

City of Shelbyville

Bicycle and Pedestrian Master Plan

November 2015



Acknowledgements

Bicycle & Pedestrian Master Plan Adoption Resolution

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The project officially began at the beginning of June 2015. The City of Shelbyville and the Bike Ped Team developed a strategy to obtain public input on the Bicycle and Pedestrian Master Plan that included the following:

One Public Presentation
One Public Workshop
A Community Attitude Survey
Four Advisory Committee Meetings
Two Presentations to Plan Commission and City Council

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Daniel Bird City Planner
Karen Martin Parks Superintendent
Suzan Baughman Administrative Assistant to Mayor DeBaun

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CITY CLERK-TREASURER

NOV 10 2015

RESOLUTION 2015 - 22

FRANK M. ZERR

A RESOLUTION APPROVING THE ADOPTION OF THE BICYCLE AND PEDESTRIAN MASTER PLAN

WHEREAS, the City Council of Shelbyville, Indiana is aware that The Comprehensive Plan for the City does not contain a Bicycle and Pedestrian Planning Element, and

WHEREAS, the City Council of Shelbyville, Indiana has employed a consultant, made use of a steering committee and has offered several opportunities for input and has considered that input in developing the new Bicycle and Pedestrian Master Plan for Shelbyville, Indiana, and

WHEREAS, the City Council of Shelbyville, Indiana is hopeful that this new plan will supplement The Comprehensive Plan in assisting public and private entities in planning for future development and redevelopment of the incorporated City of Shelbyville, and

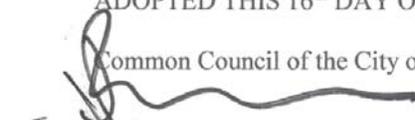
WHEREAS, the Plan Commission of Shelbyville, Indiana, after notice to the public, held a public hearing on the draft Bicycle and Pedestrian Master Plan for the City of Shelbyville, Indiana, which had previously been made available for public review at the office of the Plan Commission in Shelbyville. After hearing public input, the Plan Commission voted 8 - 0 (with 1 absent) to recommend that the City Council of Shelbyville, Indiana adopt this Bicycle and Pedestrian Master Plan as an element of the City's Comprehensive Plan.

WHEREAS, this finished project of the Plan Commission of Shelbyville, Indiana has been presented to the City Council of Shelbyville, Indiana, in a document entitled "Bicycle and Pedestrian Master Plan, Shelbyville, Indiana, October 2015."

BE IT THEREFORE RESOLVED, by the City Council of Shelbyville, Indiana, that the Council accepts and approves the "Bicycle and Pedestrian Master Plan for the City of Shelbyville, Indiana", as a new element of the City's Comprehensive Plan, and said plan element is now in full force and effect,

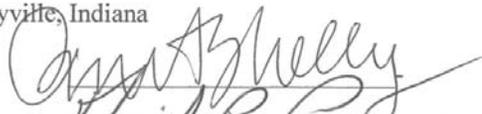
ADOPTED THIS 16th DAY OF NOVEMBER, 2015,

Common Council of the City of Shelbyville, Indiana



David Plue
Brian Ad

Rick Hank



Cassi Azhelly
David G. Carrington

Rick Hank

ATTEST:



Frank Zerr, Clerk-Treasurer



Thomas DeBaun, Mayor



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■ Section A

■ Overview



Introduction

The City of Shelbyville has prepared this Bicycle & Pedestrian Master Plan to expand quality of life offerings for city residents and businesses. The city must compete for new businesses, industries and residents to remain economically viable in today's economy. Quality of life is a top consideration for business relocations and new facility investments. An effective active transportation system consistently ranks high in lists of desired amenities and is considered a basic quality of life offering.

Local planning and Phase I funding for The Blue River Trails Master Plan will soon provide connectivity to several city parks, the County Fairgrounds and the Porter Center. This Active Living Master Plan will extend that connectivity throughout the city providing residents and visitors safe and affordable transportation options to city parks, local schools, employment centers, restaurants and downtown merchants.

Executive Summary

At the outset of an urban planning project, it is wise to spend time discovering and understanding the roots of local history which has given form to the present day city.

In the early 1900's Shelbyville was known around the country for its numerous wood crafting companies making furniture, tables, desks, cabinets, chairs and wardrobes from the seemingly endless supply of locally harvested Indiana hardwoods. At one point the city boasted 30 companies in this industry. The success of this large wood crafting economy played a major role in spawning the significant collection of prominent downtown historic buildings and magnificent residences. The City is fortunate that many of these historic structures remain and contribute to today's historic downtown and residential neighborhoods.

In addition, this city has produced local figures of prominence and influence. Attorney Thomas Hendricks, served his state as Governor and later served his country in the House of Representatives, Senate and as Vice President to Grover Cleveland. Charles Major, also an attorney, was well known nationally as an American novelist, author of the locally popular book, *Bears of the Blue River*, which inspired the Balser statue on the Square holding high his pet bears, Tom and Jerry. He also wrote *When Knighthood was in Flower* which was a best seller and later became a popular Broadway show.



18 on the Square & Masonic Oddfellows Building

Shelbyville has a rich and varied history, great historic building stock and one of our state's most pristine riparian corridors in the Big Blue River. Efforts by communities to educate and inform their local citizens about the city's historical roots will serve the community well. This rich tapestry of history and events, when understood and appreciated, builds local interest and pride in one's own community while also adding to the Shelbyville tourism experience.



Introduction & Executive Summary



U.S. Bike Routes Map - Midwest Region

The Bicycle & Pedestrian Master Plan has identified corridors throughout the city where these alternative transportation facilities are being planned to build connectivity throughout residential neighborhoods, commercial districts and employment centers with targeted focus on building connectivity into Downtown Shelbyville. Study after study has shown: increased foot and pedal traffic is good for downtown businesses and local merchants. The Bicycle & Pedestrian Master Plan also indicates which city corridors are easily extended into the county. It is hoped that this plan will spawn further studies of county-wide Alternative Transportation route planning to Waldron, Morristown, Flatrock, Fairland and Boggstown. The city and county collaborations on U.S. Bike Route #35 certainly demonstrates local and regional interest in supporting Alternative Transportation and Bicycle Tourism. These public transportation corridors also provide ample opportunities to present the rich historic tapestry of Shelbyville's evolution, personalities and events. These local stories placed along the corridors, will add to the experience and interest of visiting tourists while also informing local residents.

The creation of design standards for various elements along the bicycle / pedestrian corridors are crucial for establishing corridor awareness. These standards will add yet another layer of appealing fabric to the city in addition to providing increased safety by making the corridors more visually apparent to motorists. The standards will address corridor markings, signage, lighting, paving, crosswalks, history markers, benches, bike racks and, where appropriate, landscape. The creative development of the standards and the effective application of them throughout the city will make these corridors unique to Shelbyville, ultimately becoming part of the "Shelbyville Experience". Standards for bicycle & pedestrian development on private property should be incorporated into local ordinances to ensure new development supports Shelbyville's Active Living goals.



Historic Shelbyville Depot



The Vision

The vision behind this plan, combined with other local initiatives, is to promote active and healthy lifestyles to improve public health, provide the public with alternative transportation options, create a more dynamic city, enhance existing infrastructure, increase social connectivity, build community awareness, retain more local wealth in the city and develop a healthy and attractive workforce for business and industry.

The Goals

Active Living / Healthy Lifestyles

The old adage rings true: build it and they will come. In city after city, when these facilities are added to the public realm, the public demonstrates their appreciation by the many ways in which they choose to use them. Their use becoming a routine and their health routinely improving along the way.

The sport and leisure activities associated with cycling have early roots in Shelbyville, Indiana. By the late 1890's, only a few score automobiles had been built and horses and carriages were expensive to own and maintain. The bicycle met the need for inexpensive individual transportation – for going to and from business, for business deliveries, for running local errands, for recreational riding and for sport. Marian McFadden, in her book: *Biography of a Town*, notes that back in 1894 the still-house of the Old Distillery was bought by Century Bicycle Company, who brought alternative transportation to the City as cycling was taking over the country. The business enterprise was later purchased by Arrow Bicycle Company who brought another bicycle brand to Shelbyville. Today, there is resurgence in local cycling interest and Shelby Velo routinely schedules local rides and promotes biking events including larger regional events like the Hope, the Bears and the Goat Rides.



Bears of the Blue River Walk / Run

The public attitude survey indicates a strong local desire for more biking and pedestrian facilities. Therefore, Shelbyville can anticipate an increase in Active Living / Healthy Lifestyles as this plan is implemented.

Alternative Transportation Options

Once a community begins to build and provide alternative transportation options for the local residents, the early adopters will initiate a local culture shift. As more facilities come online, more local residents will join the movement. When one understands that the most inefficient automobile fuel consumption happens during short local trips, the money to be saved personally using alternative transportation is noticeable. When one decides to become a bike commuter, the money to be saved can be substantial. The money not spent on fuel is much more likely to be spent in the local economy.

Competitive Workforce

Business and industry has many expenses to manage in the course of maintaining a profitable business. One of their most costly expenses is health insurance. A healthy active living community that supports healthy habits and a healthy workforce is a distinct advantage over many communities with whom cities compete for jobs. Unfortunately, Indiana's workforce health is routinely ranked amongst the lowest states in the nation. This Bicycle & Pedestrian Master Plan is a major step forward in the development of a healthy and productive workforce.



Dining at Tour of Italy - 2015 Downtown Shelby Days

Animate the City

Humankind is naturally inclined to enjoy “people watching”. A city that invests in facilities to encourage the walker, the biker, the roller blader, the tri-cyclist, the jogger, the wheelchair user, the kick scooter, the tandem and sociable riders, etc., is going to exude an energy and vitality that cities populated predominantly by vehicles cannot achieve. This Bicycle & Pedestrian Master Plan effectively provides easy access to downtown Shelbyville, which will serve to further promote an active and vibrant urban center.

Build Community Relationships

A socially connected community is a community that ultimately cares for its’ citizens on a very broad and meaningful level. When a community relies mostly upon motor vehicles for transportation, we become separated from each other-behind the closed windows and absorbed in the radio or iPod. Active Living communities are populated with people out and about, where their eyes meet and their smiles connect. People who have developed a healthy habit routine come to know others in the city that have the same routine and schedule. Expanding friendships make that city more appealing to each resident, ultimately building meaningful and personal connections to one’s community.



Big Blue River Corridor

Nurture Community Awareness

As the Bicycle & Pedestrian Master Plan is implemented, opportunities for resting areas with benches and shade will be included in the improvements. These are great locations to tell the local history of the city where users pause to enjoy a beautiful day, meet a friend or catch their breath. The expanded awareness of local history and legend becomes another avenue of social connectivity for the people of Shelbyville. In today’s age of smart phones, mapping of the historic markers can be an inexpensive, yet effective tourism tool for visitors, including the emerging contingent of cycling tourists.

Retain Local Wealth

Nearly every dollar spent on gasoline is a dollar that leaves the city. Consider this economic fact: every dollar that rolls over repeatedly in the local economy before it leaves the city is an expanding benefit to the local economy. Every time a local resident chooses to use alternative transportation, they are also choosing to save gasoline and the money spent thereon. As this Bicycle & Pedestrian Master Plan is implemented and the local users increase, the money that had previously filled their tanks will be available to roll over in the local economy. Add to this fact that the millennial population is more inclined to walk and bike rather than drive, and the significance of this economic benefit expands even further.



Rupert Boneham - First Friday Bike Ride

Personal budgets

The facilities associated with this Bicycle & Pedestrian Master Plan will provide local residents with a new tool to manage their budgets and reduce expenses. For those who choose to commute to work, the savings can be rather significant. For those businesses that understand the benefits of promoting alternative transportation to and from work, incentives can reduce their health insurance costs and provide an additional benefit to their employees. There are firms in Indiana that currently reimburse employees up to \$.75/mile for alternative transportation commuters.

Economic Development

Businesses that are seeking locations to place new operations have much to consider. Underutilized land along the proposed Bicycle & Pedestrian Master Plan routes can become redevelopment opportunities that offer superior alternative transportation access for businesses and their workforce. Private development, that seemingly always accompanies trail development, should be promoted to capture a return on these public investments.

Furthermore, one of the most important business considerations is the health of Indiana's workforce and the associated costs of increased health insurance premiums, time off work and lower productivity. Indiana, as a whole, routinely ranks in the bottom of workforce health compared with other states. Shelbyville's decision to create an Active Living Community will definitely serve local economic development efforts as more facilities are put in place. Businesses are quick to understand the benefits of employees that commute on foot or bicycle: these employees are seldom sick, show up to work energized, maintain a more positive attitude and routinely deliver more work product than others of equal capacity. Bottom line: Active Living Communities are good for the bottom line!



Shelbyville Visitor's Center



The Bike Ped Team conducted an advisory committee meeting at the beginning of the analysis task to gather committee input and conduct a review of the existing conditions that influence walking and bicycling within the study area. This task included an inventory and analysis of policies, programs and infrastructure that currently support walking and bicycling. A public attitude survey of residents in the community quantified the extent, barriers and opportunities for walking and bicycling within the community.

- Advisory Committee Meeting
- Summary Inventory and Analysis
- Summary of Community Survey Results
- On-site Review of Existing Conditions

Meeting: Advisory Committee and Public

This task included a public workshop to gather comments from the analysis and an advisory committee meeting towards the end of the analysis task to review the results of the public workshop and the final existing condition analysis.

- Advisory Committee Meeting & Summary
- Public Meeting & Summary

Preparation of Draft Plan

The draft plan was prepared based upon public input and discussions between the city, the Advisory Committee, and the Bike Ped Team. The plan included the findings of the analysis task along with recommendations for policies, programs, and infrastructure improvements. The draft plan includes a map illustrating the proposed bicycle and pedestrian system.

Meeting: Advisory Committee and Public

This task included two (2) advisory committee meetings during the production of the draft plan and one (1) public open house to review the draft document. The public open house solicited input necessary to help prioritize the recommendations of the plan.

Develop Plan Priorities & Prepare Final Plan

The recommendations of the plan were prioritized based upon the input gained during the public open house. The advisory committee met to discuss the plan priorities prior to the production of the final plan.

- Prioritized List of Recommendations
- Final Plan Document

Implementation

This phase involved the formal adoption of the final plan by the city. A training session outline was provided to assist the city with next steps for implementation including education and promotion.

Adoption

The city formally adopted the final plan as an amendment to the official City Comprehensive Plan, following the requirements necessary as per State code.



■ Section B

■ Public Engagement

CANCER ASSOC. OF SHELBY COUNTY



The Bike Ped Team developed the public attitude survey in cooperation with city staff. By all measures, this was a very successful public input effort. A copy of the survey is contained in the appendix. Most people completed the survey electronically, although paper copies were also made available to the community. City staff pushed awareness of the survey primarily through social media, including city web page links and e-mail blasts. To further increase awareness of the survey and the plan, the Bike Ped Team attended Downtown Shelby Days. By all measures, this was a very successful public input effort, with 371 people taking the survey during the week long time frame.

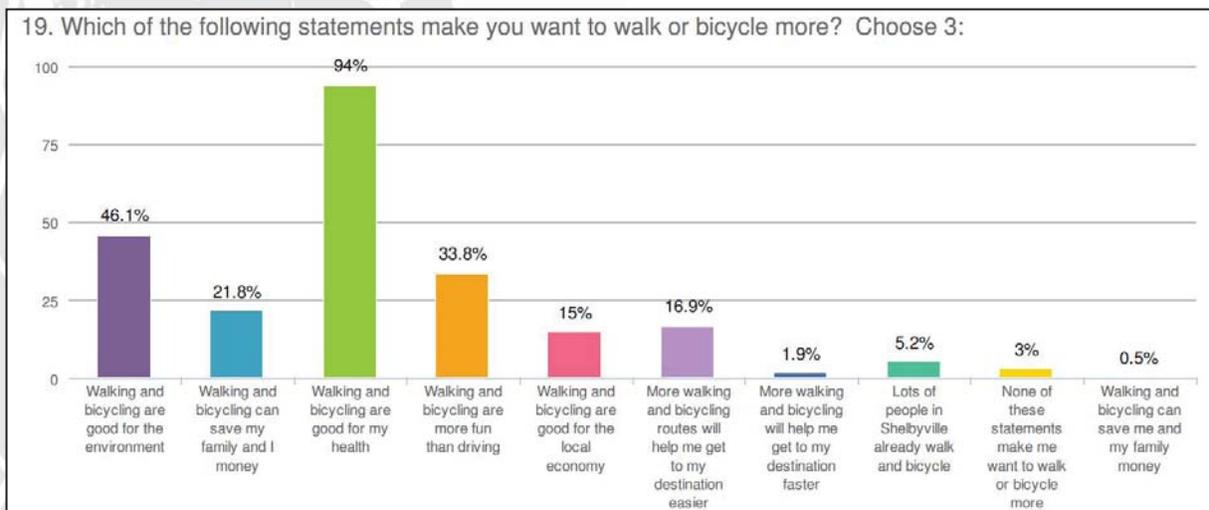
It should be noted that this was not a random survey. The intent with this Bicycle and Pedestrian Plan survey was to hear from as many stakeholders as possible, instead of garnering a statistically valid representation of the community. Since it is unknown how many people were made aware of the survey opportunity, it is difficult to establish a response rate. Still, this approach should be considered successful, based simply on participation levels. Public input was received from many more interested local residents than would attend a public open house or meeting.

The survey results were very important to the Bike Ped Team (steering committee, staff and consultants) as the plan development proceeded. Most of the respondents were "locals", living and/or working in Shelbyville. Fifty-seven percent (57%) of the 371 respondents lived within the Shelbyville city limits, with over half of all respondents working in the city. The survey participants were fairly evenly divided by age group, with the exception of the oldest and youngest responders.

Under 18 years:	01.1%
18 – 29 years:	09.4%
30 - 39 years:	27.8%
40 – 49 years:	20.8%
50 – 59 years:	23.7%
60 – 69 years:	15.9%
70 years and over:	01.4%

One other interesting result of the survey was that the responses were not evenly divided between males and females. Twice as many females participated than males, with over sixty-six percent (66%) of the respondents being women. The sex and age survey statistics show that the demand for bicycling and walking infrastructure in Shelbyville is from a wide cross-section of the community.

When asked what makes them want to bicycle or walk more, over ninety percent (90%) chose "walking and bicycling are good for my health." Almost half also said it is good for the environment, while nearly twenty five percent (25%) recognized that it can save them money.



Public Attitude Survey Results



Community Attitude Survey Results

Walking

The survey confirmed that there are already many people walking in the city on a daily to weekly basis. Not surprisingly, most walk recreationally, since walking for transportation requires a network of connecting sidewalks and trails that is not yet 100% completed. People clearly want to be able to walk more in Shelbyville. Other walking-related survey highlights include:

- o Forty percent (40%) of the respondents walk at least two times per week, with some walking daily.
- o The majority (65%) of people surveyed say they walk for recreation, instead of transportation. Only 23 people said they walk mainly for transportation, while 69 more said they walk for a combination of both.
- o Over ninety percent (90%) said they want to walk more often.
- o Sidewalks (both quality and connection) were considered the primary needs that make a streetscape a good place to walk. Informational signs were considered least important.
- o Lack of continuous sidewalks/trails was named as the primary barrier to walking more. Difficulty crossing busy streets due to speed of traffic and crossing distance was the second-highest reason for not walking more.

Bicycling

Survey results indicated that bicycling is not as popular as walking in Shelbyville. Fewer people ride bicycles than walk, but the majority does want to ride more often. As with walking, lack of connecting bike facilities and unsafe street intersections keep people from biking more.

- o 33% of the respondents bicycle a few times per month, 17% biking multiple times per week.
- o 79% said they want to ride a bicycle more often
- o Good pavement condition was considered a primary need for cycling in a street with low traffic volume and low traffic speed coming in second and third. Street lighting was the next highest response.
- o A lack of continuous bike facilities was cited as the number one detriment to bicycling more often, with unsafe street intersections scoring second highest.

Regarding destinations, when asked what places they would like to walk or bicycle to, the top 5 answers were:

- o Parks
- o Downtown
- o Restaurants and Coffee Shops
- o Areas outside of Shelbyville
- o Big Blue River



Public Attitude Survey Results

Survey General Conclusions

The survey illustrated that people want a better connecting and more complete network for bicycling and walking. Needed infrastructure is not just sidewalks, trails and bike lanes, but also includes accessible curb ramps, pedestrian street crossing signals and street appurtenances such as bicycle racks, landscaping and wayfinding signage. Traffic safety is also important to walkers and bikers who answered the survey, meaning that traffic calming measures should be considered in the city to slow vehicular traffic. Quality facilities, including sidewalks, paths and streets are also considered important. Therefore, a maintenance program to keep facilities in good repair is advisable.



Public Workshop

The public workshop for the citywide Bicycle and Pedestrian Master Plan (BPMP) was held at Shelbyville City Hall the evening of June 29, 2015. In summary, a brief introduction discussing the origins of the BPMP was reviewed with the audience. A map of community assets and attractions was displayed and the importance of using this plan to logically connect to these destinations was discussed.

The results of the public survey taken by 371 people was reviewed with an overwhelming number of respondents that want to walk and bike more often primarily for recreation purposes.

A look back at the history of Shelbyville and future planning for the community was also reviewed. Types of bicycle and pedestrian facilities were presented with representative pictures of constructed projects. The audience then divided into 3 groups and performed a mapping exercise that resulted in 3 different maps displaying where each group preferred various types of bicycle and pedestrian facilities including bike parking. Each group gave a brief presentation of their work and the intent behind their design.



Public Workshop Group Presentation

Public Presentation

The public presentation for the citywide Bicycle and Pedestrian Master Plan (BPMP) was held at Shelbyville City Hall the evening of August 26, 2015. In summary, an update was given to the audience informing them of the upcoming steps including the public review and adoption processes. A brief discussion was held describing the existing conditions of pedestrian facilities and engineering issues observed within the city. Proposed types of bicycle and pedestrian facilities were also revisited. Time was taken to review and discuss the various levels and types of pedestrian crossings.

Maps that the public created at the first public meeting were presented and the various routes were compared. Destinations and bike parking locations were also reviewed.



Mayor Tom DeBaun's 2015 Community Bike Ride

The proposed city-wide master plan was then presented to the public. Corridors of high priority were discussed for areas of key connectivity. A formal question and answer period followed with individual questions and concerns addressed after the meeting.

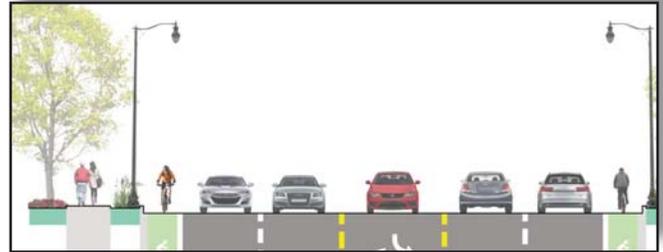


Advisory Committee Meetings

With assistance from the Bike Ped Team, city staff identified 11 key stakeholders to participate on the plan's advisory committee. The primary duty of this committee was to represent Shelbyville's values and interests, and provide guidance to the staff and Bike Ped Team during the development of the plan. The advisory committee met in person four times with the Bike Ped Team. A brief summary of each meeting is below:

Advisory Committee Meeting #1

The first advisory committee meeting or kick-off meeting was held on June 8th, 2015 at Shelbyville City Hall. In summary, the Bike Ped Team was formally introduced, a schedule for the project and upcoming events was passed out and types of facilities that were being considered were discussed in detail.



Bike Lane Facility Section

Advisory Committee Meeting #2

The second advisory committee meeting was held at Shelbyville City Hall on July 23rd, 2015 following the public workshop. In summary, community attitude survey results were discussed in detail, and the existing conditions of pedestrian facilities and engineering issues observed within the city were highlighted. This was followed with a review of proposed bicycle and pedestrian facilities. Maps created at the public workshop were reviewed and the different route information compared. Destinations and bike parking locations were also reviewed from viewpoints of importance, opportunity and convenience.



Preliminary Route Master Plan

Advisory Committee Meeting #3

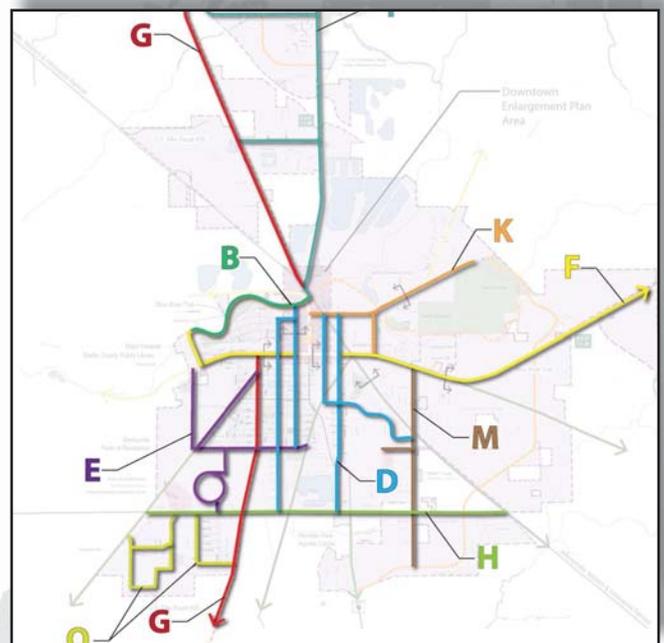
The third advisory committee meeting was held at Shelby County Public Library on August 12th, 2015. In summary, the preliminary master plan was presented detailing locations of each type of facility. An enlargement plan detailed the facility routing around the downtown core. Solutions for areas of potential concern were discussed.

