is outside of Whitestown's jurisdiction, and therefore completion of this trail segment will be Zionsville's responsibility. Whitestown should work with Zionsville to advocate for this project.



OUTSIDE THE
CORPORATE
LIMITS



ALTERNATE NORTH/SOUTH CONNECTOR

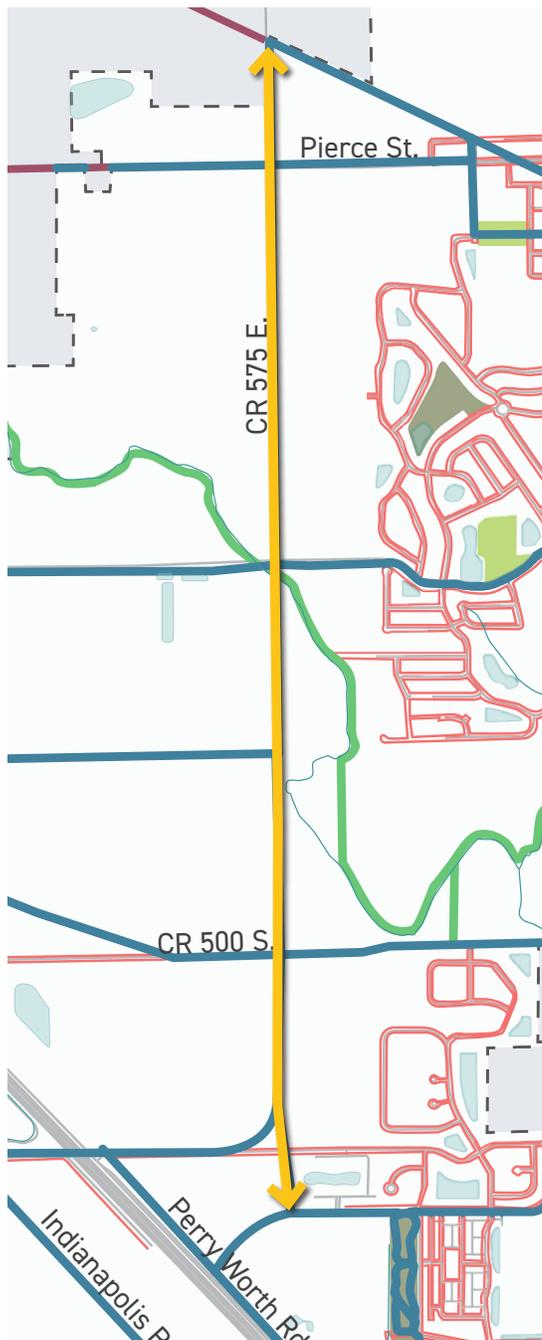
ROUTE: Along the road ROW for CR 575 E

START: The Big 4 Trail on the north end

END: CR 500 S on the south end

PATHWAY TYPE: 110' shared-use trail initially, 14' ideal long-term width goal

DESCRIPTION: County Road S 575 E is an excellent candidate for a north/south connector route for the shared-use trail network. There is no current development along this road as of yet and it is a straight shot from Pierce Street to the north and CR E 500 S to the south. There is potential to connect further north to the Big 4 Trail and further south to the Anson development.