Advisory Committee Meeting #4

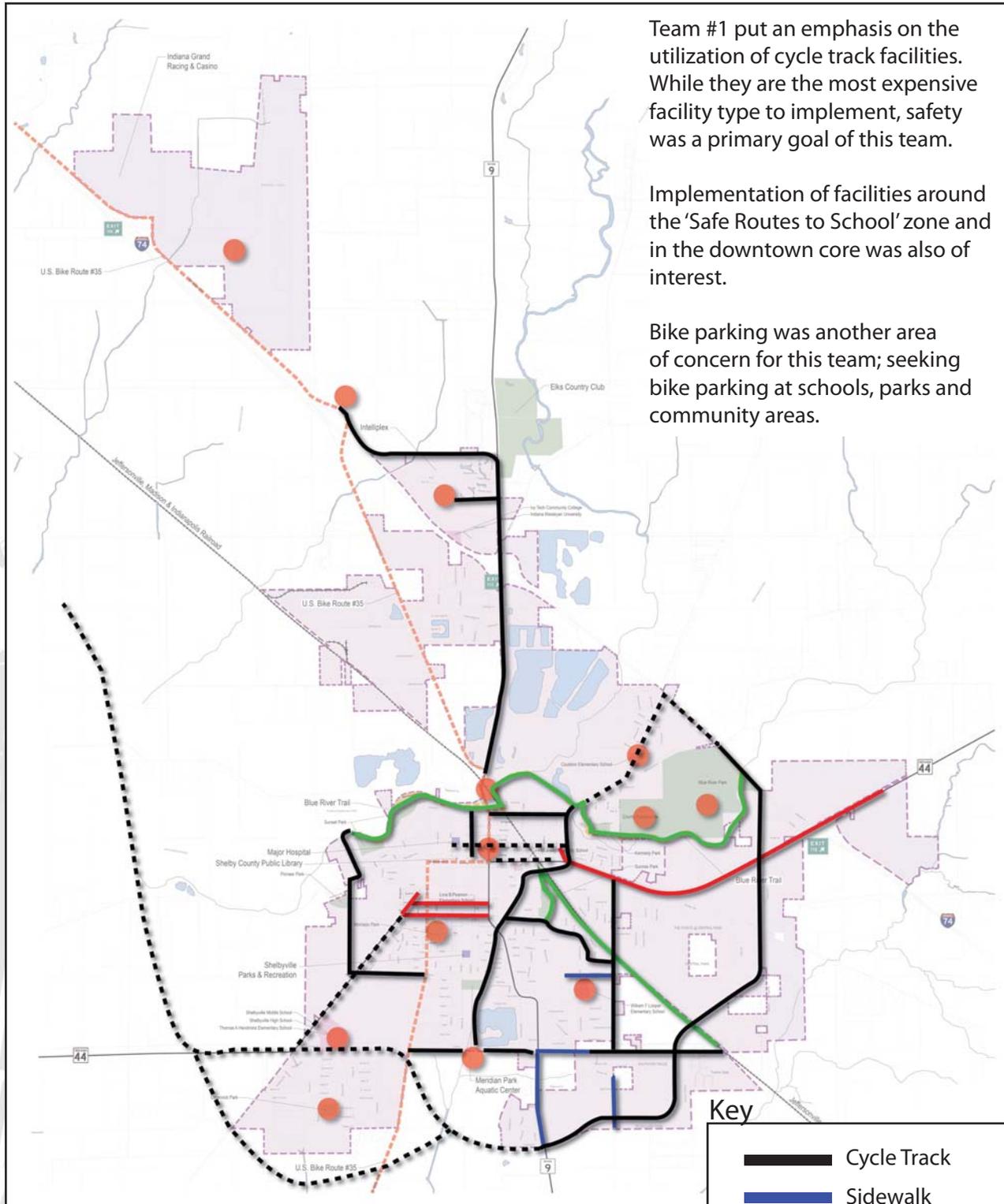
The fourth and final advisory committee meeting was held on September 17, 2015 following the public open house. In summary, pedestrian activated signal options for crosswalks at non-signalized intersections were reviewed.

The overall BPMP strategy was presented and discussed with the committee. How the BPMP interacts with the current Comprehensive Plan with regard to land use, alternative transportation planning and future annexation was discussed. A similar policy review was presented with regard to the Parks Master Plan, Zoning and Subdivision Control Ordinances too.

In closing, the committee was asked to rank priority routes from the preliminary master plan. An estimated cost sheet was presented displaying relative costs each type of facility would need to get through the construction process. Finally, the next steps were discussed regarding final BPMP adoption by City Council and the Plan Commission.



Priority Route Options



Team #1 put an emphasis on the utilization of cycle track facilities. While they are the most expensive facility type to implement, safety was a primary goal of this team.

Implementation of facilities around the 'Safe Routes to School' zone and in the downtown core was also of interest.

Bike parking was another area of concern for this team; seeking bike parking at schools, parks and community areas.

Team 1

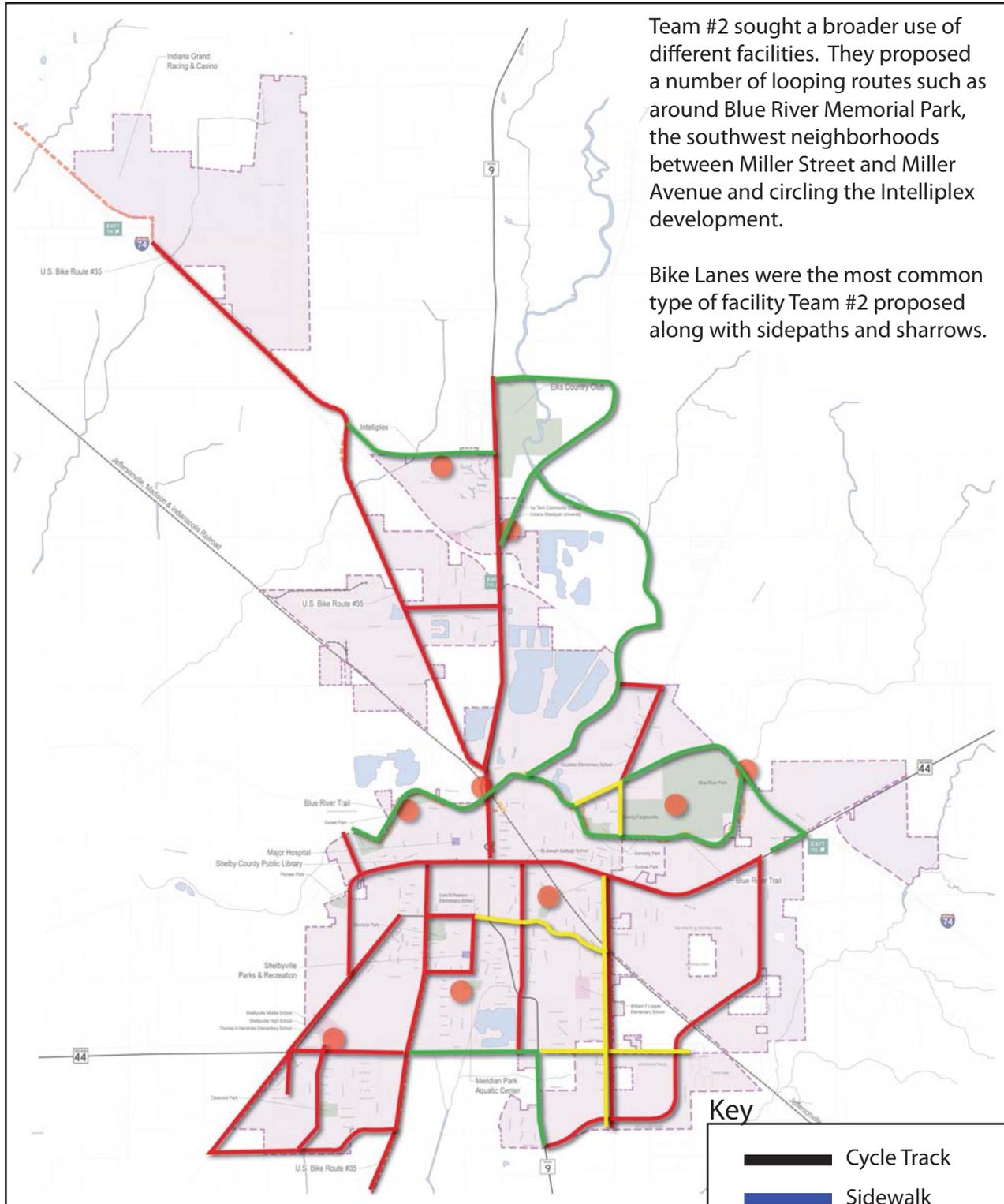
Public Workshop Team 1 Leaders: Jim Garlits and Dann Bird

Key

- Cycle Track
- Sidewalk
- Bike Lanes
- Shared Lanes
- Greenway / Sidepath
- Bike Parking



Mapping Exercise Results



Team #2 sought a broader use of different facilities. They proposed a number of looping routes such as around Blue River Memorial Park, the southwest neighborhoods between Miller Street and Miller Avenue and circling the Intelliplex development.

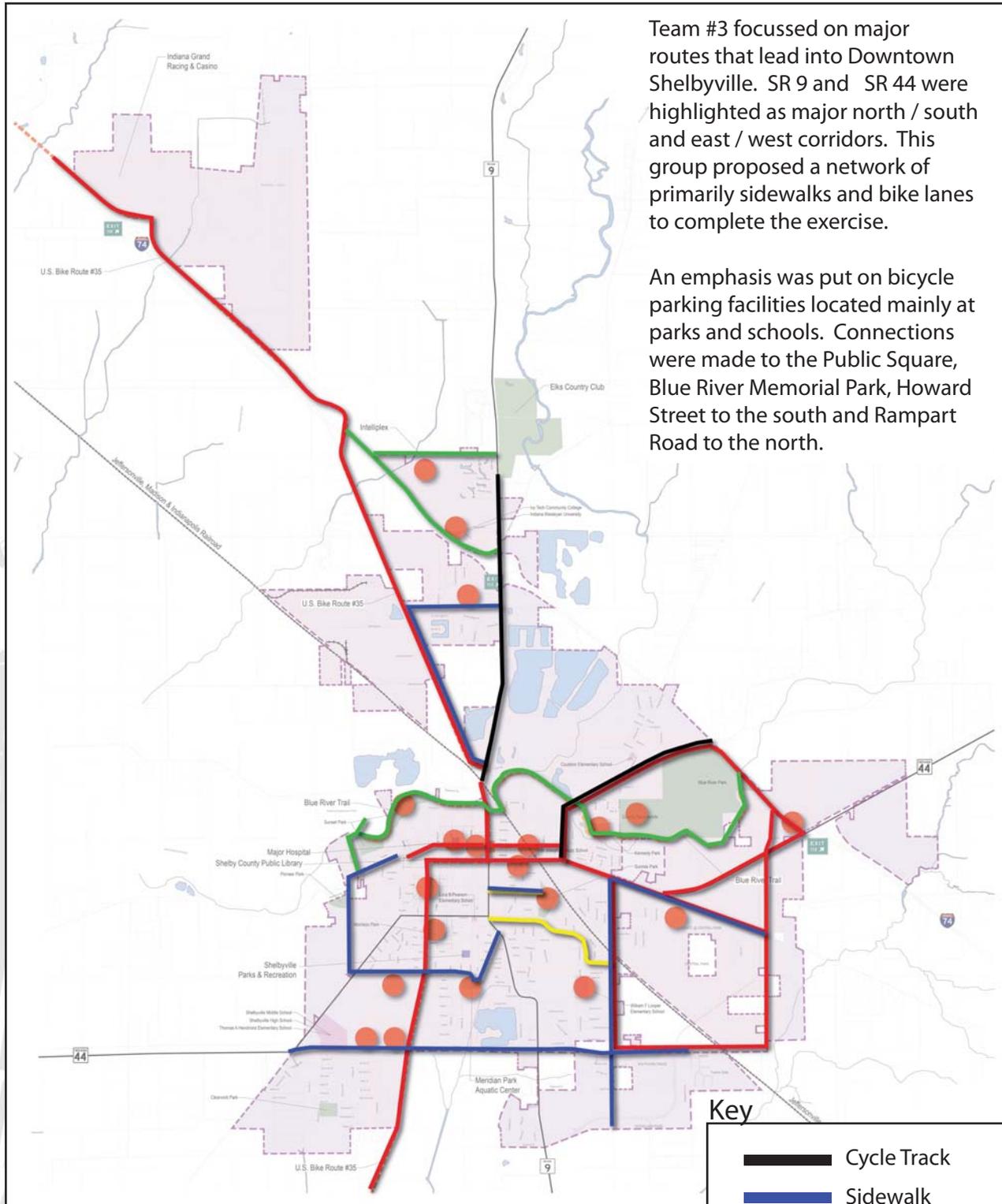
Bike Lanes were the most common type of facility Team #2 proposed along with sidepaths and sharrows.

Team 2

Public Workshop Team 2 Leaders: Kris Schwickrath and Alfonso Andolz

Key

-  Cycle Track
-  Sidewalk
-  Bike Lanes
-  Shared Lanes
-  Greenway / Sidepath
-  Bike Parking



Team #3 focussed on major routes that lead into Downtown Shelbyville. SR 9 and SR 44 were highlighted as major north / south and east / west corridors. This group proposed a network of primarily sidewalks and bike lanes to complete the exercise.

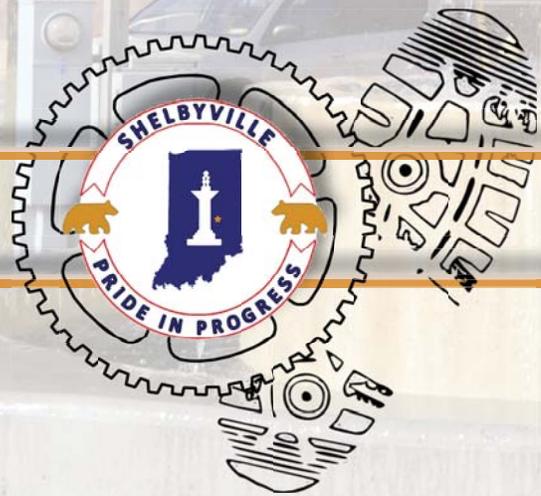
An emphasis was put on bicycle parking facilities located mainly at parks and schools. Connections were made to the Public Square, Blue River Memorial Park, Howard Street to the south and Rampart Road to the north.

Key

- Cycle Track
- Sidewalk
- Bike Lanes
- Shared Lanes
- Greenway / Sidepath
- Bike Parking

Team 3

Public Workshop Team 3 Leaders: Deborah Baatz and Shellie Ellison



■ Section C

■ Bicycle & Pedestrian Facilities

On-Site Existing Conditions Analysis

As observed on June 29, 2015

General Engineering Issues and Observations

- o There is a general shortage of bicycle parking throughout the city.
- o There are many locations that do not have ADA compliant curb ramps. All sidewalks and ramps need to meet ADA requirements.
- o Sidewalk maintenance is an issue, locations where tree roots have pushed up sidewalks causing trip hazards.
- o Many signalized intersections lack pedestrian signals. Most do have crosswalk pavement markings. Pedestrian and bicycle detection should also be installed in compliance with MUTCD.
- o Several schools are located in neighborhoods with minimal sidewalks, making walking/bicycling to school difficult or unsafe.
- o Some streets and rights-of-way are wide enough to accommodate bike lanes
 - If parking is eliminated on one side, or
 - By narrowing traffic lanes, or
 - By reducing the number of lanes, or
 - By converting one-way streets to two-way, or
 - A combination of these modifications.
 - See AASHTO Bicycle Facilities Guide (chapter 4)
- o Other streets are very narrow, making it difficult to incorporate bicycle or pedestrian facilities.
- o State highways generally have some excess width, but any changes will require substantial time and effort to coordinate with INDOT.
- o Rail crossings create some challenges for bicycle/pedestrian traffic. The railroad right-of-way also provide some opportunities dependent on railroad cooperation.



ADA Compliant Crosswalk Example



Tree Root Damage to Sidewalk Example



Crosswalk Signal Counter Example



Existing Intelliplex Side Path



On-Site Existing Conditions Analysis (Continued)

As observed on June 29, 2015

Specific Engineering Issues and Observations

- o The school property on West McKay Road provides an opportunity for a sidepath looping around the site.
- o Progress Parkway has a good sidepath facility. Access should be controlled to limit the number of interruptions along the sidepath.
- o Broadway is approximately 56 feet wide. The pavement width is not being used efficiently. This street offers a number of options for bike / ped facilities.
- o Blue River Memorial has nice trails within the park.
- o River Road is lightly travelled and not needed for access to properties. Consider closing to vehicular traffic or converting to a bicycle boulevard.

In general, all bicycle and pedestrian facilities should comply with:

- o Guide for the Development of Bicycle Facilities, AASHTO, 2012
- o NACTO Urban Bikeway Design Guide, 2013
- o Indiana Manual on Uniform Traffic Control Devices, INDOT, 2011



Riley Highway / State Road 9



Michigan Road near I-74



Intersection of Broadway & Washington Streets

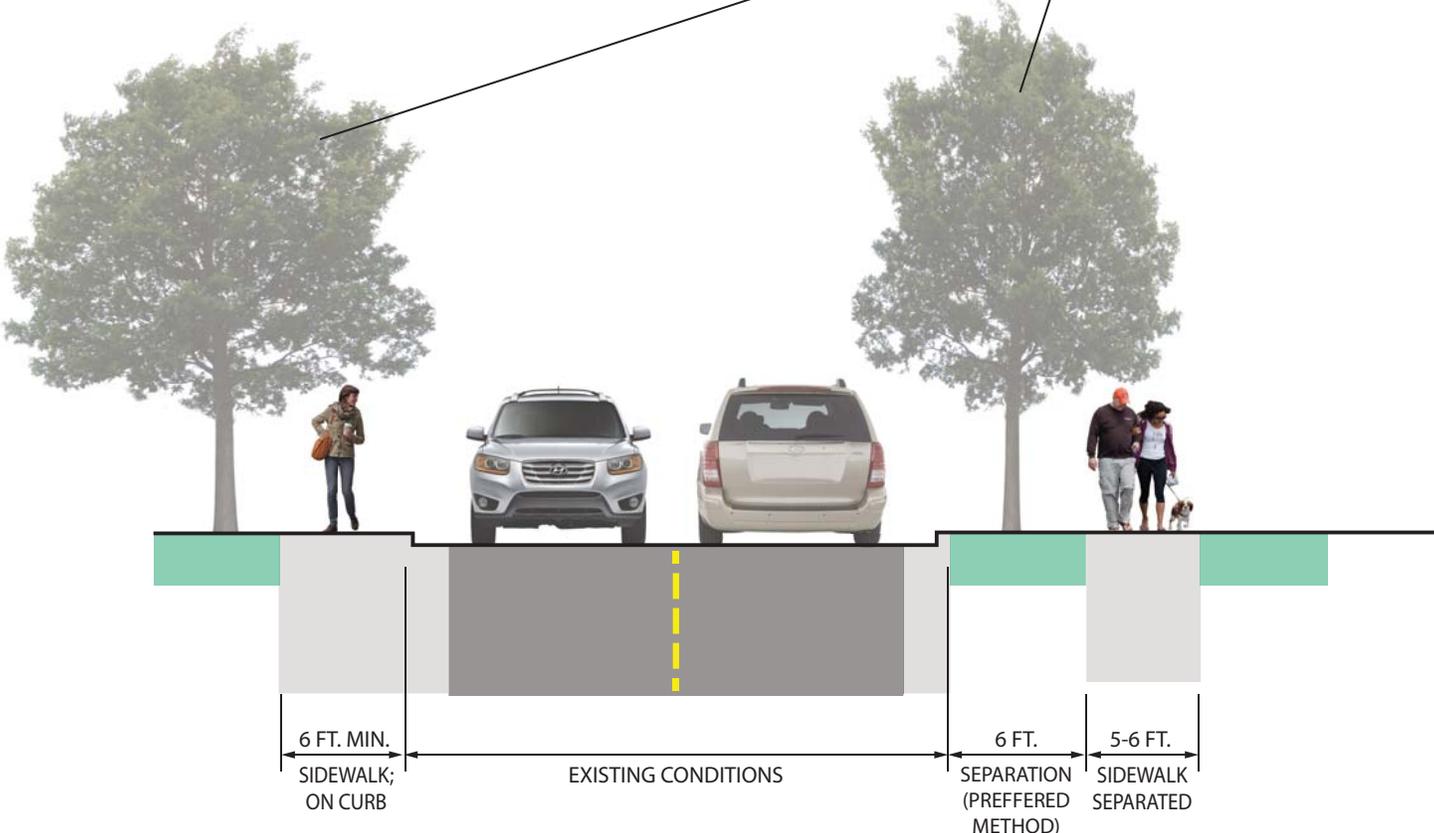


McKay Road near Shelbyville High School



Sidewalk Section (Typical)

Street trees along alternative transportation corridors improve corridor appeal and increase public use.



Sidewalk Example



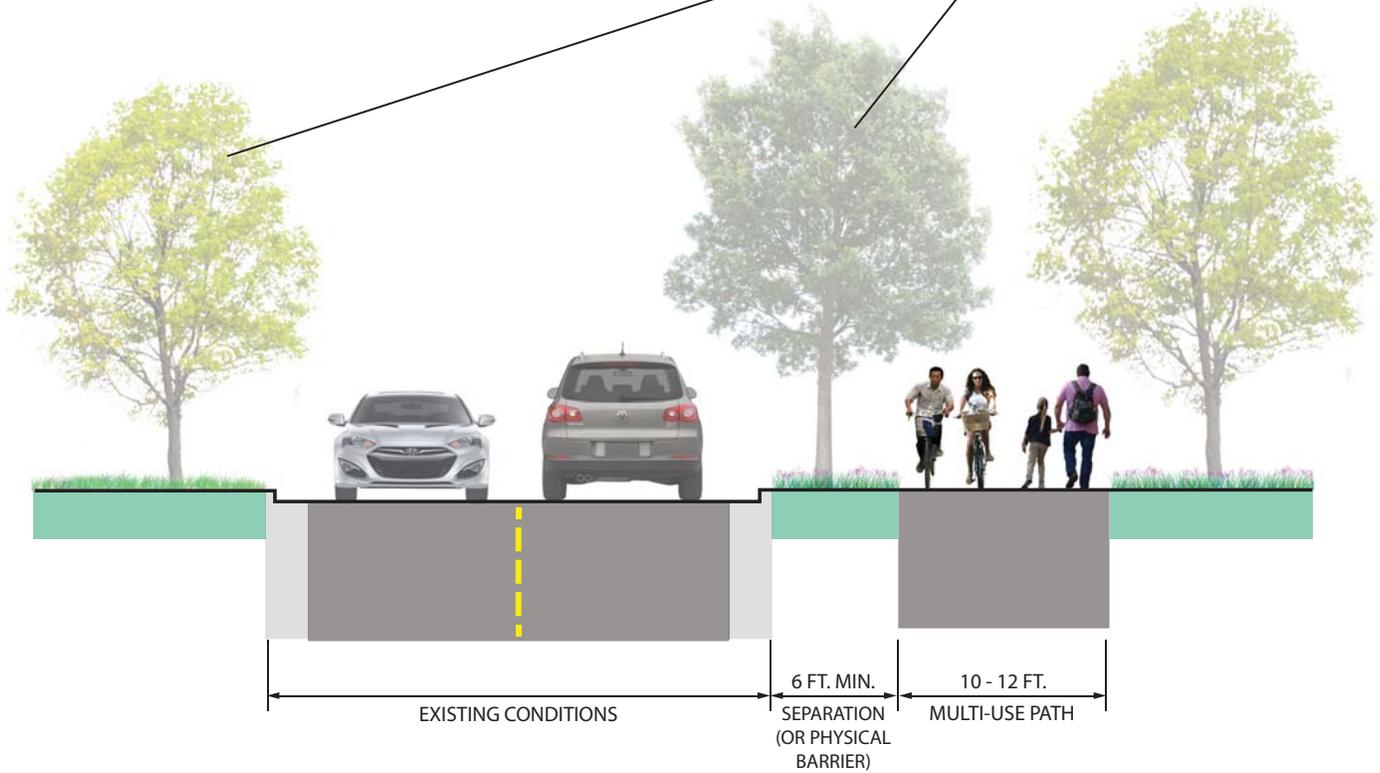
Multi-use Path Example (See Page C-4)



Facility Types

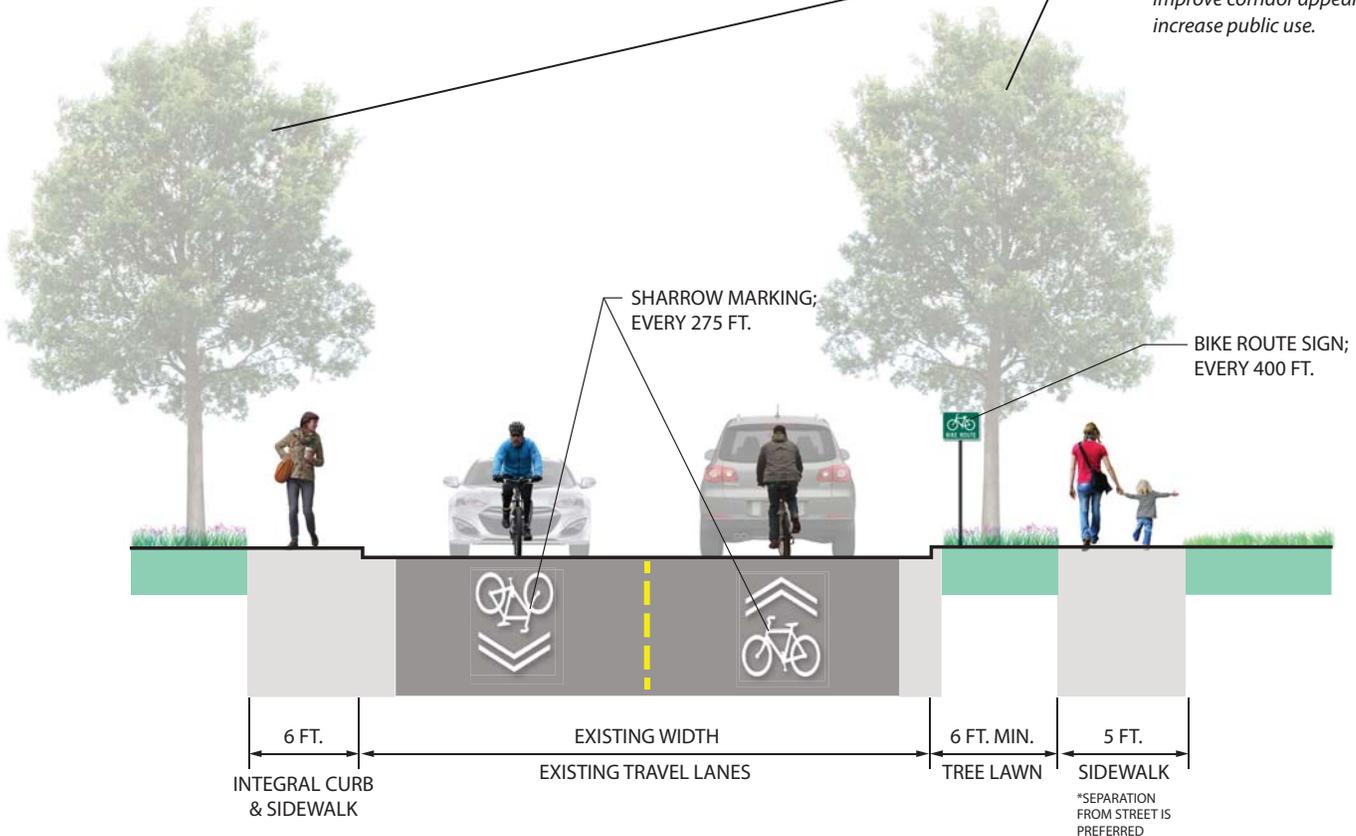
Multi-Use Path / Sidepath Section (Typical)

Street trees along alternative transportation corridors improve corridor appeal and increase public use.



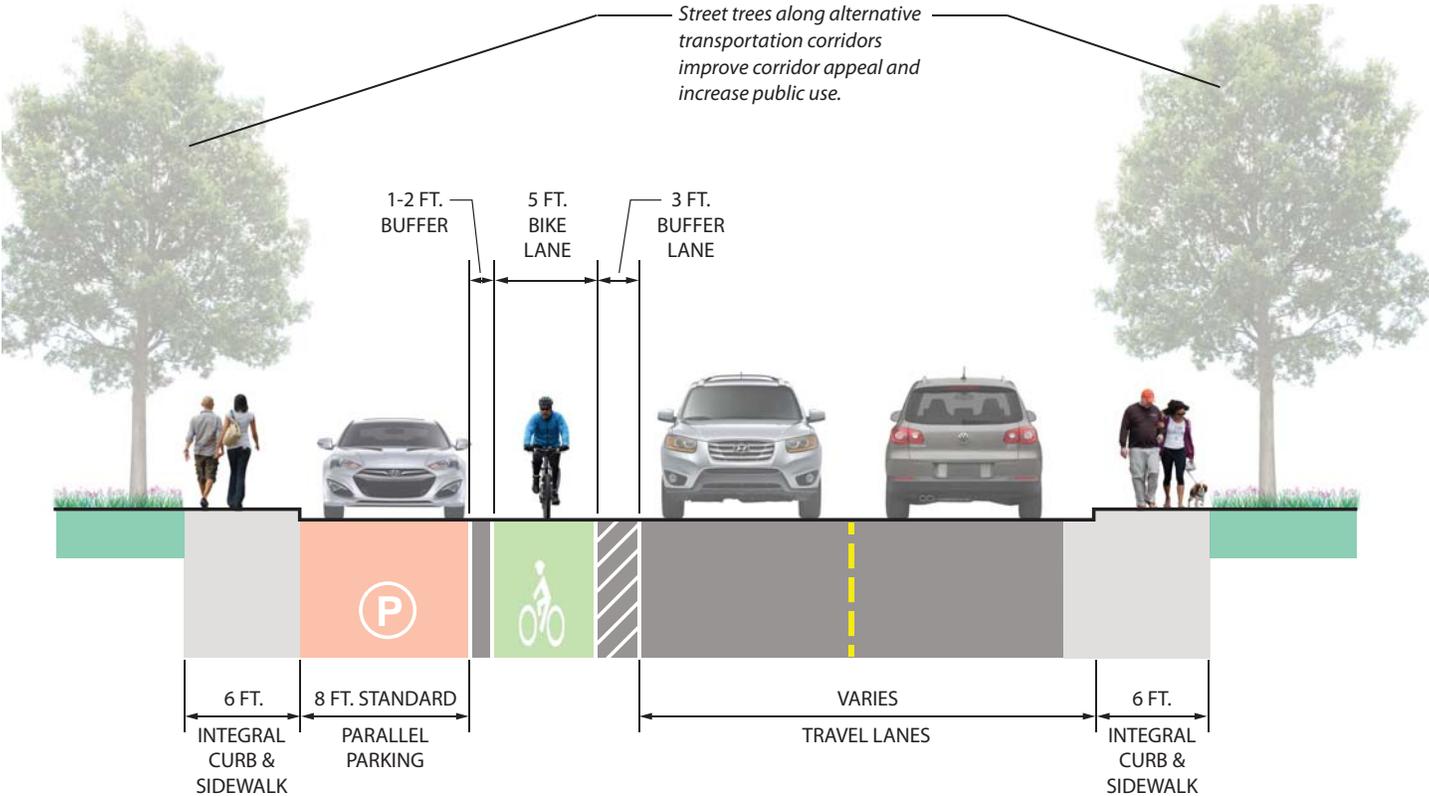
Shared Lanes / Sharrows Section (Typical)

Street trees along alternative transportation corridors improve corridor appeal and increase public use.

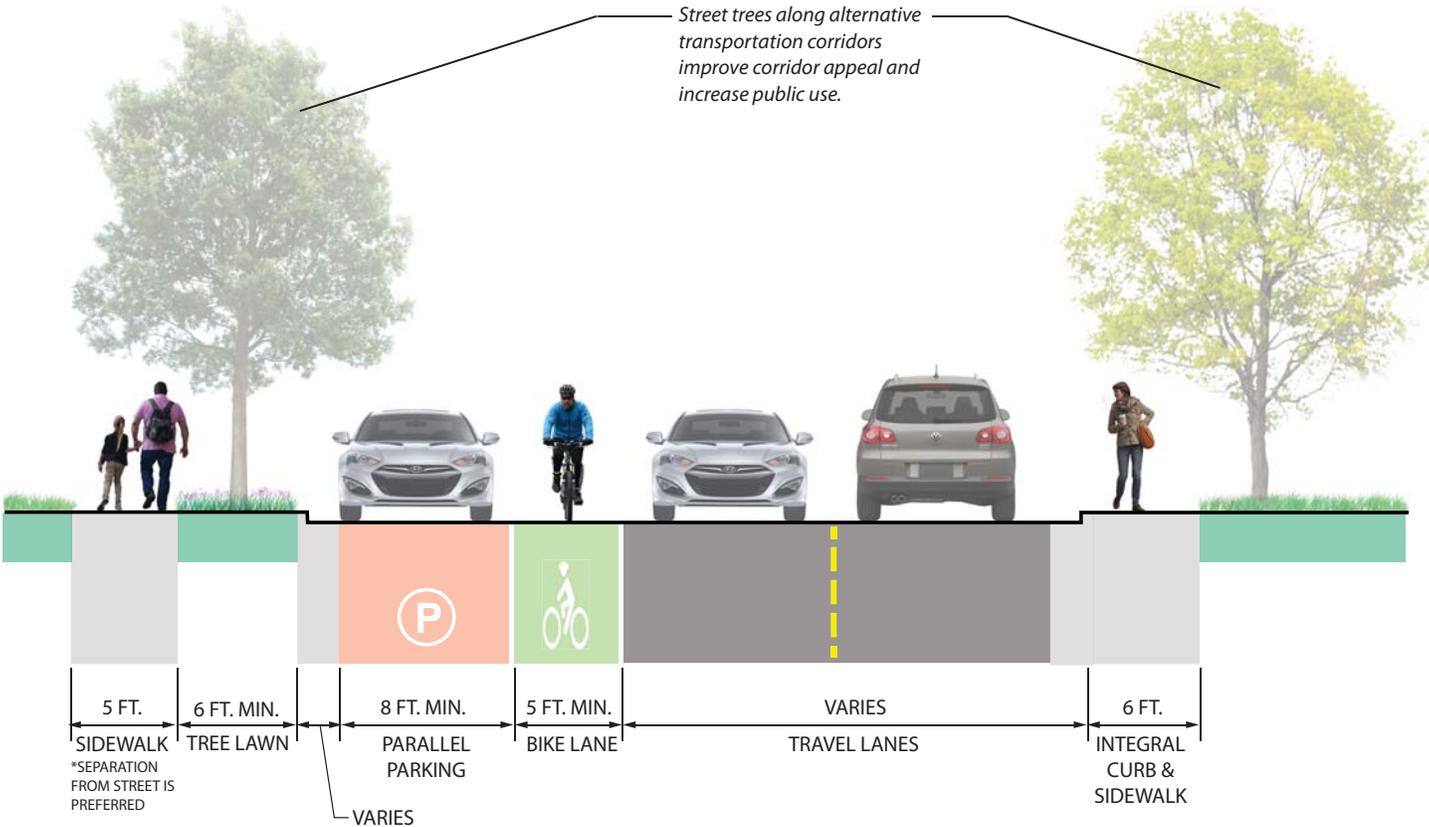




Buffered Bike Lane Section (Typical)



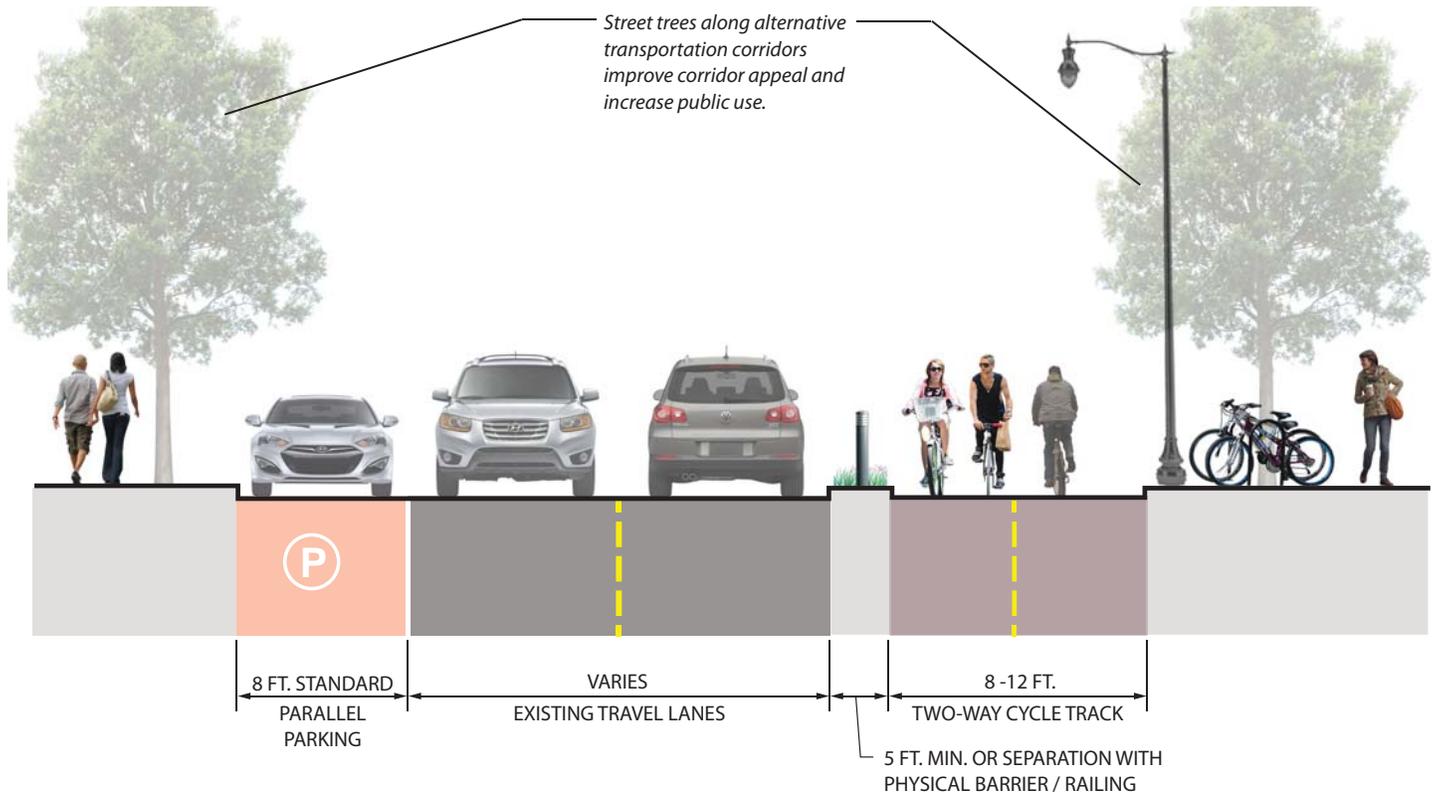
Conventional Bike Lane Section (Typical)



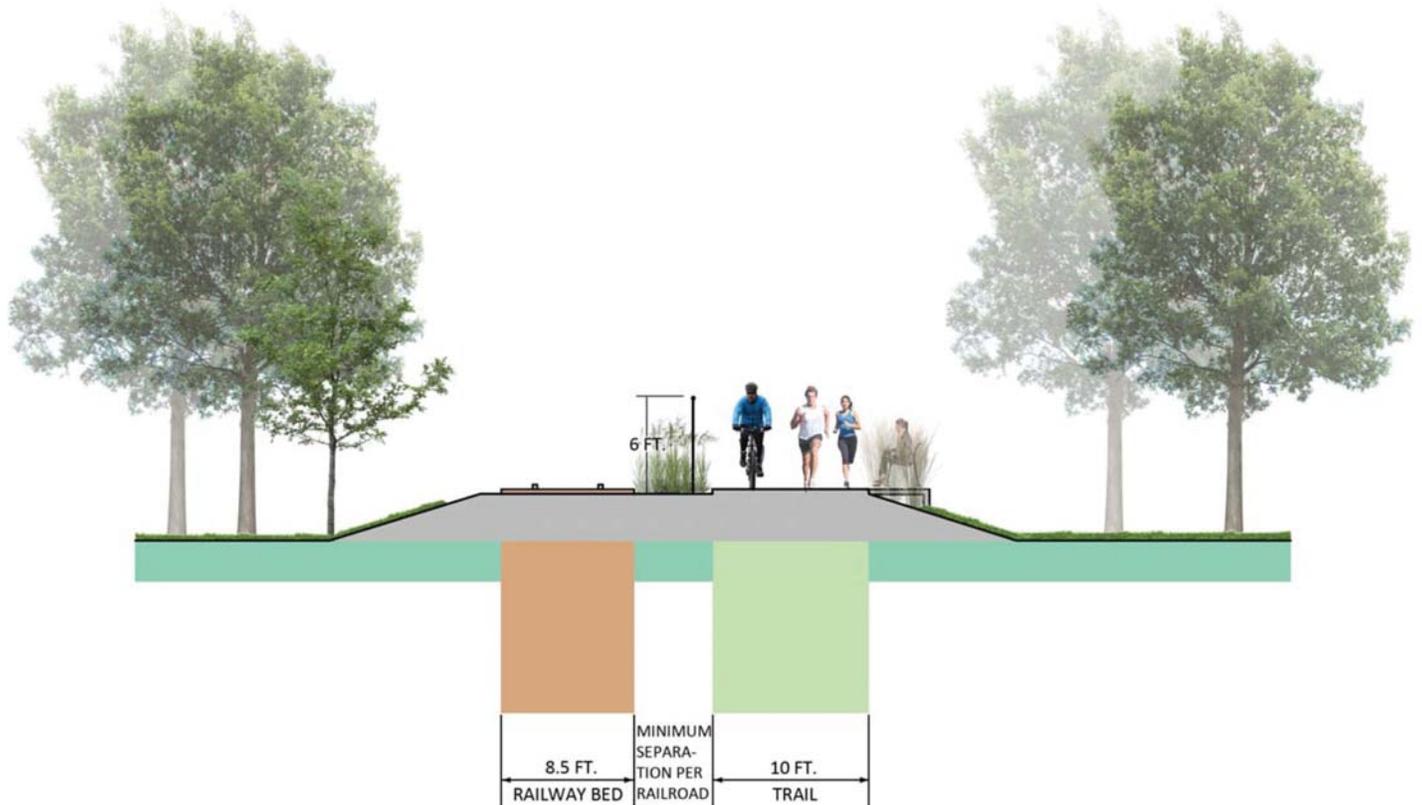


Facility Types

Cycle Track Section (Typical)



Rail with Trail Section (Typical)





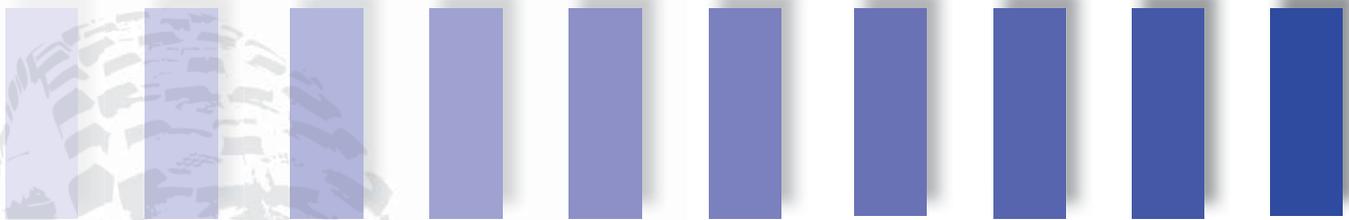
Introduction

The Manual on Uniform Traffic Control Devices (MUTCD) gives limited guidance regarding when and where to mark pedestrian crossing locations.

The following guidelines are intended to serve engineers and planners who are responsible for planning and designing pedestrian facilities within the City of Shelbyville. These guidelines are not to be used as warrants, as circumstances may vary depending on location and no set of guidelines can cover every condition or guarantee improved safety. These guidelines are intended to improve the consistency of the application of pedestrian crossing treatments.

Designers, engineers, and planners all share a responsibility to find ways for vehicles, pedestrians, and bicyclists to coexist safely and conveniently. Accommodating pedestrians with disabilities is required in the planning, design, and construction of pedestrian facilities.

The purpose of this section is to provide guidance for determining consistent engineering solutions to pedestrian safety concerns, particularly with regard to crosswalks. This section should be used to provide guidance for new and future construction projects and for retrofitting existing crosswalk locations.



Background

Marking crosswalks serves two purposes: (1) it shows pedestrians the best place to cross; and (2) it warns drivers that pedestrians may be present.

The following are advantages of marking crosswalks.

- o Helping pedestrians find their way across complex intersections
- o Designating the shortest path
- o Directing pedestrians to the location of best visibility and sight distance

General Guidance

As with the installation of any traffic control devices, engineering judgment is essential. All crosswalk pavement markings and signs shall be selected, designed, and installed in conformance with the MUTCD.

Crosswalk markings should not be used at all intersections. If used extensively, motorists would become desensitized to their presence. Crosswalk markings should generally be used only at locations where pedestrian activity is significant. Significant pedestrian activity is defined as meeting one or more of the following:

- o At least 15 pedestrians crossing the street during each of the two highest one hour traffic periods in a day
- o On a school route
- o On a route to and within 1,000 feet of a park, community center, or transit facility

The design of intersections should be completed with pedestrian crossings in mind.



Pedestrian Crossing Treatments

Guidelines for Marking Crosswalks

The table below provides guidance for the selection of the recommended traffic control devices for most circumstances as determined by the street characteristics, posted speed limits, and traffic volumes.

CRITERIA FOR PEDESTRIAN CROSSING TREATMENTS

Roadway Configuration	Roadway ADT and Posted Speed															
	Less than 5,000 vpd				5,000 to 9,999				10,000 to 19,999				Over 20,000			
	< 30mph	35 mph	40 mph	> 45 mph	< 30mph	35 mph	40 mph	> 45 mph	< 30mph	35 mph	40 mph	> 45 mph	< 30mph	35 mph	40 mph	> 45 mph
2 Lanes - Residential	1	2	2	N	1	2	4	N	2	2	4	N	2	2	4	N
2 Lanes - Commercial	1	2	2	N	1	2	4	N	2	2	4	N	2	2	4	N
2 Lanes - Industrial	1	2	2	N	1	2	4	N	2	2	4	N	2	2	4	N
2 Lanes with Median	1	3	3	N	1	3	4	N	2	3	4	N	2	3	4	N
2 Lanes with Signal	NA	NA	NA	NA	1	2	3	3	2	2	3	3	2	2	3	4
4 Lanes	2	2	2	N	2	2	4	N	2	2	4	N	2	2	4	N
4 Lanes with Median	2	3	3	N	2	3	4	N	2	3	4	N	2	3	4	N
4 Lanes with Signal	NA	NA	NA	NA	2	2	3	3	2	2	3	3	2	2	3	4
School Routes	1	2	2	4	1	2	4	5	2	4	5	N	2	4	N	N

NA = not applicable

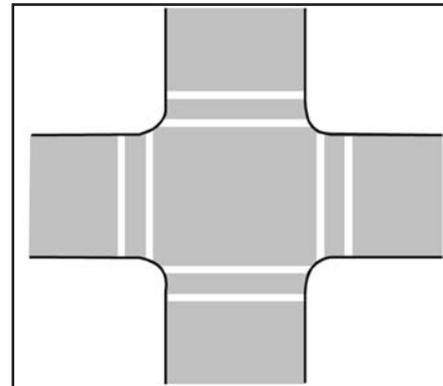
N = Pedestrian treatments not recommended without engineering study.

Source: Boulder, San Jose, Virginia DOT

Types of Pedestrian Crosswalks

Level 1

Level 1 crosswalks should be marked with parallel lines. The lines shall be white and shall be reflective. The lines may be painted at low vehicular traffic locations and should be thermoplastic or preformed plastic at high volume locations. At stop or signal controlled intersections, stop bars shall be installed in advance if the crosswalk lines in conformance with the MUTCD.



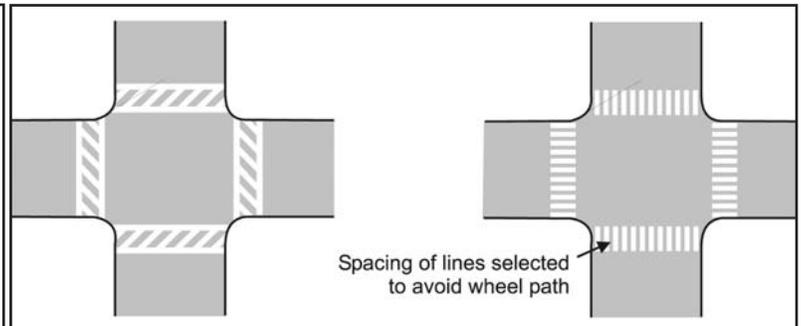
Level 1 Crosswalk Graphic

Level 2

Level 2 crosswalks should be marked with high visibility pavement markings and advance warning signs. High visibility markings should include hatching (ladder or zebra designs) and advance "Ped Xing" or "School Xing" markings.



Level 2 Crosswalk Signage



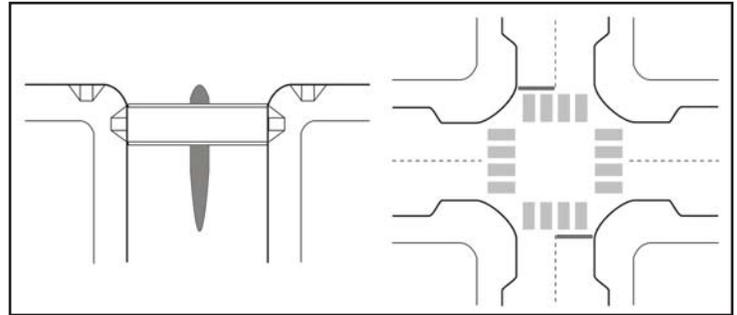
Level 2 Crosswalk Graphic

Spacing of lines selected to avoid wheel path



Level 3

Level 3 crosswalks should have pedestrian refuge islands and/or curb extensions (bump-outs) in addition to the Level 2 markings and signs.