CR 575 looking south



CR 575 looking north

BIG 4 TO LEBANON

ROUTE: Continuing along the old Big 4 rail bed

START: The western end of the Whitestown portion of the Big 4 Trail

END: The eastern end of the Lebanon portion of the Big 4 Trail

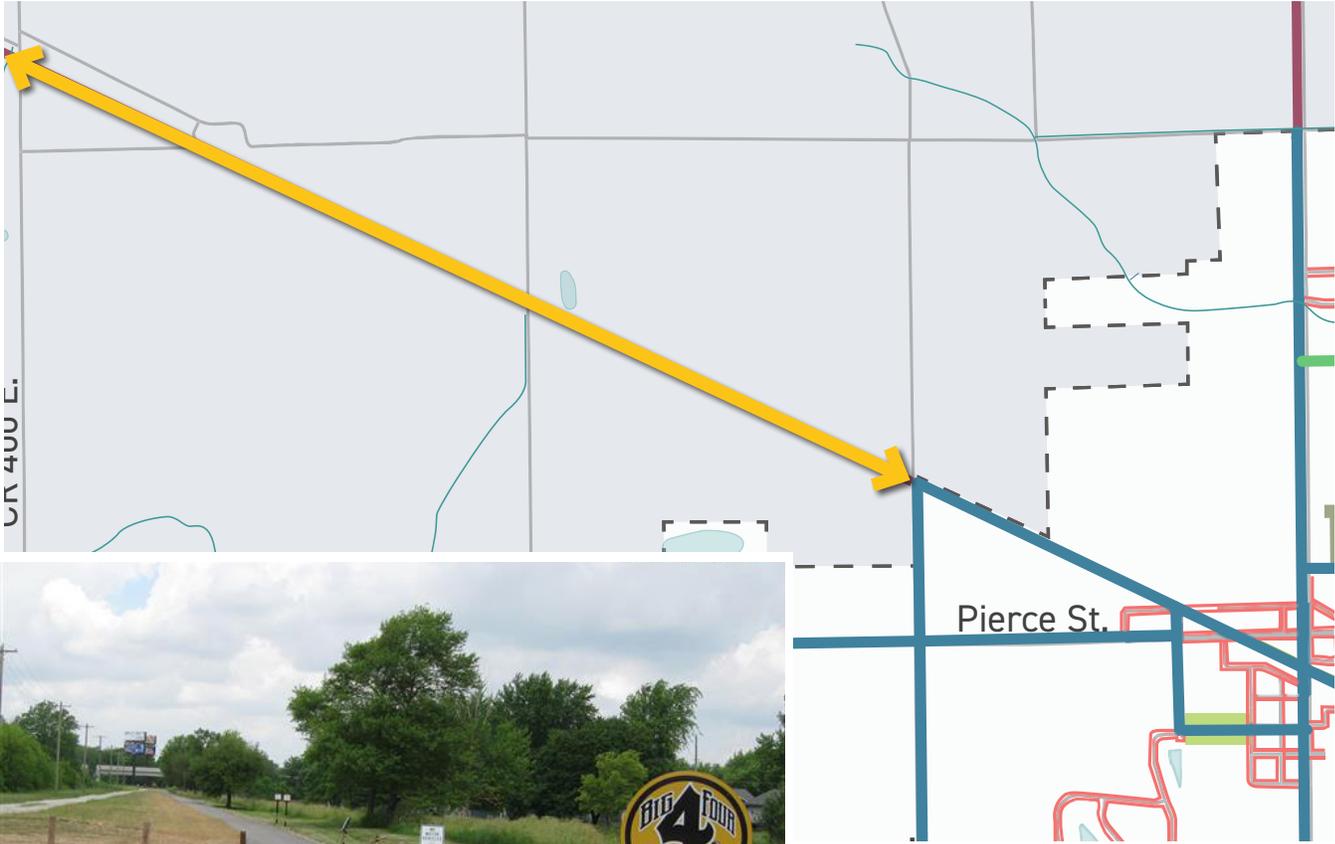
LENGTH:

PATHWAY TYPE: 10' shared-use rail trail initially, 15' ideal long-term width goal

DESCRIPTION: The portion of the Big 4 Trail that has yet to be developed between Whitestown and Lebanon is under Boone County jurisdiction. The goal is to get this gap closed so that there is a continuous bike and ped thoroughfare connecting Zionsville, Whitestown and Lebanon. The County has recently expressed that this connection is a priority for them, and there are plans in the works to make this connection happen.

It is noted that this section of trail is outside of Whitestown's jurisdiction, and therefore completion of this trail segment will be Lebanon and Boone County's responsibility. Whitestown should work with Lebanon and Boone County to advocate for this project.

OUTSIDE THE
CORPORATE
LIMITS



Big 4 Trail trailhead in Lebanon, IN

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