Level 3 Crosswalk Graphic



Overhead Pedestrian Crossing Signal Example

Level 4

Level 4 crosswalks should be marked with overhead warning signs, flashing beacons (including HAWK or RRFB), or in-pavement lighting in addition to the Level 2 and 3 traffic control pavement markings and signs.

Level 5

Level 5 crossings should be considered for pedestrian signals or grade separation. Pedestrian signals shall be installed only when determined to be warranted and designed and installed in conformance with the MUTCD. Pedestrian signal locations shall include Level 2 and 3 traffic control devices and may include Level 4 devices.



Pedestrian Bridge Example



Pedestrian Tunnel Example

Mid-Block Pedestrian Crossings

Mid-block pedestrian crossings should be avoided, especially when designing new facilities. They are generally acceptable only in low speed, low traffic areas, such as downtown. When installed, they should have the appropriate level of protection as determined by accepted standards.



Trailheads

Trailheads are a necessary component of a bicycle and pedestrian system and should be evenly located throughout the Bicycle and Pedestrian system. They offer access to individuals not directly connected to the system as well as amenities all users can enjoy.

Automobile parking at trailheads should be designed and constructed using existing ordinances and standards with a quantity of spaces that accommodates 3 or more cars or trucks. Quantity is dependent on several factors including popularity of facility or surrounding population density and should be carefully considered during the detailed design phase. Accessible parking spaces should be programmed as well.

Bike parking should be located at all trailheads allowing users a secure location to lock their bicycle, but also increasing the opportunities for multi-modal transportation options for system users.

Amenities such as pet waste bag dispensers and trash receptacles help to keep the trailhead clean and sanitary while meeting system users needs. Ideally recycling receptacles would be offered as well and coordinated with a citywide pick-up program.

Wayfinding and Bicycle/Pedestrian system mapping should be prominently displayed at the trailhead to orient users to their location in the city and where the connections available to them.

Benches, water dispensers and shade – either tree canopy or a structure – should also be considered to offer system users a place of respite and refreshing.

Amenities and constructed elements at trailheads should be considered part of the Shelbyville brand and should match the existing Streetscape standards to provide a uniform aesthetic throughout the system.



Proposed Blue River Trailhead - Ratio Architects, Inc.

Branding the System

One of the goals for proposed bicycle and pedestrian improvements is to create a system that, in the end, becomes identifiable and uniquely associated with Shelbyville. Design standards for all the components of the system will play a significant role in accomplishing this goal. These established design standard components often include the following:

- o Designs for Physical Separation of Cycle Tracks
- o Bike Racks
- o Light Fixtures
- o Seating
- o Trailhead Appurtenances
- o Trash / Recycle Receptacles
- o Gateways
- o Historic Markers
- o Mile Markers
- o Wayfinding
- o Shade Trees
- o Landscape
- o Crosswalk Designs and Refuges
- o Pedestrian Accommodations at Key Intersections



Branding Example- South Haven, Michigan

When these various components are predetermined for their function and aesthetics as corridor standards, construction and implementation are simplified. Even more important, these design standards combine to establish and “mark” the system corridors in a fashion that makes these corridors unique to Shelbyville, thereby building the Shelbyville “brand”. This branding also serves to promote public safety, as the various components of the system make the corridors more visually apparent to motorists traveling along and across those corridors.

Wayfinding

Clearly marked routes are crucial to promoting the highest use of these public facilities benefiting local residents plus visitors and tourists navigating their way around the city. . By using properly designed and standardized wayfinding signage, corridor use will be more convenient and safe for all users. The design standards for signage will address text color, background color, sign size, post materials, directional graphics and user graphics. Guided by current MUTCD standards, uniform text and graphics are effective means to increase the efficacy of the wayfinding system.



Branding Example - Indianapolis Cultural Trail



Trailhead Wayfinding Example



Gateway Monument - Franklin, Indiana



Bicycle Parking & Bike-Share Programs

Bicycle Parking

A general lack of bicycle parking was found within the City of Shelbyville. Bike parking at destinations and local attractions encourages use of the Bicycle and Pedestrian system. The location of these facilities should be carefully considered during implementation and easily identified in visible, logical locations for system users.

Providing bike parking near or adjacent to commercial, multi-family, governmental land uses ensures a beneficial relationship between the system user and the service provided at each location.



Ridgefield Bike Rack - Kenneth Lynch & Sons

Space requirements should be thoughtfully considered prior to installing bike parking – especially on downtown sidewalks. Bike parking should be anchored to concrete and at least 3 feet from curbs, fences, walls, trees and fire hydrants. Sidewalks that receive bike parking should be at least 10 feet wide and the orientation of the bike rack shall be designed so a typical bike does not create an impassable route for pedestrian or impede ADA requirements.

Bike-Share Programs

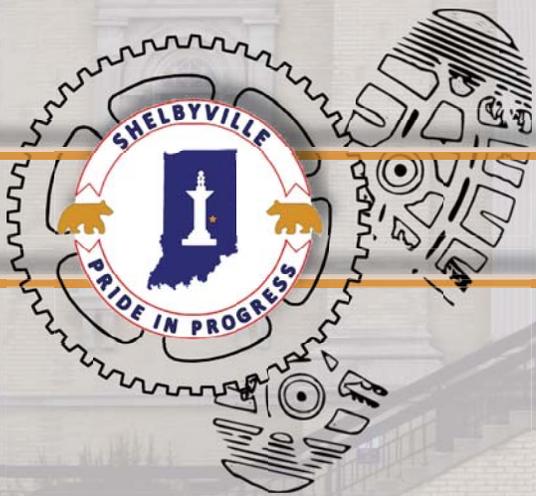
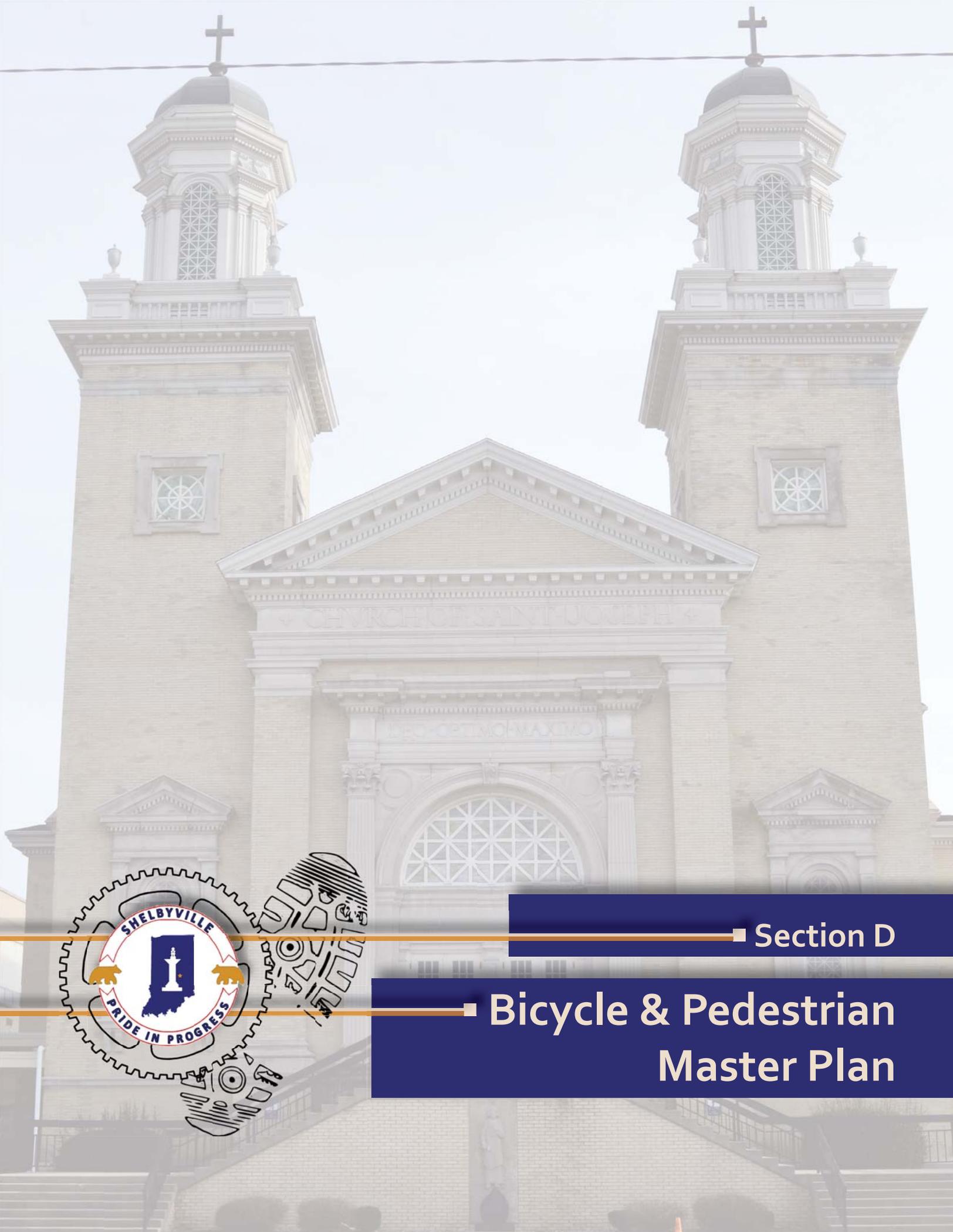
Bike-share programs are a great way for city residents to use an alternative form of transportation and allow visitors the chance to experience the city from a different perspective than a car. Bike-share programs allow people to borrow a bike from point “A” and return it at point “B”. Many bike-share systems offer subscriptions that make the first 30–45 minutes of use either free or very inexpensive, while still allowing for hourly or daily rental, encouraging use as transportation. This allows each bike to serve several users per day.

Bike-share programs are becoming a popular commodity in central Indiana with cities such as Carmel and Indianapolis providing successful enterprises. Bike-share programs are either operated by the city or by a service provider such as Zagster.com or SocialBicycles.com (Sobi). Turn-Key is the most common type of bike-share program and should be equipped with the following elements:

- o Multi-Speed Bikes
- o Expandable Docking Stations
- o Fully Automated – Smartphone APP
- o Routine Maintenance
- o 24/7 Rider Support
- o Liability Insurance

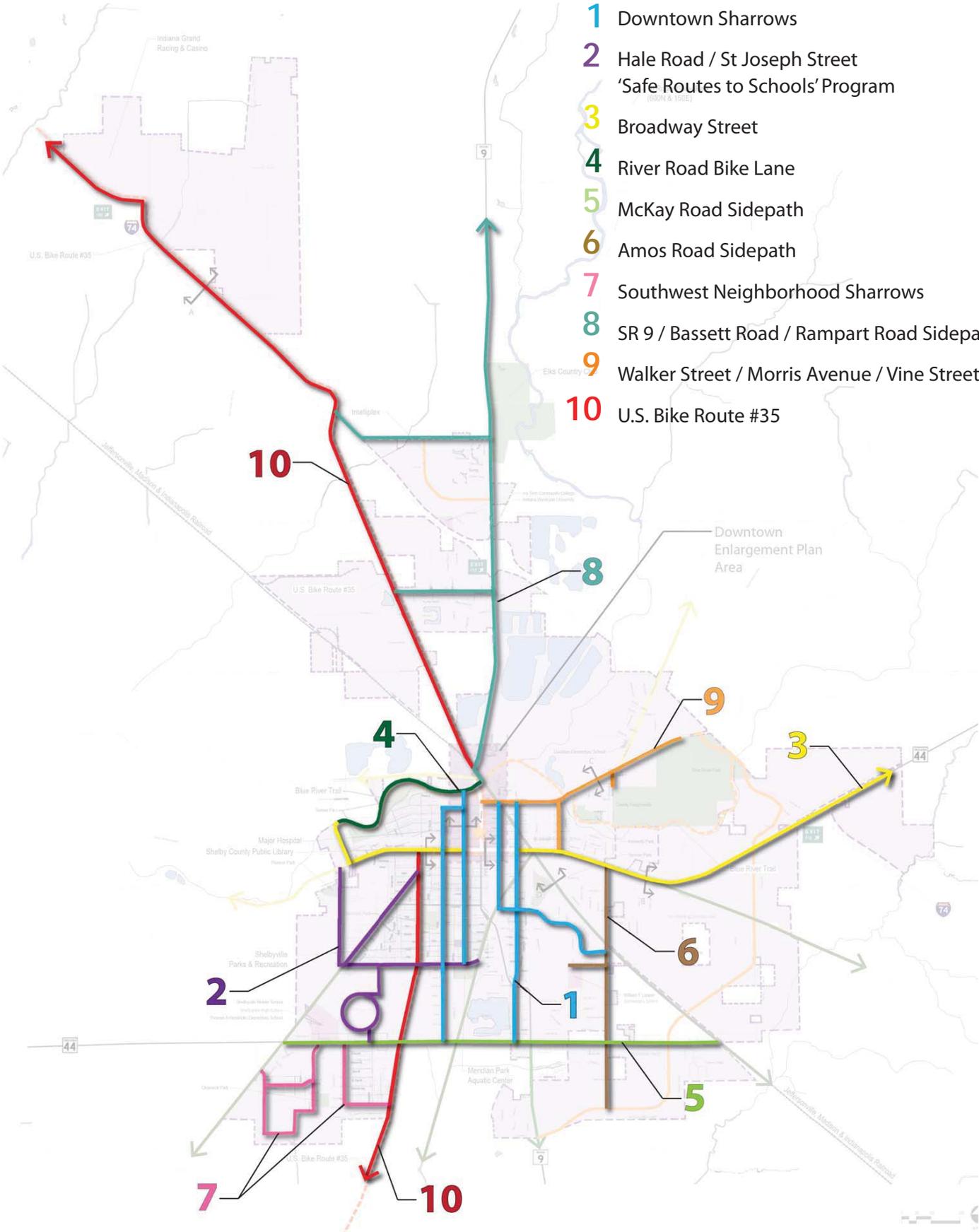


Indiana Bike-Share Docking Station



■ Section D

■ **Bicycle & Pedestrian
Master Plan**



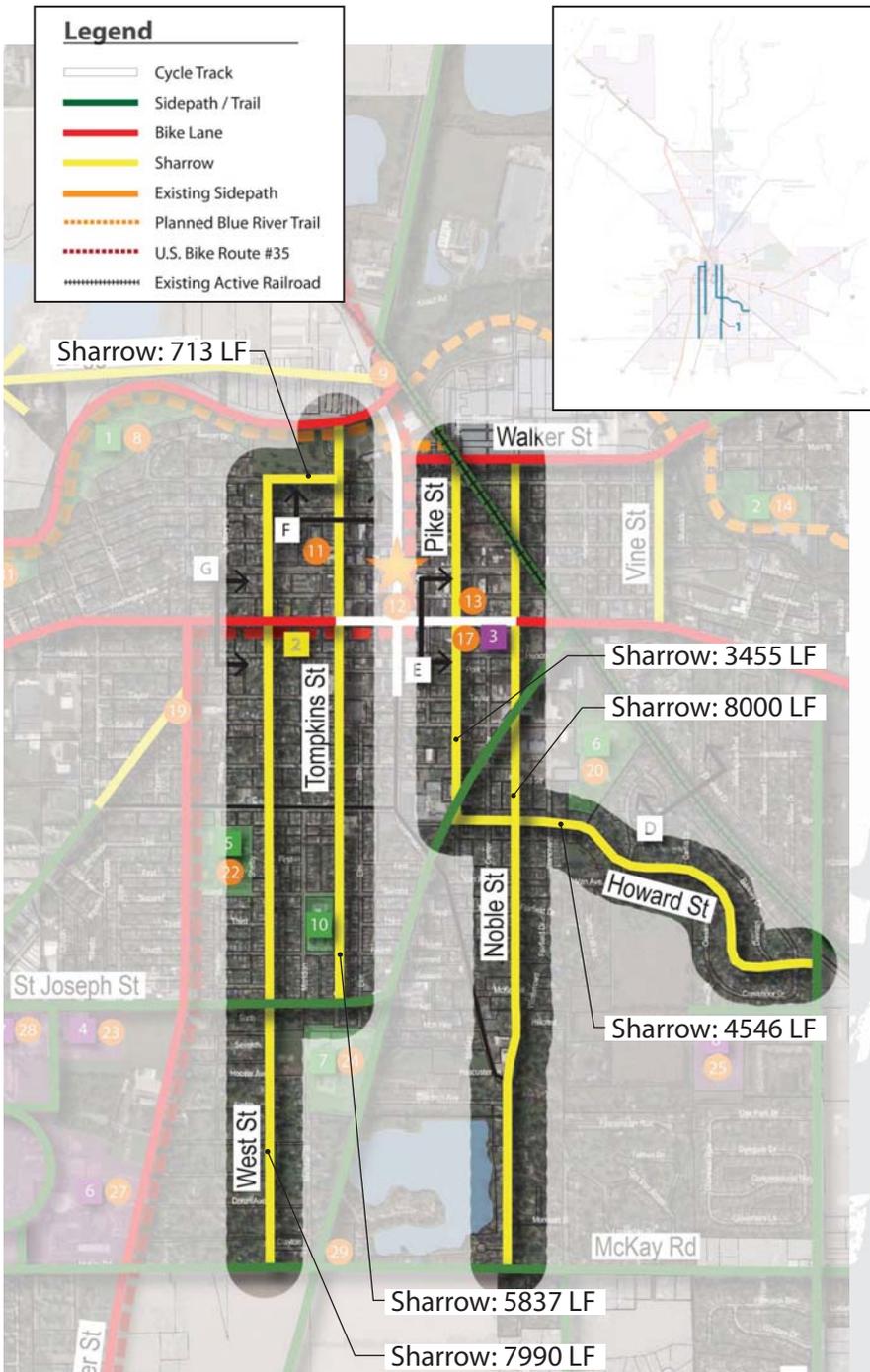
- 1 Downtown Sharrows
- 2 Hale Road / St Joseph Street
'Safe Routes to Schools' Program
- 3 Broadway Street
- 4 River Road Bike Lane
- 5 McKay Road Sidepath
- 6 Amos Road Sidepath
- 7 Southwest Neighborhood Sharrows
- 8 SR 9 / Bassett Road / Rampart Road Sidepaths
- 9 Walker Street / Morris Avenue / Vine Street
- 10 U.S. Bike Route #35



1 Downtown Sharrows

The downtown sharrows along West, Tompkins, Noble, Pike and Howard Streets create a needed connection with the downtown core while avoiding the primary north / south and east / west thoroughfares. These routes also create connections from the Blue River Trail and River Road on the west side and Walker Street on the east side south to McKay Road. During implementation of bicycle facilities within city streets, pedestrian safety and accessibility improvements such as crosswalks and sidewalks should be programmed simultaneously.

Implementation of these sharrows should be simple and relatively cost efficient. However, intersections should also be improved for better pedestrian accessibility during implementation. Creating these connections within the downtown core provides safer access from surrounding neighborhoods to the commercial / retail business areas.



Howard Street - Proposed Sharrow



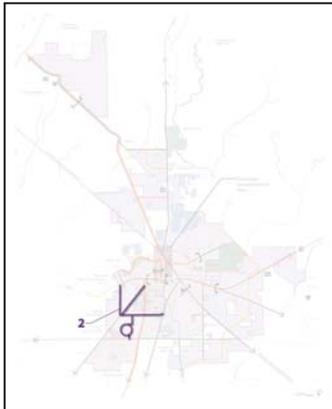
Howard Street - Proposed Sharrow



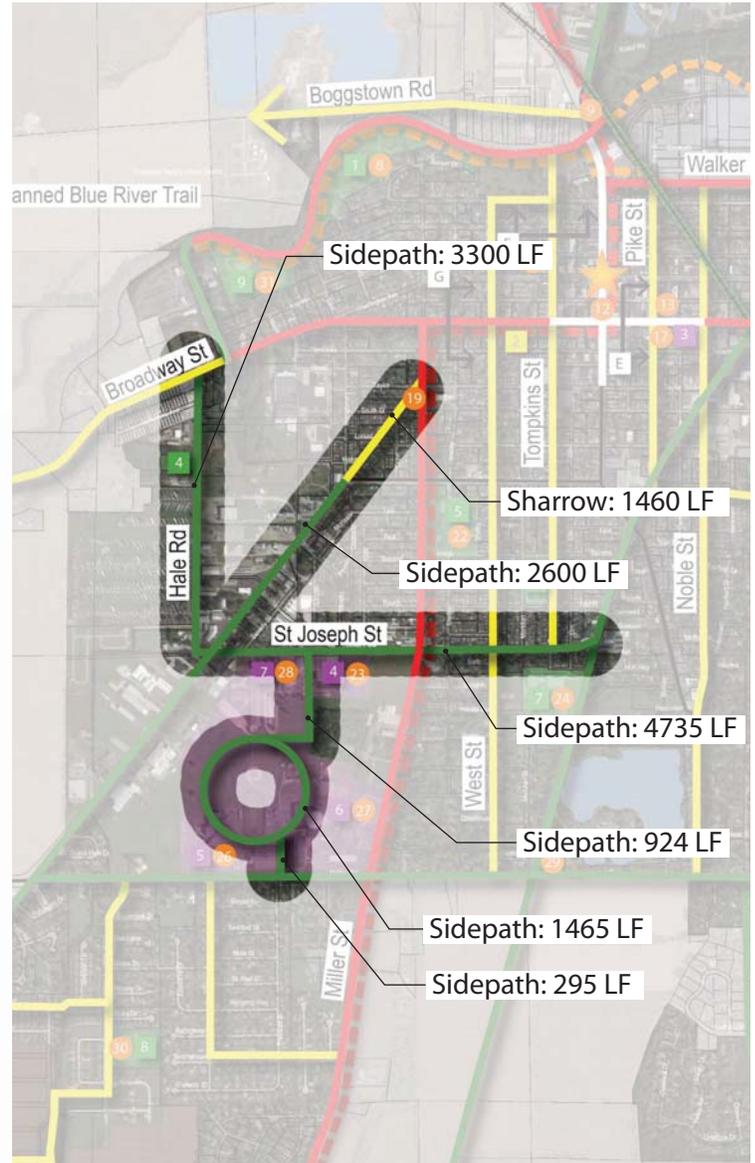
Tompkins Street - Proposed Sharrow



2 Hale Road / St Joseph Street 'Safe Routes to School'



Legend	
	Cycle Track
	Sidepath / Trail
	Bike Lane
	Sharrow
	Existing Sidepath
	Planned Blue River Trail
	U.S. Bike Route #35
	Existing Active Railroad



The proposed routes along Hale Road, Miller Avenue and St. Joseph Street will create alternative transportation opportunities to and from school for students. Sidepaths along roads surrounding both the Shelbyville Middle School and High School as well as Thomas A Hendricks Elementary will allow students viable options to walk or bike safely to school.

The additions of these bicycle and pedestrian facilities support Shelbyville's 'Safe Routes to School' (SRTS) program. This program was established to make walking and bicycling to school safer and more accessible for children, including those with disabilities, and to increase the number of children who choose to walk and bicycle. On a broader level, SRTS programs can enhance children's health and well-being, improve educational outcomes, ease traffic congestion near the schools, improve air quality and advance community quality of life amenities.



Hale Road - Proposed Sidepath



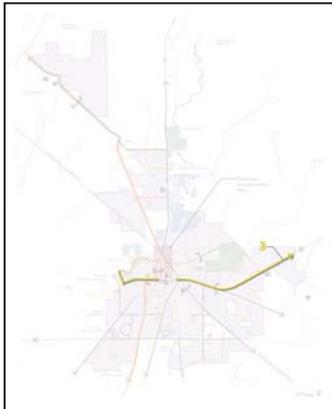
St. Joseph Street - Proposed Sidepath



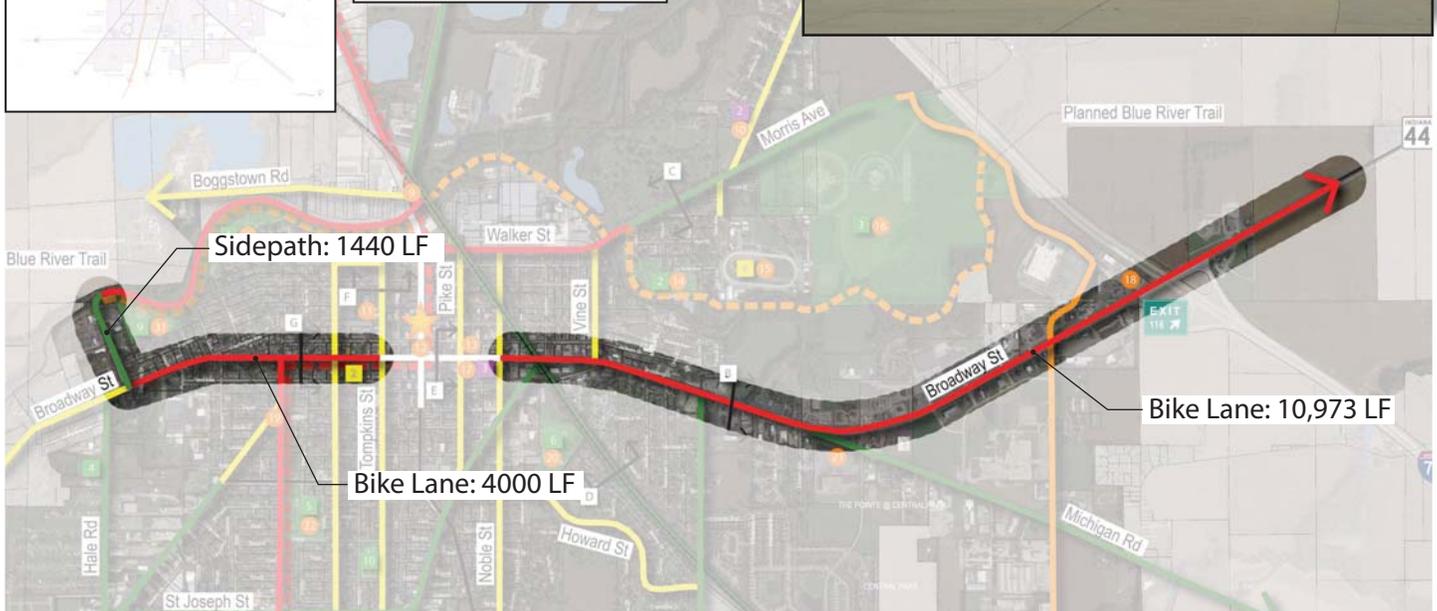
St. Joseph Street - Proposed Sidepath



3 Broadway Street



Legend	
	Cycle Track
	Sidepath / Trail
	Bike Lane
	Sharrow
	Existing Sidepath
	Planned Blue River Trail
	U.S. Bike Route #35
	Existing Active Railroad



The Broadway Street bike lane and sidepath combination forms a main east / west corridor through downtown Shelbyville from Hale Road past Interstate-74 along SR 44. When combined with the Blue River Trail, Progress Parkway sidepath and future cycle track, this system creates a loop encompassing the Public Square and downtown business core, the Blue River corridor, Sunset Park, Shelby County Babe Ruth Park, Blue River Memorial Park and the Shelby County Fairgrounds.

A section of cycle track from Tompkins Street to Noble Street is needed to complete this east / west corridor providing alternative transportation options for users looking to travel to the larger retail businesses east of downtown Shelbyville.



Broadway Street - Proposed Bike Lane



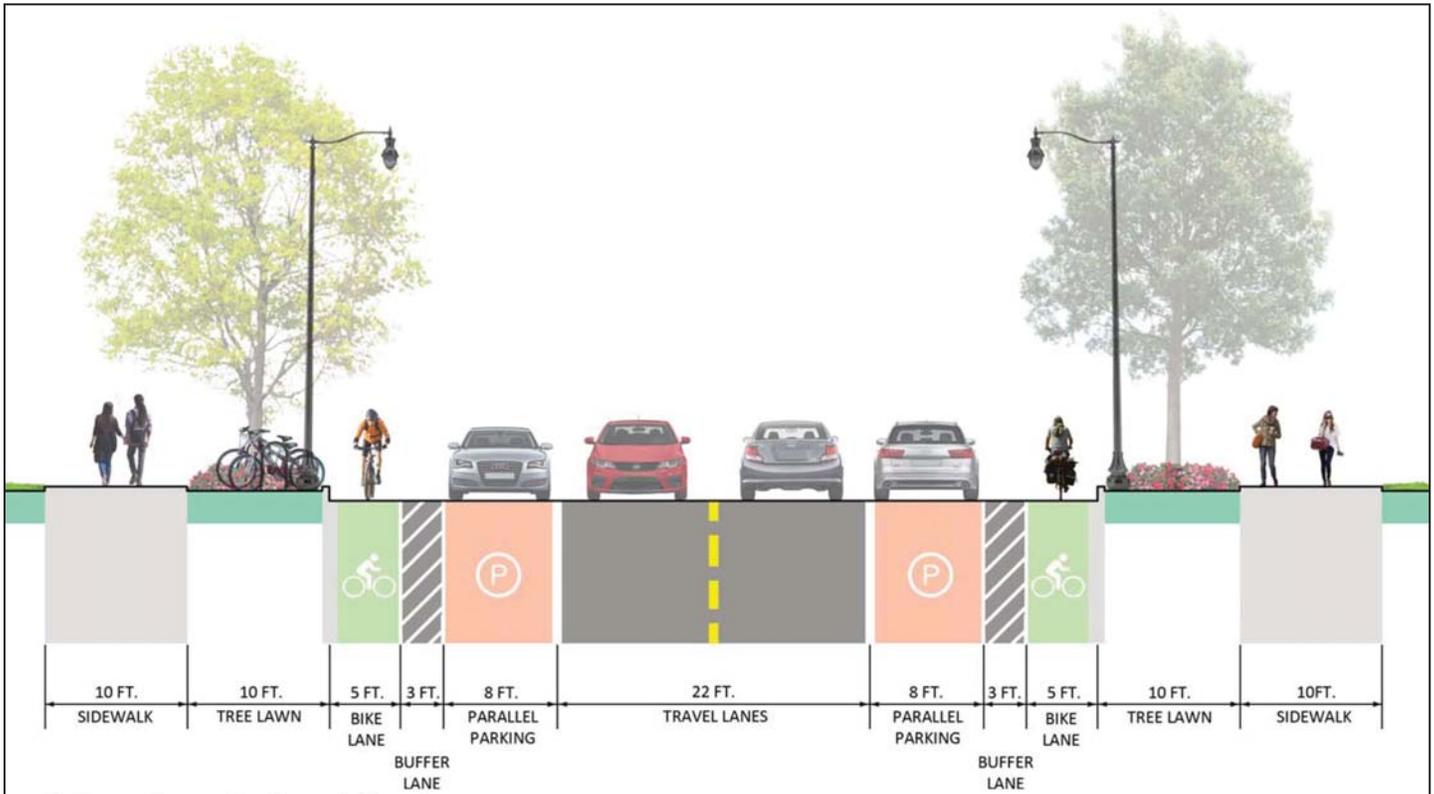
Broadway Street - Proposed Bike Lane



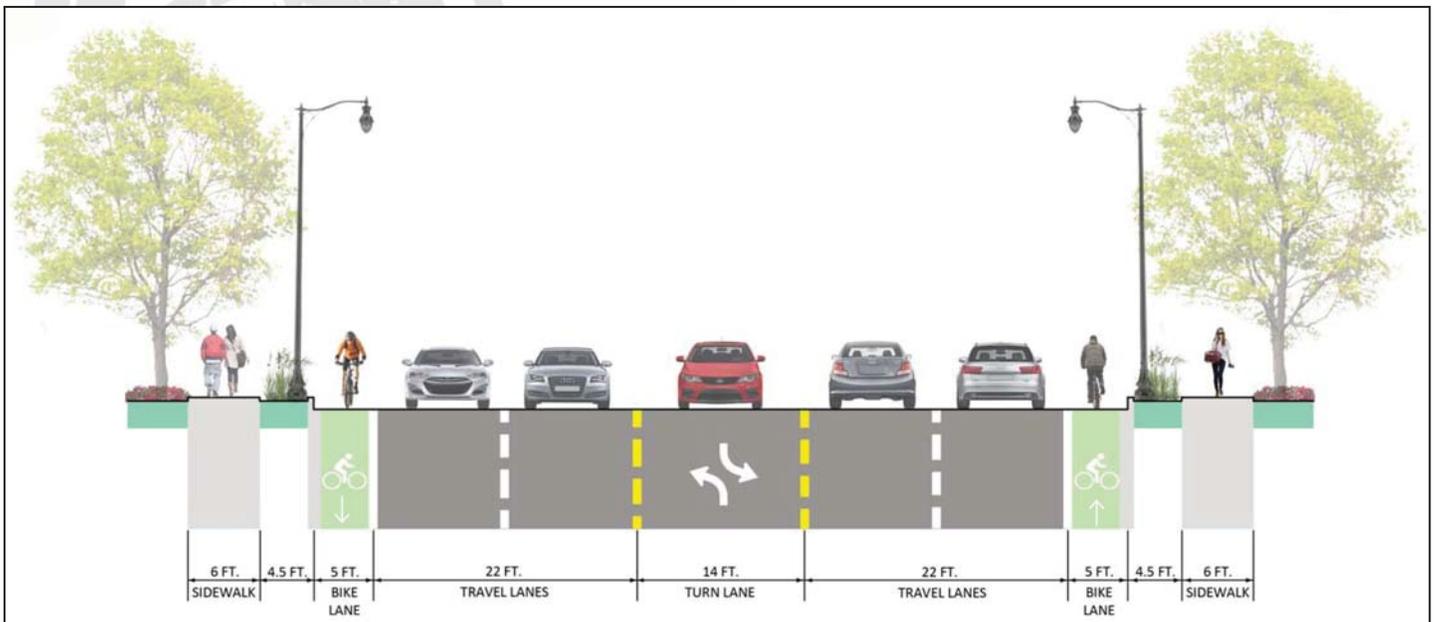
Habig Street - Proposed Sidepath



3 Broadway Street (Continued)



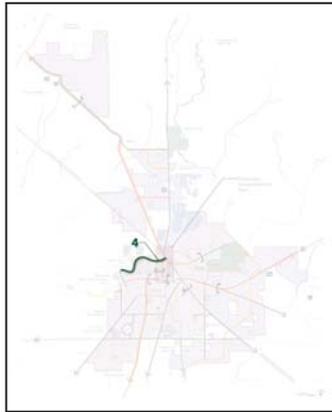
Proposed Local Broadway Street Bike Lane Section



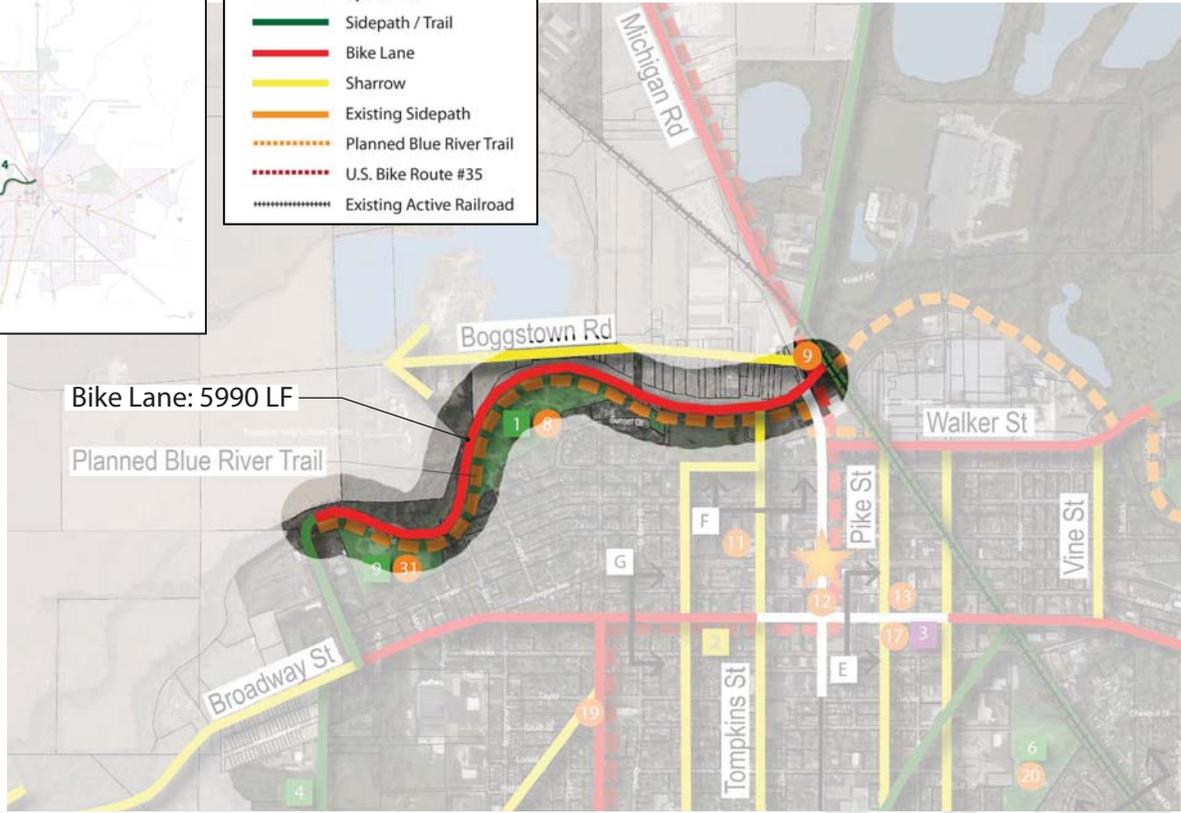
Proposed SR 44 Broadway Street Bike Lane Section (INDOT Jurisdiction)



4 River Road Bike Lane



Legend	
	Cycle Track
	Sidepath / Trail
	Bike Lane
	Sharrow
	Existing Sidepath
	Planned Blue River Trail
	U.S. Bike Route #35
	Existing Active Railroad



River Road - Proposed Bike Lane



River Road - Proposed Bike Lane



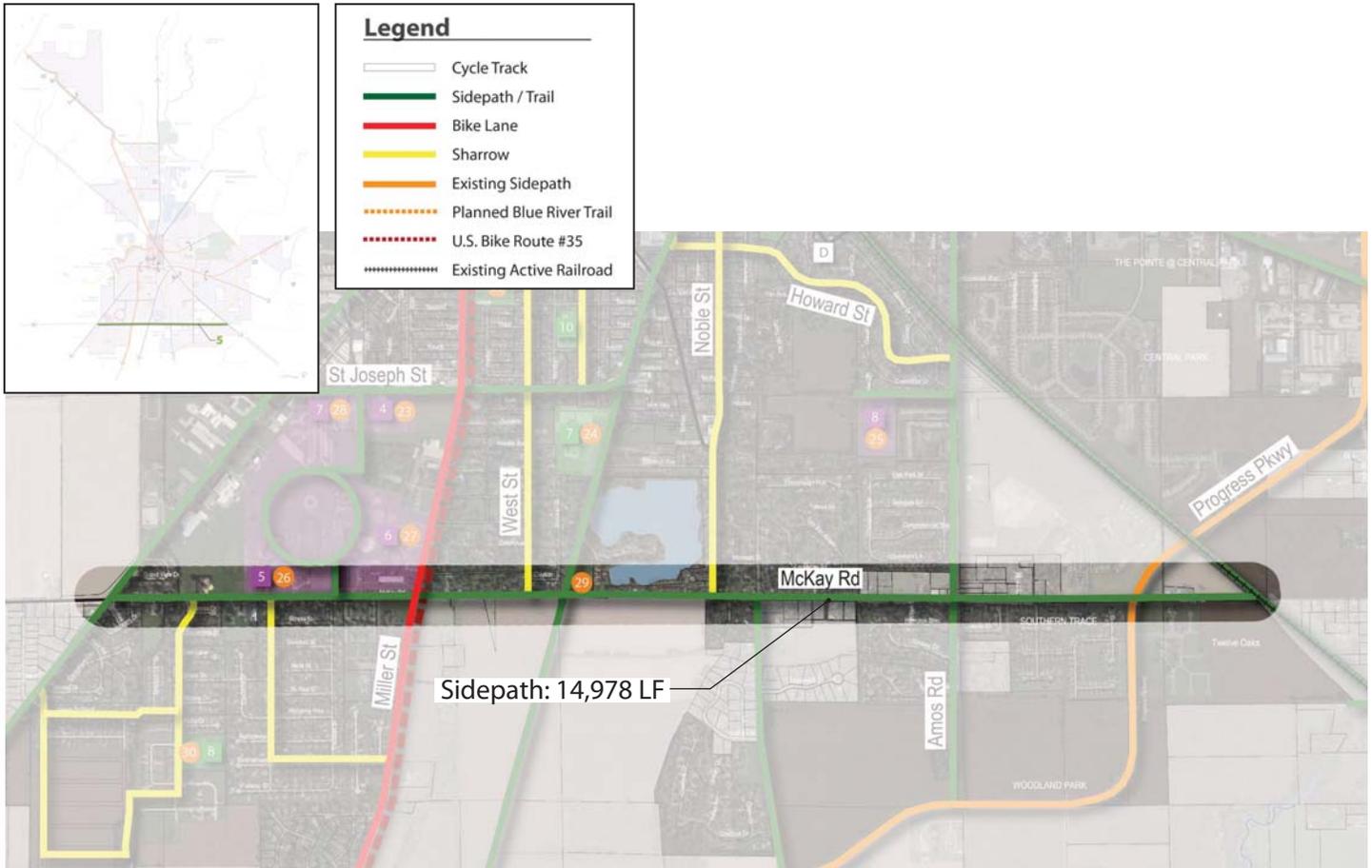
River Road - Proposed Bike Lane

The River Road bike lane will follow a portion of the Blue River Trail to be completed under Phase II of that project. This proposed route will create over a mile of bike lane following the perimeter of the Blue River corridor starting at the vehicular bridge on SR 9 and traveling west to the Habig Street sidepath.

For the neighborhoods on the northwest side of downtown Shelbyville, this bike lane will create a safe connection to Sunset Park, Shelby County Babe Ruth Park and retail areas on SR 9 south of the river.



5 McKay Road Sidepath



The proposed sidepath along McKay Road will create an east / west connection nearly three miles in length across the south side of Shelbyville. The sidepath starts at Miller Avenue bordering the 'Safe Routes to School' program zone. A future trail head is proposed where the McKay Road sidepath connects with the Abandoned Rail Trail spur traveling south from downtown. The sidepath dead ends into the Jeffersonville, Madison and Indianapolis Rail Line which is proposed to be complimented by a Rail with Trail facility.

This proposed sidepath creates many opportunities for users to travel from Shelbyville's south side into downtown with its connections to sharrow, a bike lane and other sidepaths running north and south. It also connects with Progress Parkway opening up alternative transportation options to the east side of the city.



McKay Road - Proposed Sidepath



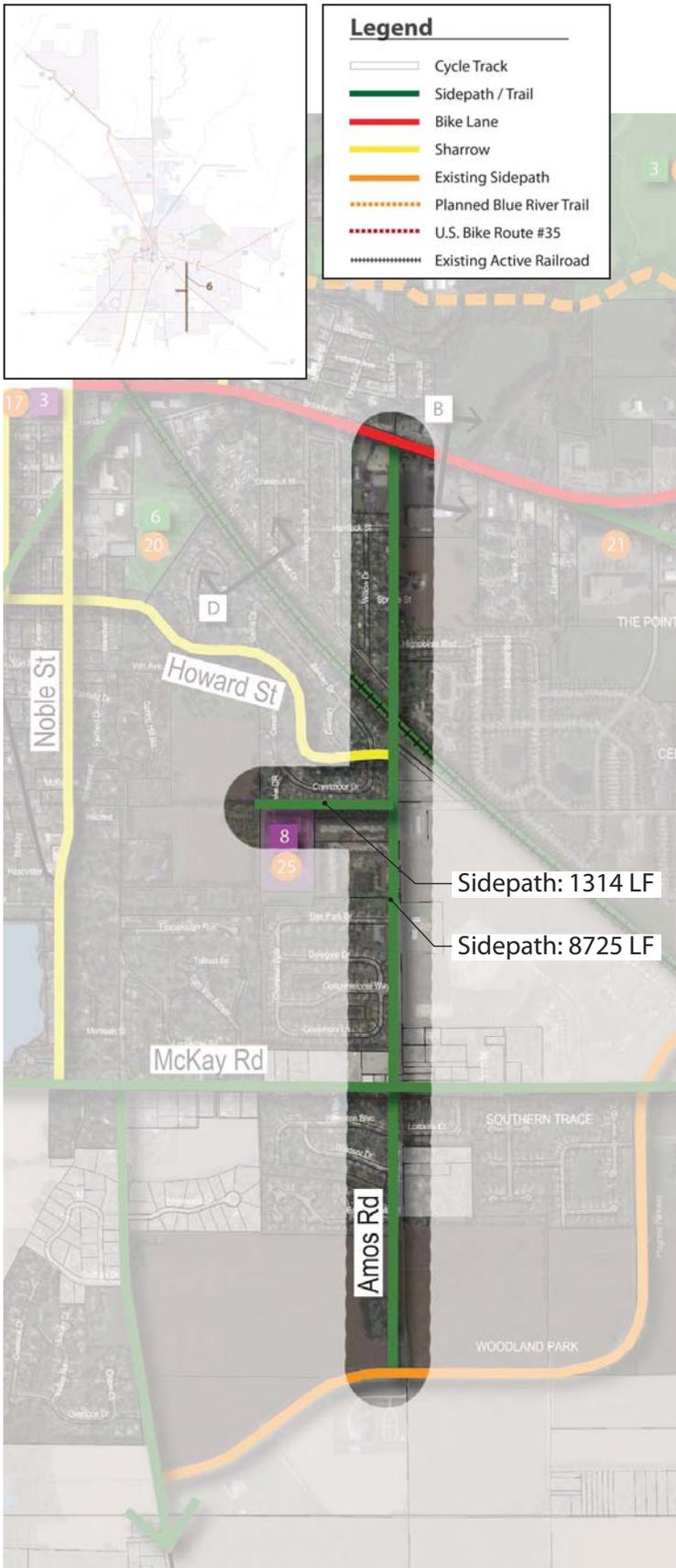
McKay Road - Proposed Sidepath



McKay Road - Proposed Sidepath



6 Amos Road Sidepath



The Amos Road sidepath would create a major north / south corridor connecting Broadway Street to Progress Parkway along the east side of downtown Shelbyville. Much like the McKay Road sidepath, this proposed route would allow for a number of options to travel downtown as it intersects the Howard Street sharrows, the McKay Road sidepath and the Jeffersonville, Madison and Indianapolis Rail Line rail with trail. Residents of southeast neighborhoods would use this route as their main corridor for alternative transportation into downtown and parks along the Blue River Trails.

A small east / west spur along Loper Drive runs by the William F. Loper Elementary School. In addition, the Shelbyville Middle School and High School can be accessed with the combination of the Amos and McKay Road sidepaths further expanding the 'Safe Routes to School' program.



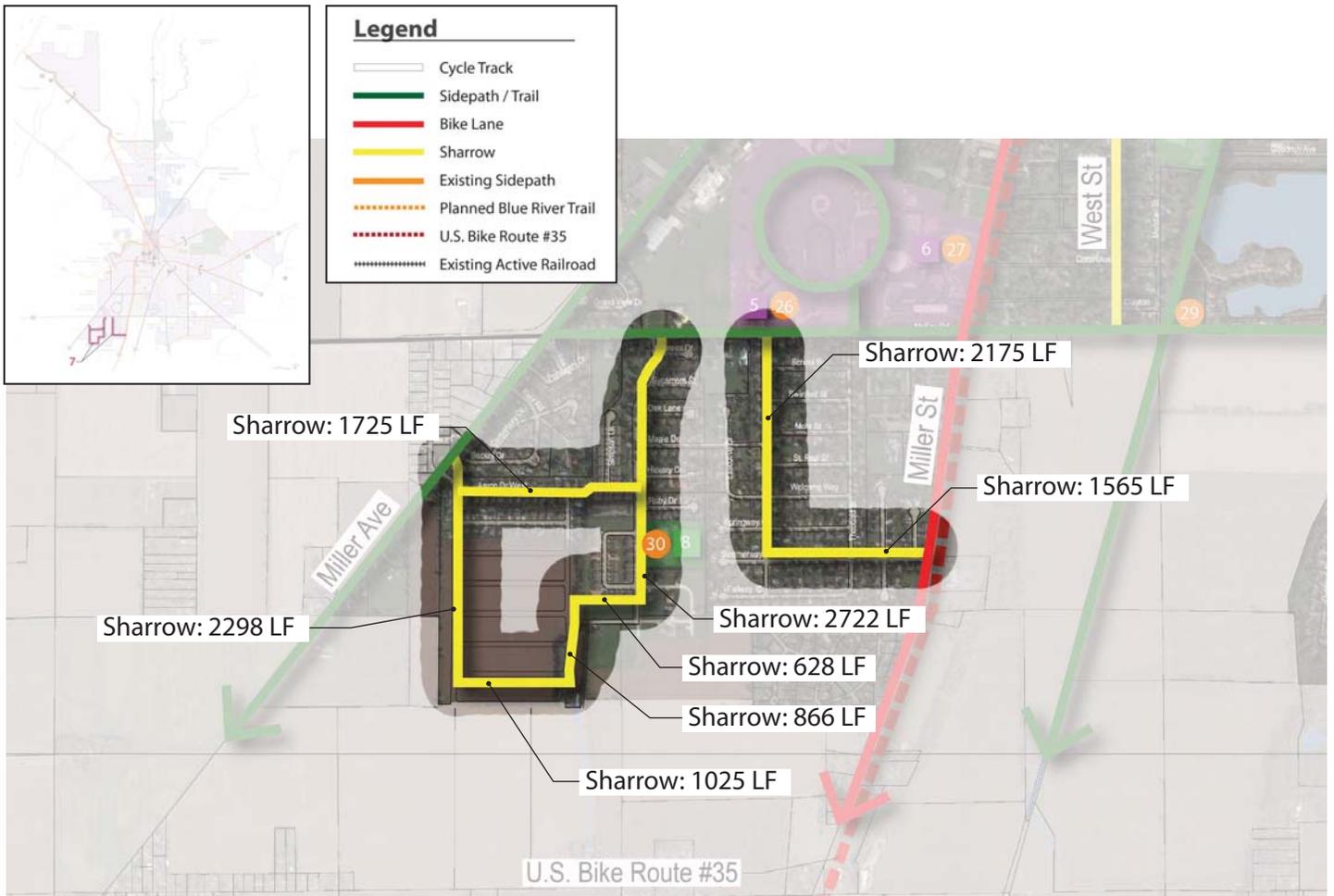
Amos Road - Proposed Sidepath



Looper Drive - Proposed Sidepath



7 Southwest Neighborhood Sharrows



Nearby neighborhoods on the southwest side of Shelbyville continue to grow and expand. With that in mind, this proposed set of sharrows will connect these neighborhoods to the surrounding major roadways such as Miller Avenue, Miller Street and McKay Road. The neighborhood sharrows encompass the area around Clearwick Park and sit immediately south of the Shelbyville Public Schools main campus.

While some of these neighborhoods have undeveloped lots, the flexibility and inexpensive nature of implementing sharrows allows for these proposed routes to be put into place as development progresses.



Premier Street - Proposed Sharrow



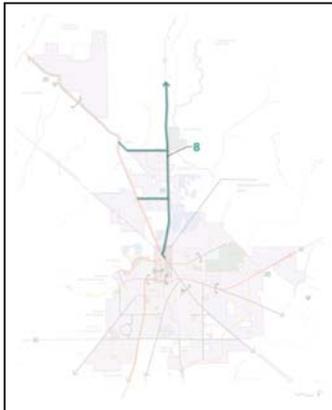
Summerway Drive - Proposed Sharrow



Berwick Drive - Proposed Sharrow



8 SR 9 Sidepath



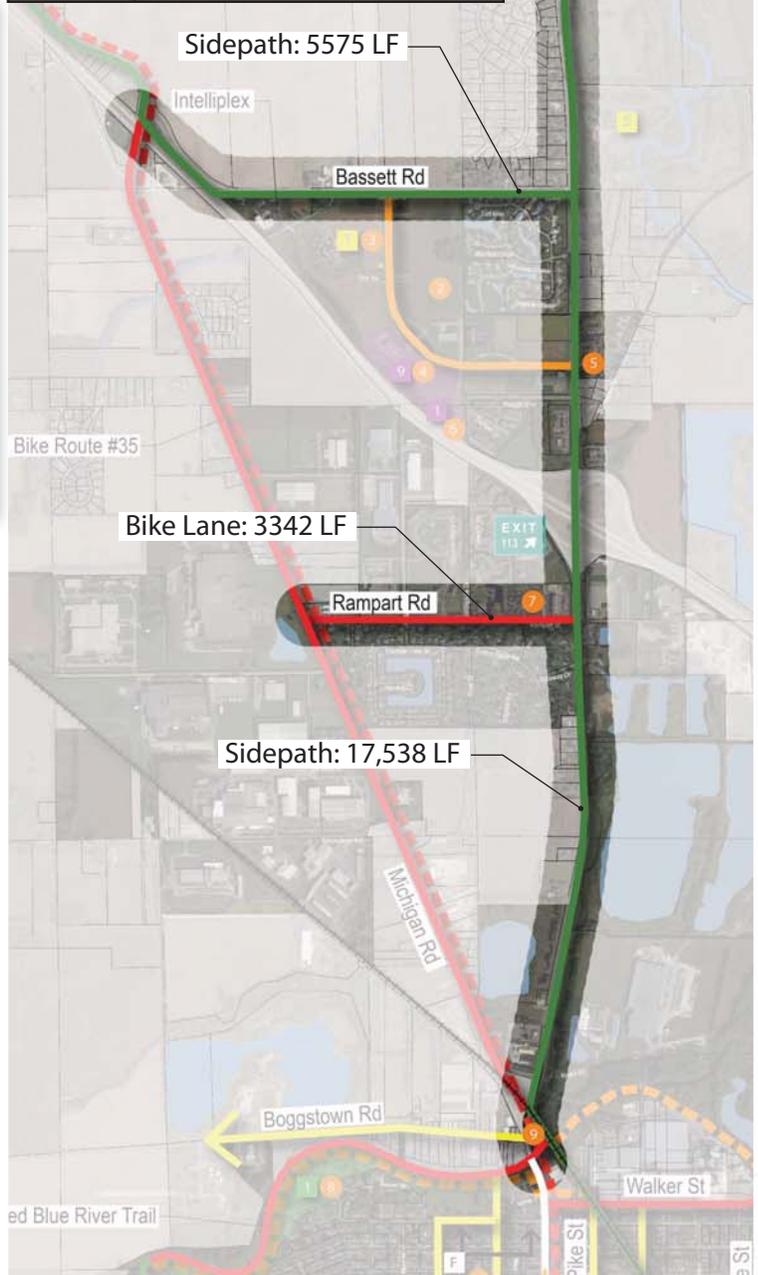
Legend	
	Cycle Track
	Sidepath / Trail
	Bike Lane
	Sharrow
	Existing Sidepath
	Planned Blue River Trail
	U.S. Bike Route #35
	Existing Active Railroad



SR 9 - Proposed Bike Lane



Bassett Road - Proposed Sidepath Continuation



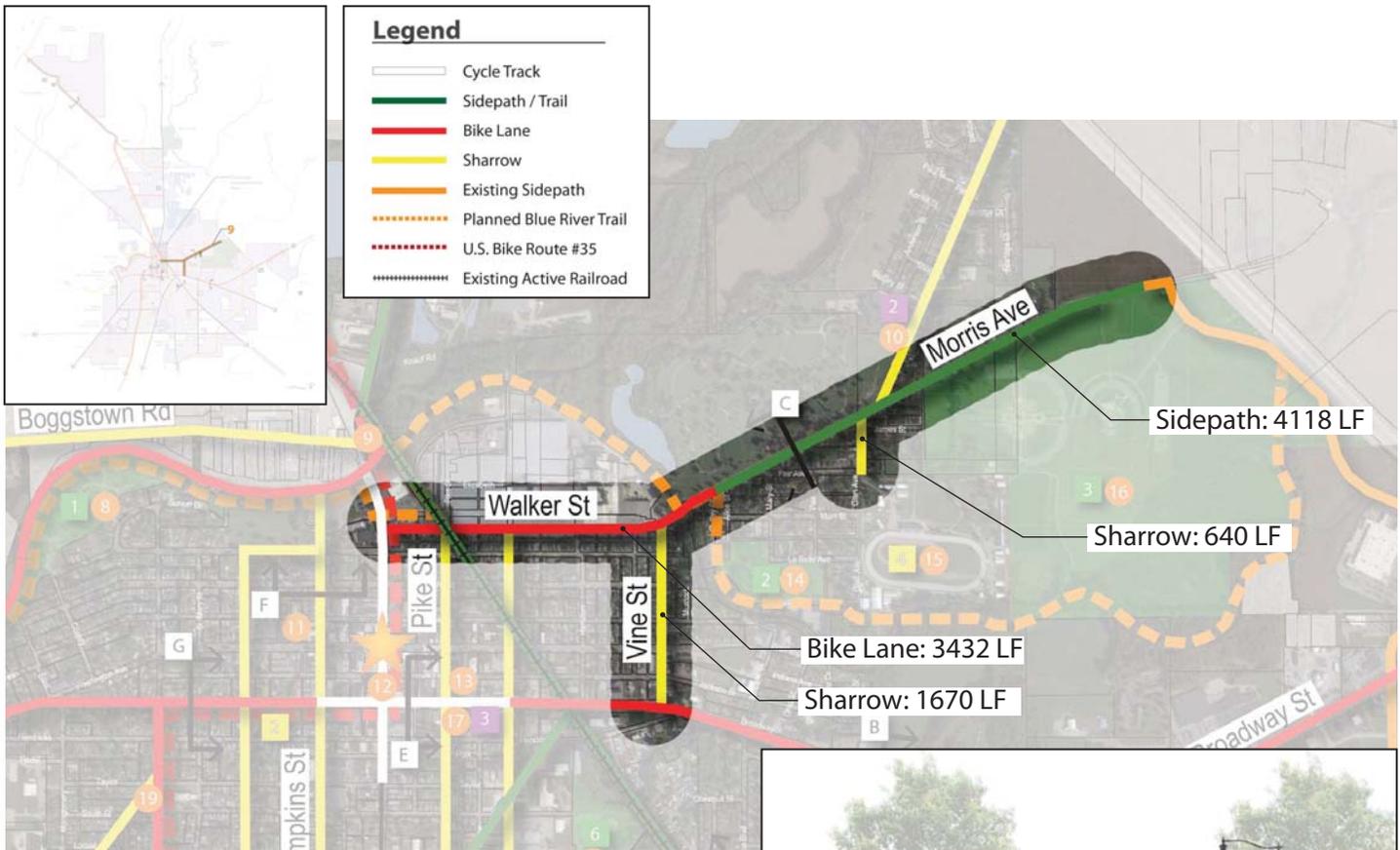
SR 9 or Riley Highway is the main north / south access point for visitors traveling to downtown Shelbyville from Interstate-74. A combination of sidepaths and a bike lane form connections between SR 9 and Michigan Road; creating access to the Intelliplex Campus, Ashford Place Health Campus, Ivy Tech Community College, Indiana Wesleyan University and Shelbyville's northside business district.

The Rampart Road bike lane runs east to west capturing a few northside neighborhoods. It also fronts the Rampart Medical Center and connects to the proposed U.S. Bike Route #35 corridor.

The proposed side path along Bassett Road connects to the newer Intelliplex sidepath. This route runs directly past the construction site for the new Major Hospital Campus and intersects with SR 9 facilities near the Elks Country Club.



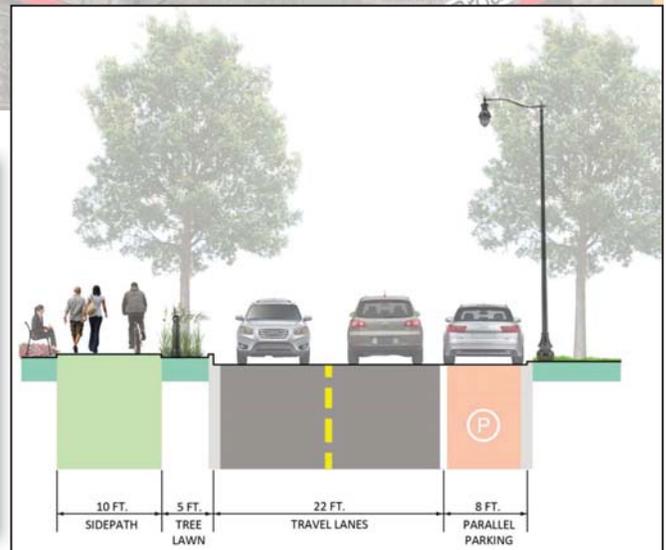
9 Walker Street / Morris Avenue / Vine Street Connector



Morris Avenue - Proposed Sidepath



Entrance to Fairgrounds



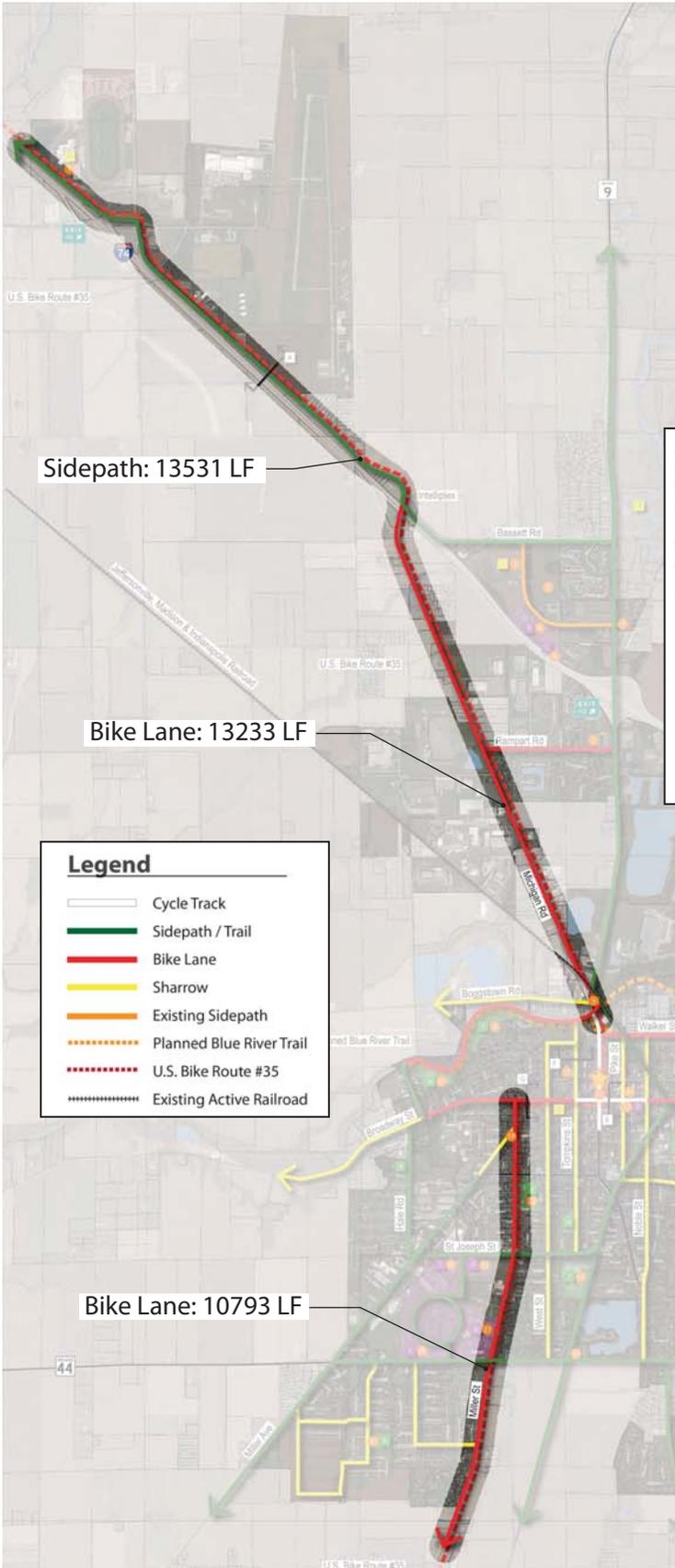
Proposed Morris Avenue Sidepath Section

The Walker Street / Morris Avenue / Vine Street connectors bridge the gap between different types of facilities on the northeast side of downtown Shelbyville. The Walker Street bike lane and Morris Avenue sidepath connect the proposed Blue River Trail to the entrance of Blue River Memorial Park and also Progress Parkway. The Walker Street bike lane runs east to west from Vine Street to Harrison Street, just a few blocks north of the Public Square. The Vine Street sharrow connects the proposed Blue River Trail and Walker Street south to Broadway Street and its proposed bike lane. Lastly, the Frank Street sharrows provide access to the Shelby County Fairgrounds from the Morris Avenue sidepath.

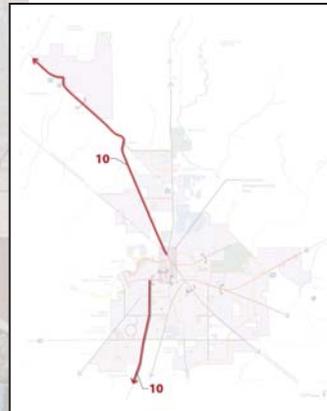
Coulsten Elementary School sits just north of the Morris Avenue / Knighstown Road intersection. Kennedy Park, the Shelby County Fairgrounds and Blue River Memorial Park can all be accessed by these proposed routes.



10 U.S. Bike Route #35



Michigan Road - Proposed Sidepath & U.S. Bike Route #35



Miller Street - The Bicycle Shop

The U.S. Bike Route #35 is part of the United States Bicycle Routes System program. This particular route currently runs from Saulte Saint Marie, Michigan to South Bend, Indiana and is proposed to continue south through Louisville, Kentucky. Along the way, it will follow alongside a part of Interstate-74, turn south into downtown Shelbyville and continue south along Miller Street.

To help push this project forward, a sidepath along Michigan Road north of Interstate-74 is proposed. Bike lanes are proposed south of the highway leading into downtown Shelbyville and then picking back up along Miller Street south of Broadway Street. These routes will enable the use of alternative transportation from south of downtown all the way north to Indiana Grand Racing and Casino. This is the most expansive route proposed connecting over seven miles of Shelbyville's territory.



10 U.S. Bike Route #35 (Continued)



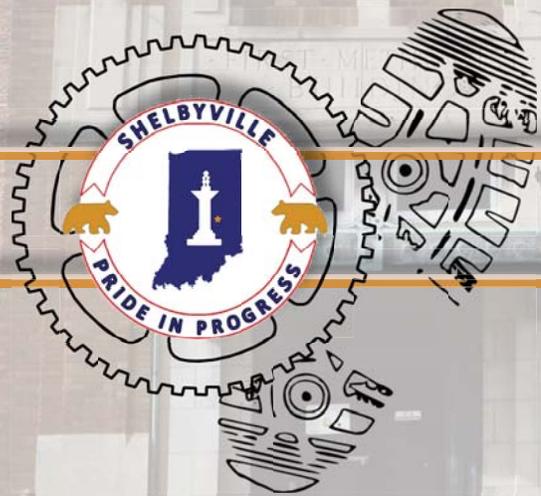
Proposed Michigan Road Sidepath Section



Miller Street - Proposed Bike Lane & U.S. Bike Route #35



Miller Street - Proposed Bike Lane & U.S. Bike Route #35



■ Section E

■ Implementation



Recommendations

1. Adopt Plan as element of Comprehensive Plan

Create a Bicycle & Pedestrian Master Plan task force or council to assist with the implementation of the plan (this could be a continuation of the current steering committee or another entity). Update the existing comprehensive plan and coordinate with the next park master plan before it is adopted

2. Plan becomes a policy document used to guide local decisions

Adopt a local policy that ensures pedestrian facility assessment and improvements are programmed into all corridor improvements for bicycle facilities

3. Plan becomes a policy document used to guide decisions per State Law:

a. *BZA decisions on use variances (IC 36-7-4-918.4), "Approvals does not interfere substantially with comprehensive plan"*

b. *Plan Commission decisions on rezonings (IC 36-7-4-603), "pay reasonable regard to the comprehensive plan"*

4. Plan becomes a policy document used to guide local decisions, including budgets

Amend the capital improvement plan and budget to include a multi-year plan for completing sidewalk improvements and bicycle facilities

5. Plan becomes a policy document used to guide local standards, including ...

Make amendments to the Ordinance and Zoning Map that reflect the recommendations of this plan

6. The Plan becomes a policy document that influences other local decisions

Traffic Speed, Tourism, School Transportation, Redevelopment, etc. – share the plan with other entities

7. Plan becomes a policy document used to influence state decisions (i.e., INDOT)

Meet with INDOT and present them with a copy of the adopted Bicycle & Pedestrian Master Plan

Seek INDOT funding for alternative transportation facilities on all future INDOT projects

8. The Bicycle & Pedestrian Master Plan is reviewed and updated regularly

To ensure that the plan remains valid, it is important to schedule periodic reviews to reflect current community desires, new best practices, etc



Implementation Recommendations

Growing evidence suggests that differences in the built environment have an influence on local resident physical activity (e.g., infrastructure for walking and cycling, availability of public transit, street connectivity, housing density, and mixed land use). A successful implementation of this plan will positively influence the likelihood that people will use active transport for their daily travel. People who live in areas that are more conducive to walking and cycling are more likely to engage in these forms of Active Living. Making certain that the built environment in Shelbyville supports bicycling and walking is an effective implementation strategy.

Plan and Ordinance Review

Anytime a new plan is adopted, it is crucial that other community plans, policies and ordinances are examined to make sure that they synchronize with the new plan. If this is not done, there is a risk that the new plan will not be fully realized. As part of Shelbyville's Bicycle & Pedestrian Master Plan process, the consultants reviewed the following existing Shelbyville documents:

- o **City's Comprehensive Plan** – overall policy for future (20 – 25 years) development and redevelopment of city
- o **City's Parks Master Plan** – 5 year policy for Parks & Rec
- o **City's Unified Development (Zoning/Subdivision) Ordinance** – local laws (not policy)
- o **City's Capital Improvements Plan** – 5 year spending policy
- o **City's Downtown Plan** (underway) – policy document

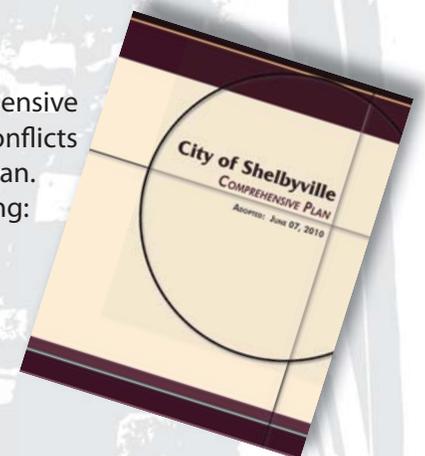
Note: Only relevant portions of these documents were reviewed, and solely for purpose of coordination with proposed Shelbyville Bicycle & Pedestrian Master Plan

Current Comprehensive Plan Review

Shelbyville's Comprehensive Plan was developed in 2010 and, as with most comprehensive plans, looks out a generation to the future. It was reviewed to ensure there are not conflicts between the adopted Comprehensive Plan and the proposed Bicycle & Pedestrian Plan. The City's Comprehensive Plan looks at long-term growth and development, including:

- o Adequacy of community services and facilities
- o Locations for future residential, commercial, industrial development
- o Protection of sensitive, natural features

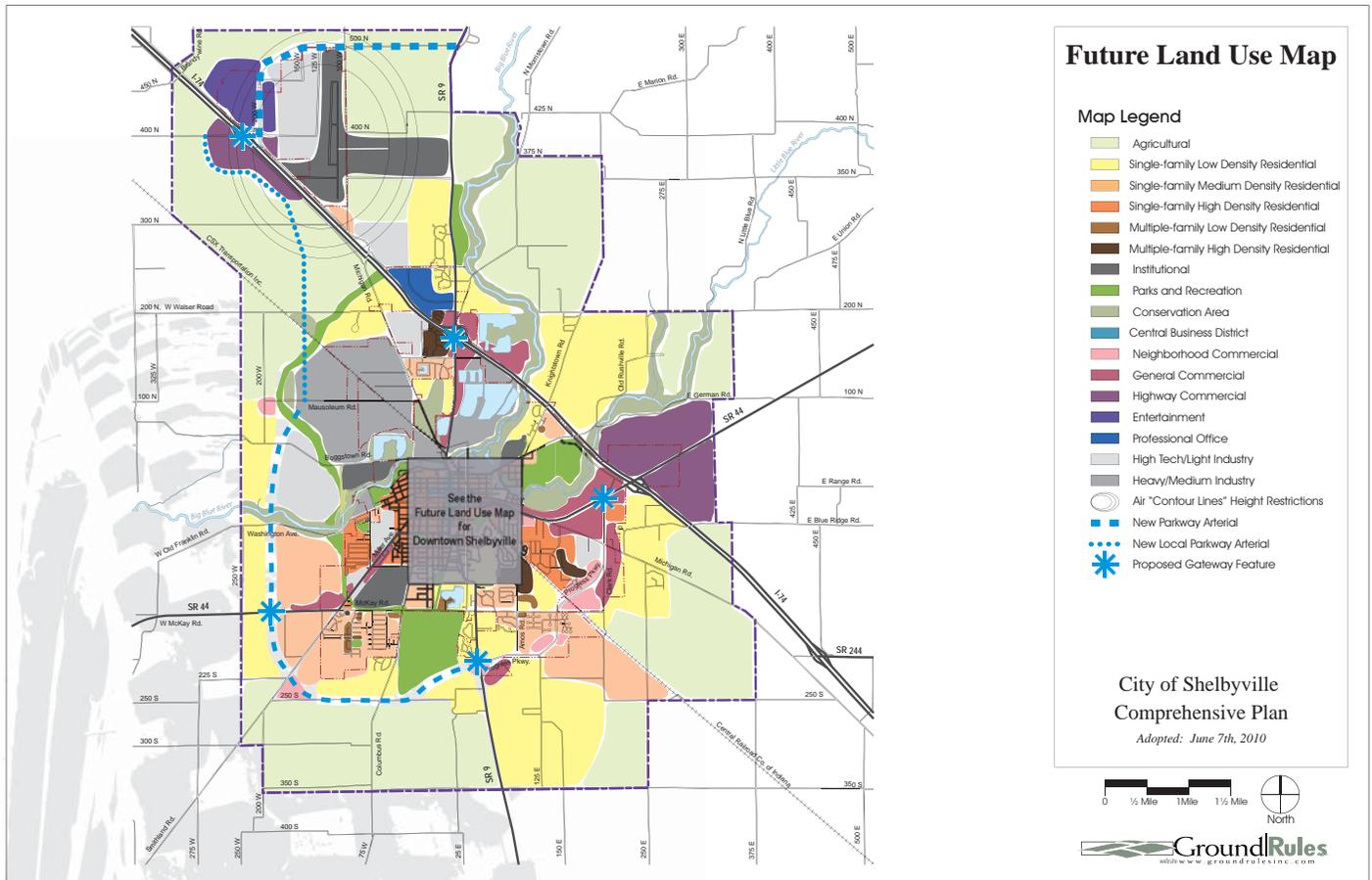
The Bicycle and Pedestrian Master Plan Team considered the Comprehensive Plan as a framework for developing the bicycle and pedestrian master plan. The current Comprehensive Plan's goals and action steps support pedestrian-friendly circulation in residential, industrial and institutional areas. The Plan has a Transportation Chapter that emphasizes pedestrian facilities (sidewalks, trails) and a Parks Chapter that has an objective to connect parks, natural areas and facilities with sidewalks and paths. Planning for bicycles is missing from the Comprehensive Plan and the plan does not contain an actual bicycle and pedestrian plan element. Since there is currently no bicycle and pedestrian element in the Comprehensive Plan, there is no conflict with the proposed Bicycle and Pedestrian Plan.



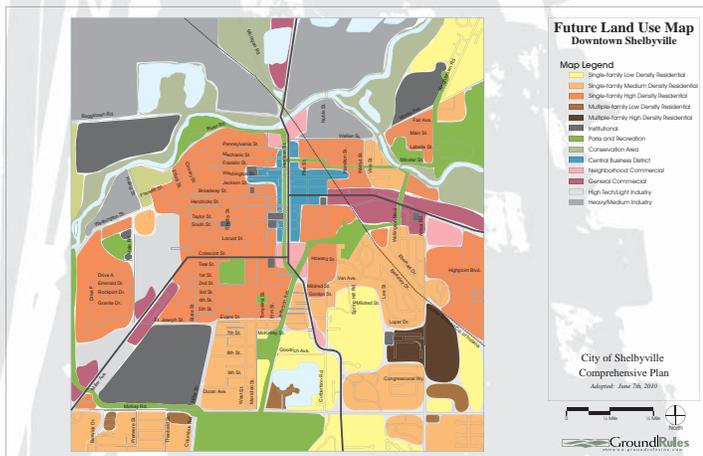


The City's stated intent is to update the Comprehensive Plan every 5 years. It was last revised in 2010 and is due for an update. Some general recommendations for updating the comprehensive plan to make it more supportive of the Bicycle and Pedestrian Plan include:

- o Add support for bicycle-friendly circulation
- o Add bike/pedestrian support for commercial areas
- o More strongly support bicycles & bike facilities as part of the city's transportation network



Future Land Use Map



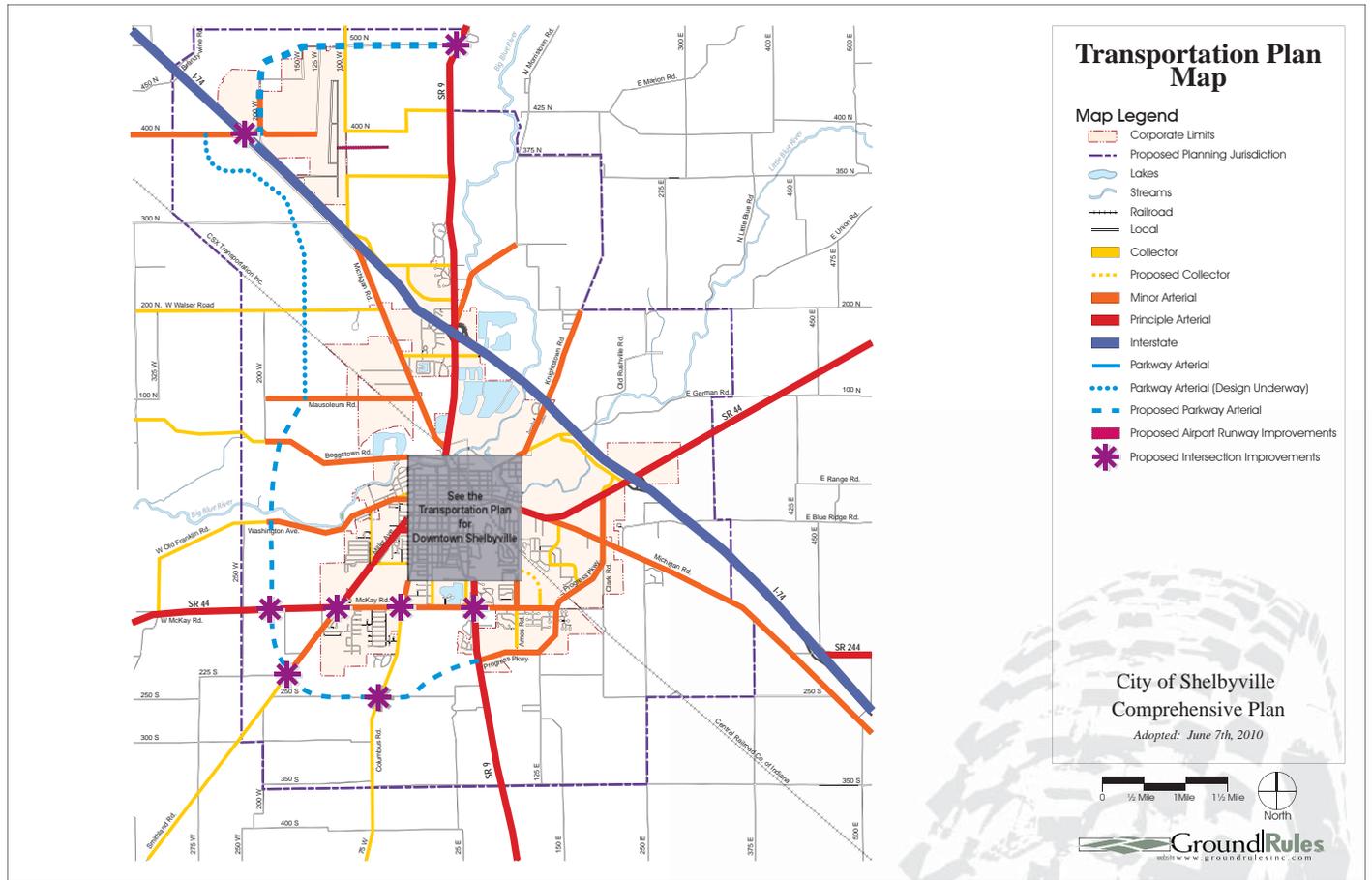
Future Land Use Map - Downtown Shelbyville

Future Land Use Map - Downtown Shelbyville

The Future Land Use Map in the Comprehensive Plan shows several residential, commercial and industrial categories, in addition to institutional and park and recreation land uses. Of special interest as a possible resource for bicycle and pedestrian traffic is the conservation area category.



Future Land Use Map - Downtown Shelbyville

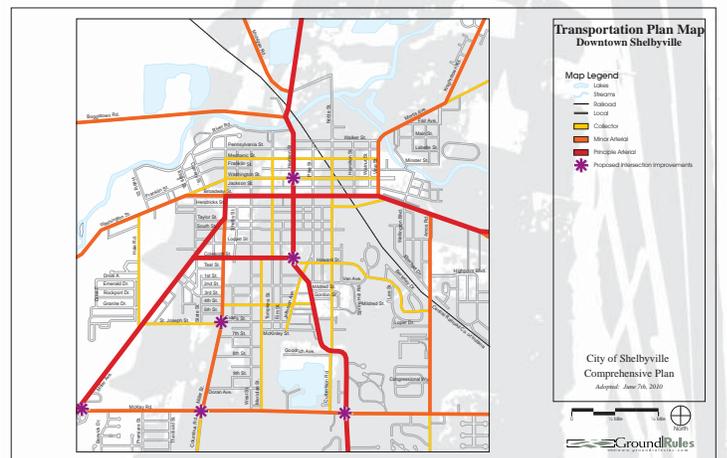


Transportation Plan Map

The current Transportation Plan Map in the City's Comprehensive Plan does not show any pedestrian or bicycle facilities.

More specifically, the next Comprehensive Plan Update should consider the following:

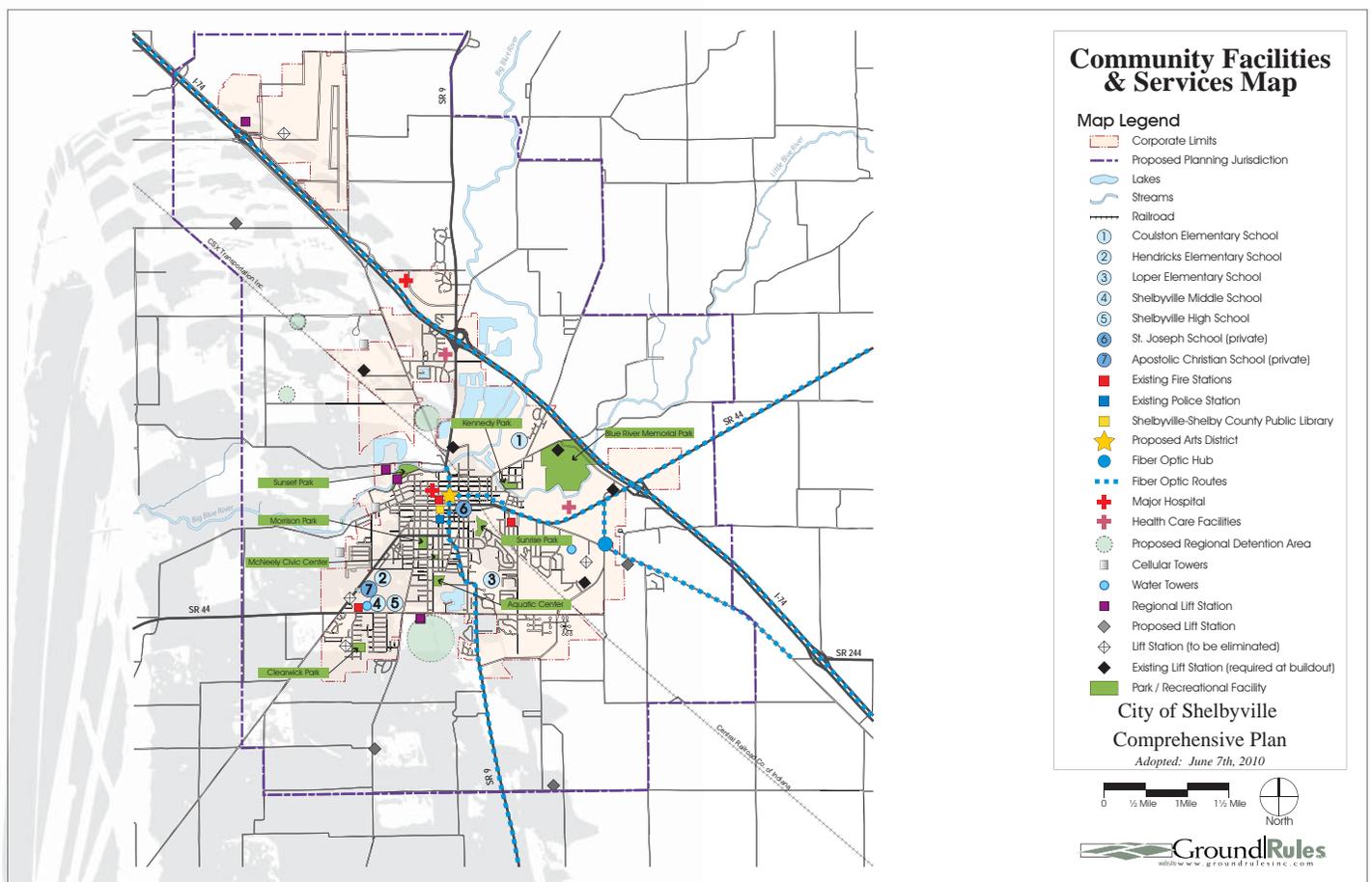
- o Target future annexation, since this could dictate where the future growth of the City's Bicycle & Pedestrian Master Plan occurs
- o Create an action plan section that assigns priorities and responsibilities for implementation
- o Update maps and text to reflect or reference the Bicycle/Pedestrian Master Plan
- o Add new street standards that reflect the proposed bicycle and pedestrian facilities
- o Target areas for higher density infill development to support increased pedestrian activity
- o Identify possible locations for senior housing with good pedestrian access
- o Coordinate with upcoming 2017 Park Master Plan update
- o Adopt Complete Streets Policy that references current pedestrian and bicycle design standards



Transportation Plan Map - Downtown Shelbyville



- o Consider adding new component to Comprehensive Plan: “Healthy Community” section:
 - Ties in with Bike / Pedestrian Plan, but also covers local food, etc.
 - Gives Shelbyville additional credibility to get grants
 - Promotes a healthier community - big picture
 - Reference Healthy Shelby County Goals
- o Designate key roadway corridors within the community as “multimodal corridors” to foster design and planning for all modes of transportation (pedestrian, bicycle, vehicular and transit). With the aging population and dwindling car ownership, transit should be the next step in planning for Shelbyville’s transportation future. Transit should be supportive of bicycling and walking, with stops/routes that complement the city’s bicycle and pedestrian network and vehicles that can carry bikes
- o Continue to include a Community Facilities & Services Map to help identify where important bicycle and pedestrian connections need to be



Community Facilities & Services Map



Park Master Plan Review

Mission Statement: The Shelbyville Parks and Recreation Department seeks to enhance the quality of life for our community by providing leisure time opportunities and the protection of our environment through our programs, services, facilities, personnel and collaborative efforts.

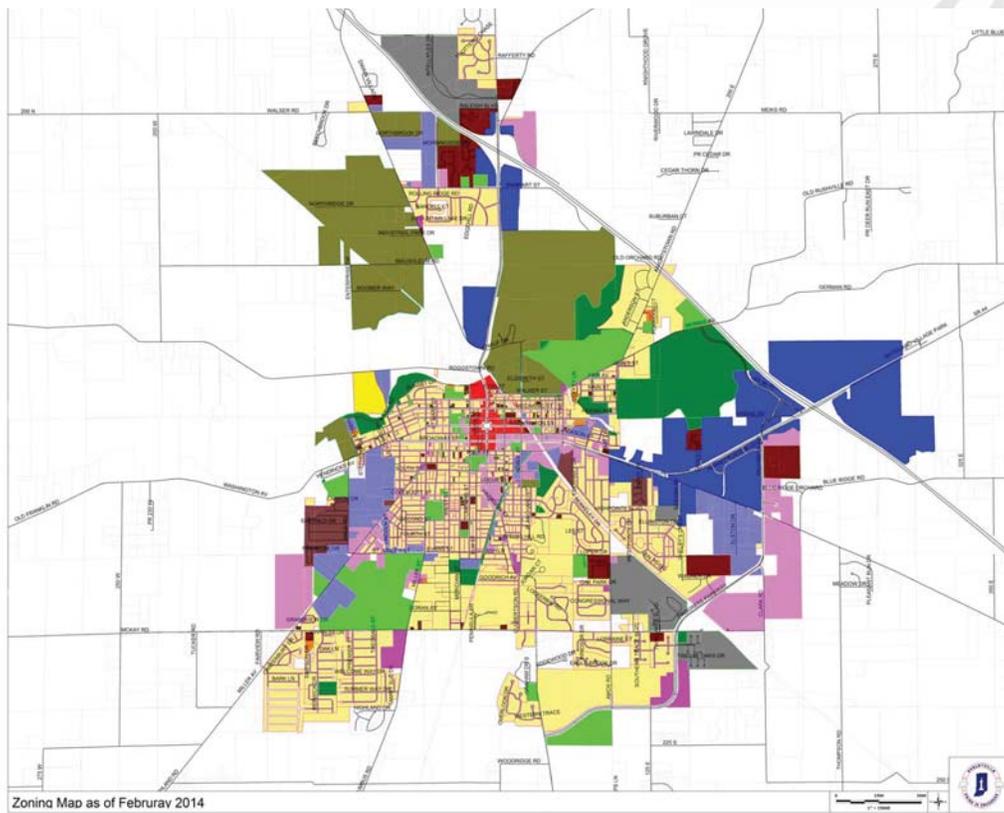


Indiana requires that communities adopt a new Parks & Recreation Master Plan every five years in order to be eligible for many of the Indiana Department of Natural Resources, Division of Outdoor Recreation's grant programs. Shelbyville's current Park Master Plan covers 2013 – 2017. The master plan is recreation focused, including the consideration of bicycle and pedestrian facilities as recreational facilities, but not necessarily as community transportation facilities. The stated goal is to "Interconnect the public parks, natural areas and facilities with sidewalks and paths". The transportation focus of the Parks Action Plan is currently on trail work with the city seeking more grants annually, looking for trail volunteers and beginning trail programming.

Trails are an important part of a local bicycle and pedestrian network. However, it is important that the updated master plan look beyond trails and supports a full local transportation network for bicycles and pedestrians, providing full coordination with this Bicycle and Pedestrian Master Plan. The park master plan may be adopted as an element of the City's Comprehensive Plan, giving it more relevance locally for planning and zoning decisions and budget allocations.

Current Unified Development Ordinance Review

A Unified Development Ordinance (UDO) is a combination of local Zoning and Subdivision Ordinances. Like Zoning and Subdivision Ordinances, the UDO is the primary tool for implementing a comprehensive plan and its components, including the Bicycle and Pedestrian Master Plan. For any plan to be successful, local ordinances must be synchronized to ensure they result in the desired future. For this reason, any time a new plan is adopted, the UDO should be reviewed and amended as needed.



Zoning Map as of February 2014

Zoning Map - February 2014

The Zoning Map for Shelbyville, Indiana was not reviewed in detail for the purposes of the Bicycle and Pedestrian Master Plan, however, the UDO recommendations do contain ideas that could result in changes to the current zoning map, including new zoning districts and an examination of boundaries.



Applicability of Unified Development Ordinance (UDO)

- o New Development -- Require Bicycle and Pedestrian compliance for all new development
- o Substantial Improvements -- Require Bicycle and Pedestrian compliance if improvements reach a certain point. Improvements should be cumulative, so that phasing site improvements in several small projects will not thwart local intentions. Compliance should trigger at a certain percentage of expansion or improvement, either based on area or value

General Amendment Recommendations

- o Consider consolidation of street tree and perimeter tree planting standards within UDO
- o Consider creating an overlay design district in "Safe Routes to School" project area
- o Initiate zoning map amendments (rezoning) on property identified as suitable for higher density in the comprehensive plan
- o Incorporate traffic calming standards in the ordinance, including features such as curb extensions, landscape improvements and pavement markings that are indicative of a pedestrian and bicycle environment to motorists
- o Adopt "road diet" design criteria to allow opportunities such as the conversion of four lane low volume roadways to three lane roadways with improved pedestrian and cycling facilities
- o Set minimum internal and external roadway and pedestrian connectivity standards for all new residential and commercial subdivisions to require better connectivity between developments for active transportation (i.e., limit cul-de-sacs, require connections between adjacent developments, etc.)
- o A detailed review and assessment of the City's 'Construction Design Standards' should be completed so that the revised standards accomplish the goals of this plan. This work and resulting update should conclude prior to Phase I implementation of Bicycle and Pedestrian facilities

Pedestrian Recommendations

- o Require sidewalks for all new development
- o Require pedestrian circulation plans as part of typical site plan reviews and approvals by the planning department
- o Require interior pedestrian paths and connections from parking areas on private property for all commercial, industrial, multi-family and institutional development over certain size
- o Require pedestrian amenities (i.e., benches) for commercial, industrial, multi-family and institutional developments over certain size or in certain zoning districts
- o Consider requiring a cash escrow as construction guarantee for sidewalks
- o 6' wide sidewalk pavement desired within 5' minimum standard
- o Revise specs to allow trail substitution
- o Strengthen waiver criteria to discourage sidewalk waivers
- o Create standards for location, frequency and design of pedestrian street crossings, reflecting the most up to date standards and technology in intersection and roadway design

Bicycle Recommendations

- o Add a bicycle parking requirement (base ratio of bicycle parking to vehicular parking spaces required)
- o Determine if individual approval by the Board of Works is required for bike racks on sidewalks
- o Adopt a typical standard for bicycle racks. Consider allowing substitutions with approval or having different standards for different areas (i.e., the downtown)
- o Reduce the minimum amount of vehicular parking spaces required for most uses and set vehicular parking space maximum ratios
- o Revise to add bicycle facilities section and add a full range of bicycle facilities to city standards



City Code Recommendations

- o Make local traffic laws “bicycle-friendly”
- o Rely on state law for bicycle traffic regulation
- o Adopt local 3’ passing law to protect bicyclists from passing cars
- o Adopt Complete Streets ordinance

Site Plan Review

Ensure that Plan Commission and BZA understand how to assess site plan viability. Consider training planning officials in addition to relying on staff.

Current Capital Improvement Plan Review

A Capital Improvement Plan (CIP) is an excellent tool to use for phased and long-term development of new infrastructure, including improvements suggested in this Bicycle and Pedestrian Master Plan. The City of Shelbyville already has a CIP in place, which is based on the Comprehensive Plan, infrastructure plans and input from citizens & officials. An excerpt of relevant portions of that plan is shown below. An update to the CIP is due, since the current plan only runs through 2017. It is recommended that the next CIP update will add sidewalk replacement and bicycle and pedestrian facility construction categories.

	<u>Cost</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Unscheduled</u>
<u>TRAILS (not including Parks Trail budget)</u>							
<u>Riverside Park Connector</u>	\$2,350,000.00		\$850,000.00	\$500,000.00	\$500,000.00	\$500,000.00	
<u>Historic Railroad/Eastside Beautification</u>	\$150,000.00		\$150,000.00				
<u>Gateway</u>	\$275,000.00	\$25,000.00	\$250,000.00				
<u>Subtotal</u>	<u>\$2,775,000.00</u>	<u>\$25,000.00</u>	<u>\$1,250,000.00</u>	<u>\$500,000.00</u>	<u>\$500,000.00</u>	<u>\$500,000.00</u>	
<u>ALTERNATIVE TRANSPORTATION FACILITIES (not including Downtown Revitalization sidewalk budget)</u>							
<u>Park Connectivity Trail</u>	\$2,000,000.00			\$2,000,000.00			
<u>Intelliplex - Downtown Trail</u>	\$1,750,000.00						\$1,750,000.00
<u>Bicycle Connectivity Trail Network</u>	\$2,000,000.00						\$2,000,000.00
<u>Safe Routes to School</u>	\$250,000.00	\$250,000.00					
<u>Safe Routes to School Future Phases</u>	\$1,000,000.00		\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
<u>Subtotal</u>	<u>\$7,000,000.00</u>	<u>\$250,000.00</u>	<u>\$200,000.00</u>	<u>\$2,200,000.00</u>	<u>\$200,000.00</u>	<u>\$200,000.00</u>	<u>\$3,950,000.00</u>



Draft Downtown Plan Development

- o Downtown plan underway – Five design alternatives were prepared with two schemes overwhelmingly popular during Downtown Shelby Days public engagement
- o Bike/Pedestrian Plan will contribute to Downtown Plan
 - East side of the Harrison St corridor will connect Blue River Trail to Public Square
 - Include bike and pedestrian infrastructure within public right-of-way to augment downtown redevelopment

City Code Recommendations

As with most Indiana city codes, laws are dated and need an update to align with commonly used and accepted current active transportation regulations. Portions of City Code may not be “bicycle-friendly”.

Adopting a three-foot passing law to protect bicyclists from passing cars was a progressive law for the city to adopt. Indiana’s legislature has failed to pass a statewide passing law. Shelbyville joins these eight Indiana cities already having three-foot passing laws — Indianapolis, Carmel, Lafayette, West Lafayette, Fort Wayne, Seymour, South Bend and Elkhart. A 3’ passing law makes it a Class C infraction for a person driving a vehicle overtaking a bicycle to not allow at least three feet of clearance between the vehicle and the bicycle. Additionally, the local laws specify that the vehicle is not to return to the original lane until the vehicle is safely clear of the bicycle.

Adopting a complete street ordinance, as previously recommended, would be another bicycle and pedestrian friendly measure. Other recommendations include:

- o Rely on state law for bicycle traffic regulation
- o Don’t regulate maximum bicycle speed



Shelbyville's new Bicycle and Pedestrian Master Plan increases Alternative Transportation choices and healthy living options for the city, but how does the community become aware and engaged with active transportation? As people are encouraged to get active, it is important to make sure they are educated on bicycle and pedestrian safety, laws, etc. Promotion and education must go hand-in-hand with this plan.

Promotion

People are more likely to try something new when they get a personal invitation. The City of Shelbyville currently has many active bicyclists and pedestrians, including one of the most "bike-friendly" mayors in Indiana. It makes sense to rely on the Mayor and other local bicycle enthusiasts and walkers to serve as examples and ambassadors. They can work with organizational partners, such as the hospital and the local school corporation to introduce the City's new bicycle and pedestrian plan. As more people bicycle and walk, those participants become invested in the plan, taking an interest in promoting bicycle and pedestrian improvements and maintaining the system.

Other communities have used the following ideas as they plan, build, promote and maintain their pedestrian and bicycle environments:

- o Sponsor Community Bicycling and Walking Events:
 - Build on the existing Mayor's Bike Ride
 - Grow local "Bike to Work" Day participation
 - Encourage walking and biking to community events, like the Farmers Market or the County Fair –
 - Provide bicycle parking at community events
- o Publicize the outcome of the local Safe Routes to School project
- o Apply for designation as a Walk Friendly Community through www.walkfriendly.org
- o Apply for designation as a Bike Friendly Community through League of American Bicyclists www.bikeleague.org
- o Explore a local bike-share or rental program
- o Market Shelbyville's active transportation for tourism, offering bike and walking tours of the community
- o Work with key partners, including the schools and the hospital to sponsor initial events and support key active transportation facilities
- o Develop Parks Department programming that uses the city's active transportation network

Celebrate new bicycle and pedestrian facilities with a ribbon cutting event. Every accomplishment in the plan, including a visible first project, should be celebrated and publicized, and will help launch community engagement and use.



Education

For the safety of the community, bicycle and pedestrian safety education must go along with promotion. The following suggestions have been used by other communities, and are offered as examples:

- o Educate the community on bicycle and pedestrian safety through a variety of social and media outlets (i.e., cyclists ride with traffic, pedestrians walk against traffic)
- o Work with local schools to educate students on active transportation, including putting information in "Friday Folders" for parent review
- o Work with the Police Department, the Parks Department, pediatricians and daycare providers to educate children on bicycling and walking safety
- o Conduct a community-wide walkability workshop to raise awareness of pedestrian issues
- o Sponsor a bike rodeo to teach children about bike safety
- o Work with the library and other continuing education providers to offer bicycle classes through a League of American Bicyclist certified instructor
- o Conduct walkability assessments of targeted areas to analyze and promote necessary pedestrian improvements
- o Target an initial roadway corridor as a pilot project and work with surrounding neighborhood, businesses, local active transportation advocates and professional experts to determine feasibility
- o Make citizens aware of current universal design standards, such as those referenced in the Americans with Disabilities Act, to enable them to understand opportunities for improvements to the pedestrian realm in their communities



Mayor Tom DeBaun's Community Bike Ride



Funding Options & Strategies

The Shelbyville Bicycle & Pedestrian Master Plan is a broad vision that logically connects all parts of the city with appropriate facilities for each location and route. As such, local resources will be required to implement the plan over time. All potential funding sources should be pursued to leverage resources for implementation of the Bicycle & Pedestrian Master Plan. Funding sources for the development of these facilities include:

Grant Programs

Application can be made to the following programs that offer funding for the design and construction of bicycle and pedestrian facilities:

- IDNR Recreational Trails
- Map 21 – Transportation Alternatives
 - Safe Routes to School

A local match of 20% of the total grant amount is typical.

Future Public Works Projects

Following adoption of the Bicycle & Pedestrian Master Plan, upcoming road construction projects should reference this plan and address facilities proposed for those routes. Sidewalks, sidepaths and on-street bicycle facilities can be programmed into these construction projects. New bridges and bridge upgrade projects should consult this plan and ensure the proposed facilities will meet future alternative transportation needs. Trails may be constructed over sewer upgrade projects providing synergy and cost efficiencies for the city.

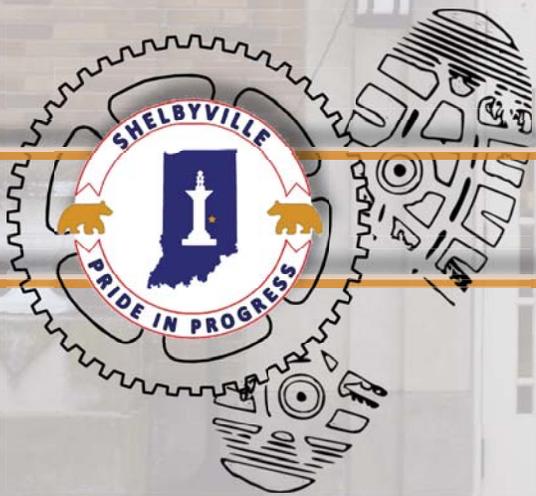
Future Development Projects

The Bicycle and Pedestrian Master Plan provides guidance on private development activities to Plan Commission members and City Planning staff regarding facilities along the frontage or within a project site. New development can have a positive role in constructing segments of the master plan.

Philanthropy

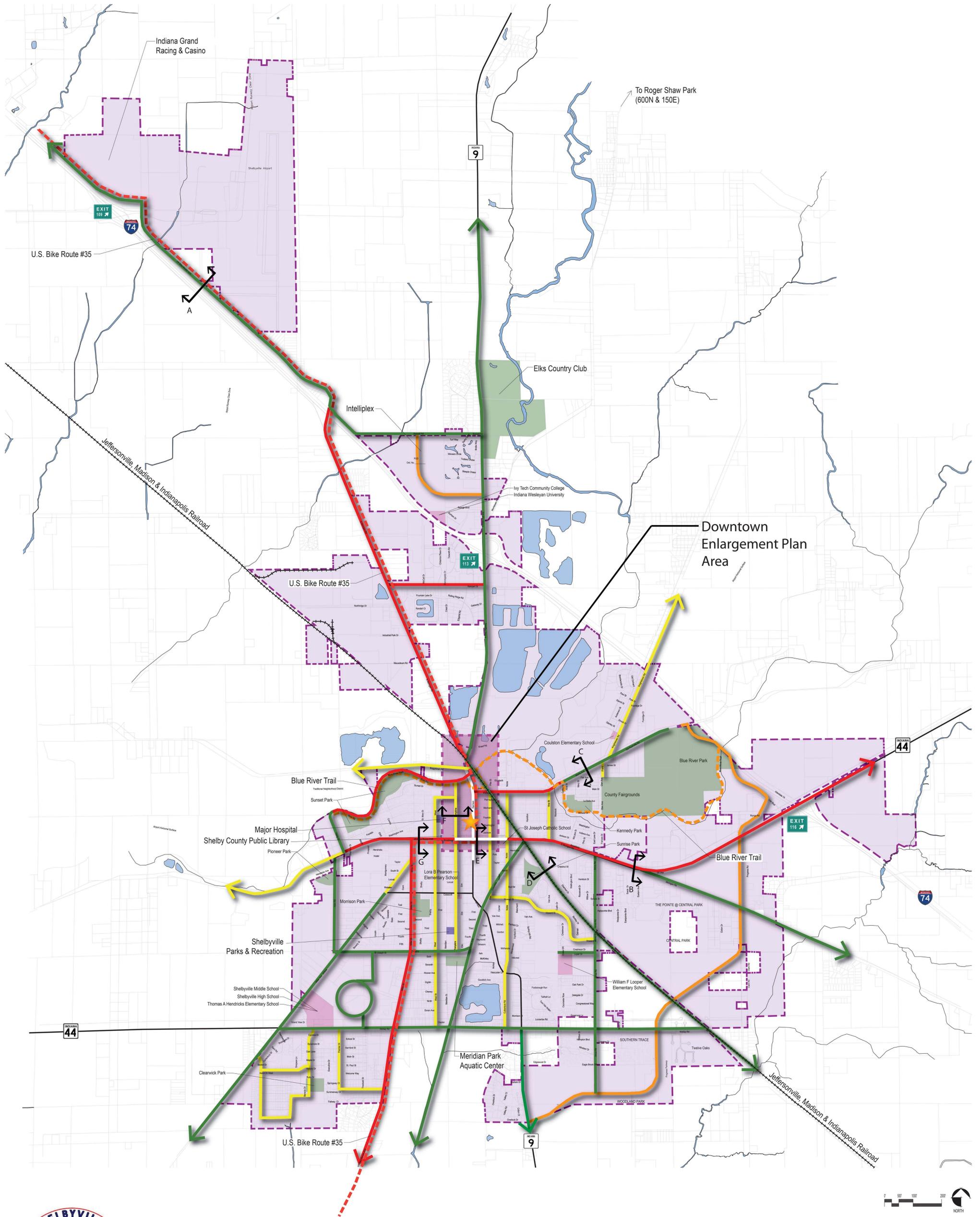
Community based funding has proven successful in many communities. A local non-profit provides fund raising services collecting donations from local businesses and individual who see a benefit in having these quality of life facilities in their community. Typically the non-profit will work with the City Public Works, Street and / or Parks Departments to collectively design and construct the facilities.

In closing, when successfully implemented, this Bicycle and Pedestrian Master Plan will bring Active Living transportation facilities to all residents of the city, adding to the requisite Quality of Life offerings necessary to build an economically sustainable future for the City of Shelbyville.



■ Section F

■ Appendix

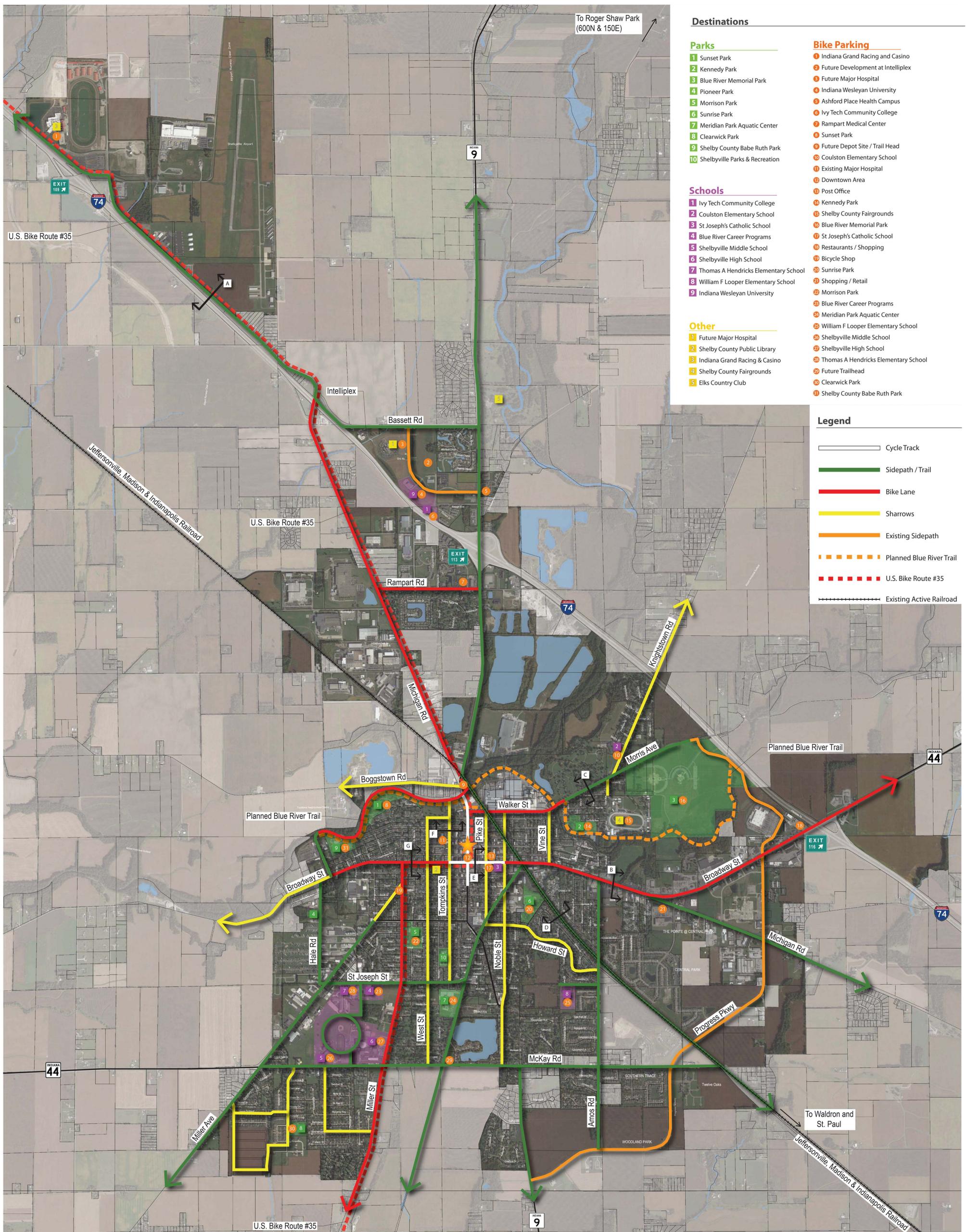


Bicycle & Pedestrian Master Plan

City of Shelbyville, Indiana
22 October 2015

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Destinations

Parks

- 1 Sunset Park
- 2 Kennedy Park
- 3 Blue River Memorial Park
- 4 Pioneer Park
- 5 Morrison Park
- 6 Sunrise Park
- 7 Meridian Park Aquatic Center
- 8 Clearwick Park
- 9 Shelby County Babe Ruth Park
- 10 Shelbyville Parks & Recreation

Bike Parking

- 1 Indiana Grand Racing and Casino
- 2 Future Development at Intelliplex
- 3 Future Major Hospital
- 4 Indiana Wesleyan University
- 5 Ashford Place Health Campus
- 6 Ivy Tech Community College
- 7 Rampart Medical Center
- 8 Sunset Park
- 9 Future Depot Site / Trail Head
- 10 Coulston Elementary School
- 11 Existing Major Hospital
- 12 Downtown Area
- 13 Post Office
- 14 Kennedy Park
- 15 Shelby County Fairgrounds
- 16 Blue River Memorial Park
- 17 St Joseph's Catholic School
- 18 Restaurants / Shopping
- 19 Bicycle Shop
- 20 Sunrise Park
- 21 Shopping / Retail
- 22 Morrison Park
- 23 Blue River Career Programs
- 24 Meridian Park Aquatic Center
- 25 William F. Looper Elementary School
- 26 Shelbyville Middle School
- 27 Shelbyville High School
- 28 Thomas A. Hendricks Elementary School
- 29 Future Trailhead
- 30 Clearwick Park
- 31 Shelby County Babe Ruth Park

Schools

- 1 Ivy Tech Community College
- 2 Coulston Elementary School
- 3 St Joseph's Catholic School
- 4 Blue River Career Programs
- 5 Shelbyville Middle School
- 6 Shelbyville High School
- 7 Thomas A. Hendricks Elementary School
- 8 William F. Looper Elementary School
- 9 Indiana Wesleyan University

Other

- 1 Future Major Hospital
- 2 Shelby County Public Library
- 3 Indiana Grand Racing & Casino
- 4 Shelby County Fairgrounds
- 5 Elks Country Club

Legend

- Cycle Track
- Sidepath / Trail
- Bike Lane
- Sharrows
- Existing Sidepath
- Planned Blue River Trail
- U.S. Bike Route #35
- Existing Active Railroad

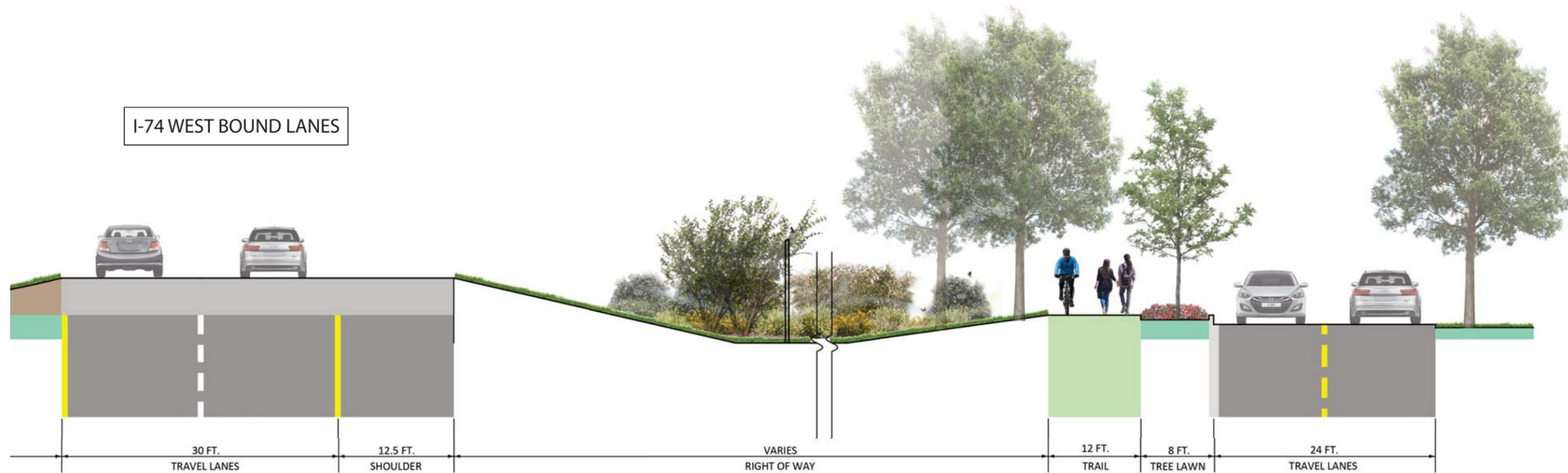


Bicycle & Pedestrian Draft Master Plan

City of Shelbyville, Indiana
22 October 2015

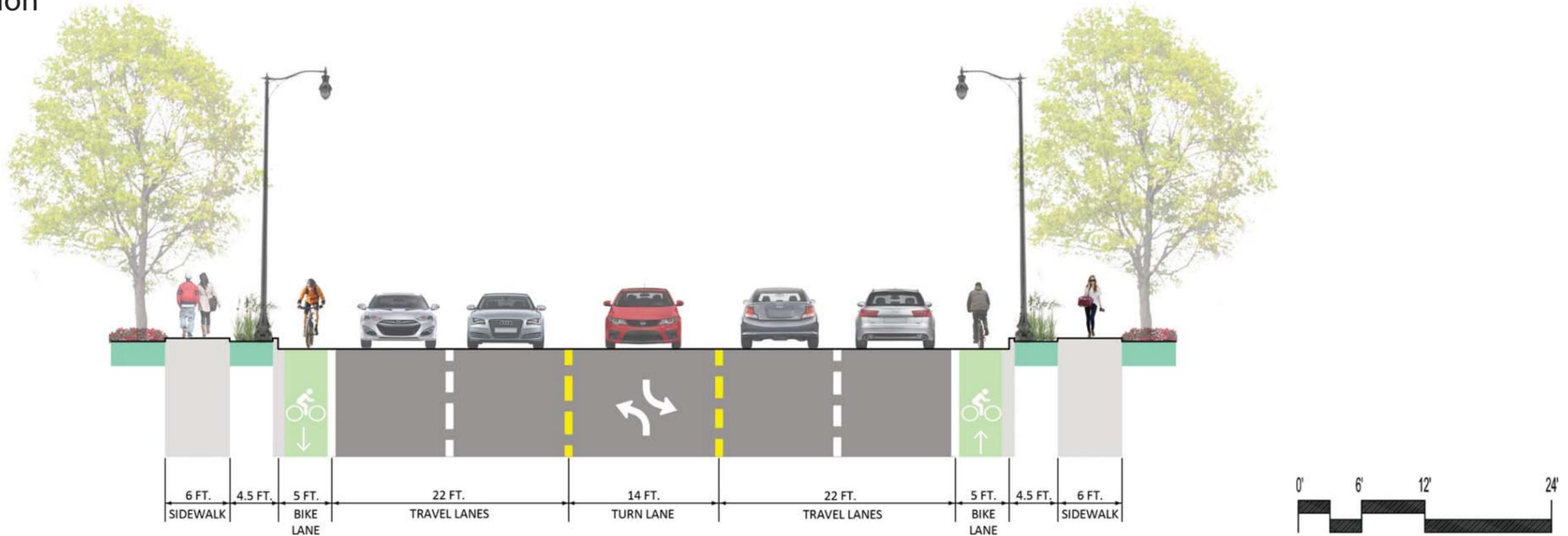
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Michigan Rd.

A. Michigan Rd. Section

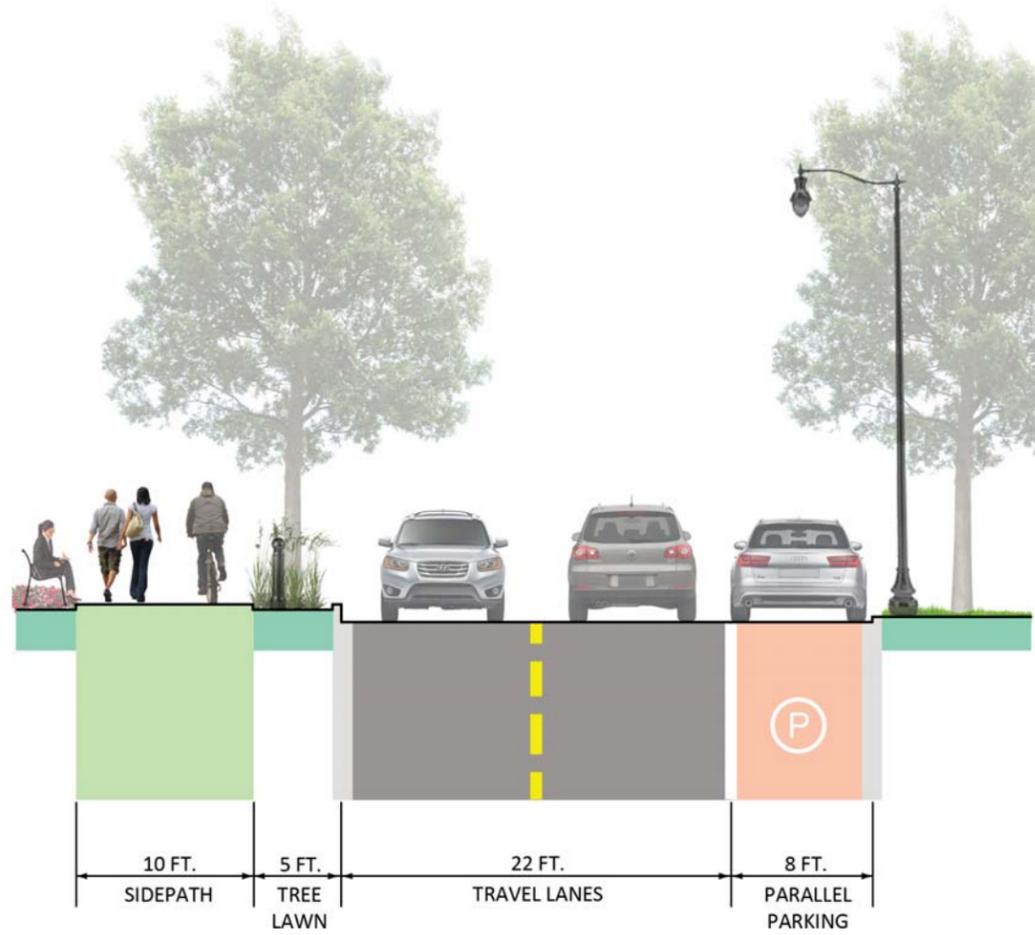


B. Broadway St. (IN-44) Section

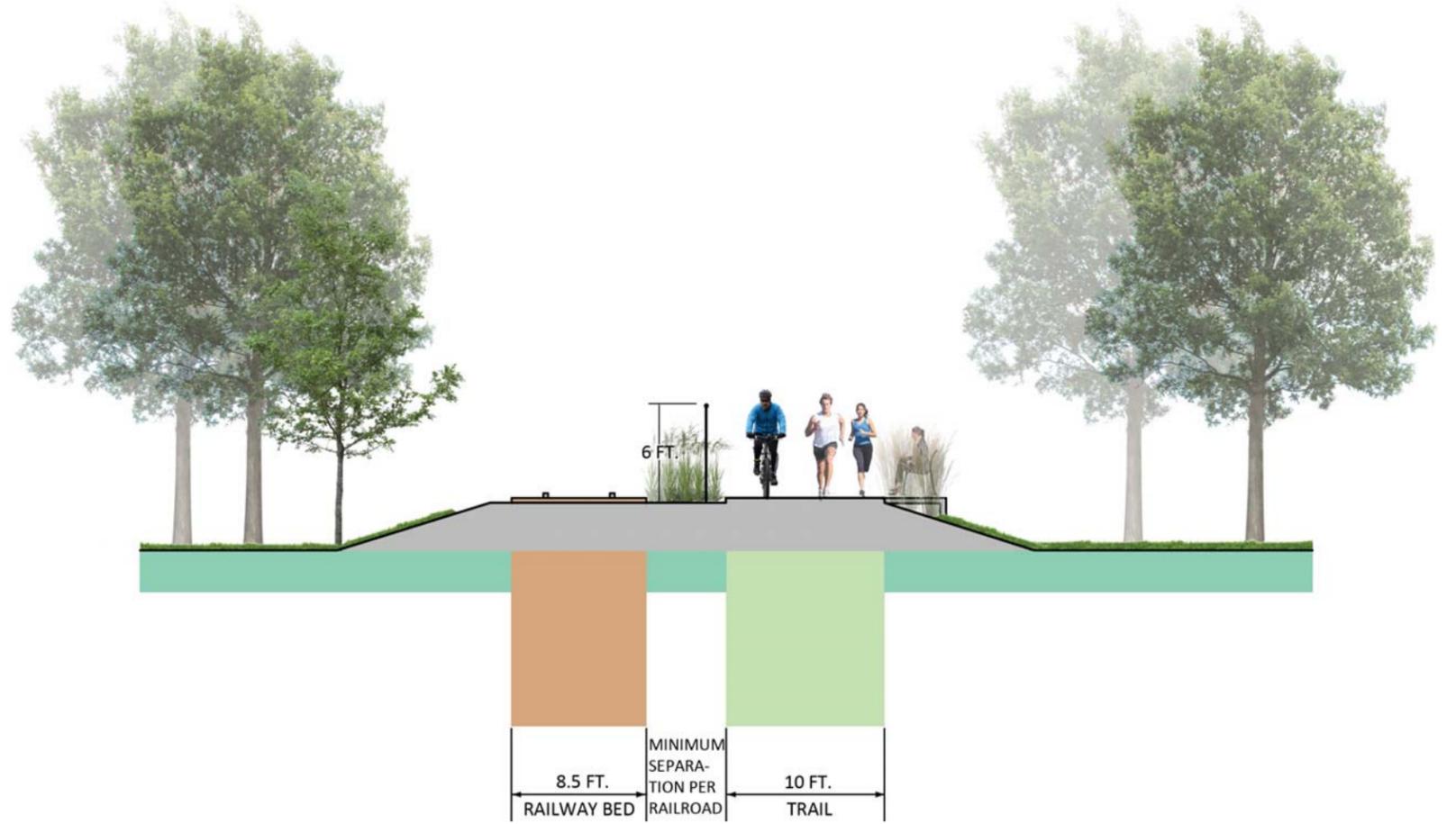
Bicycle & Pedestrian Route Sections

City of Shelbyville, Indiana
07 August 2015

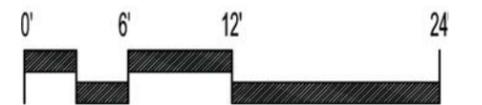




C. Morris St. Section



D. Rail with Trail Section

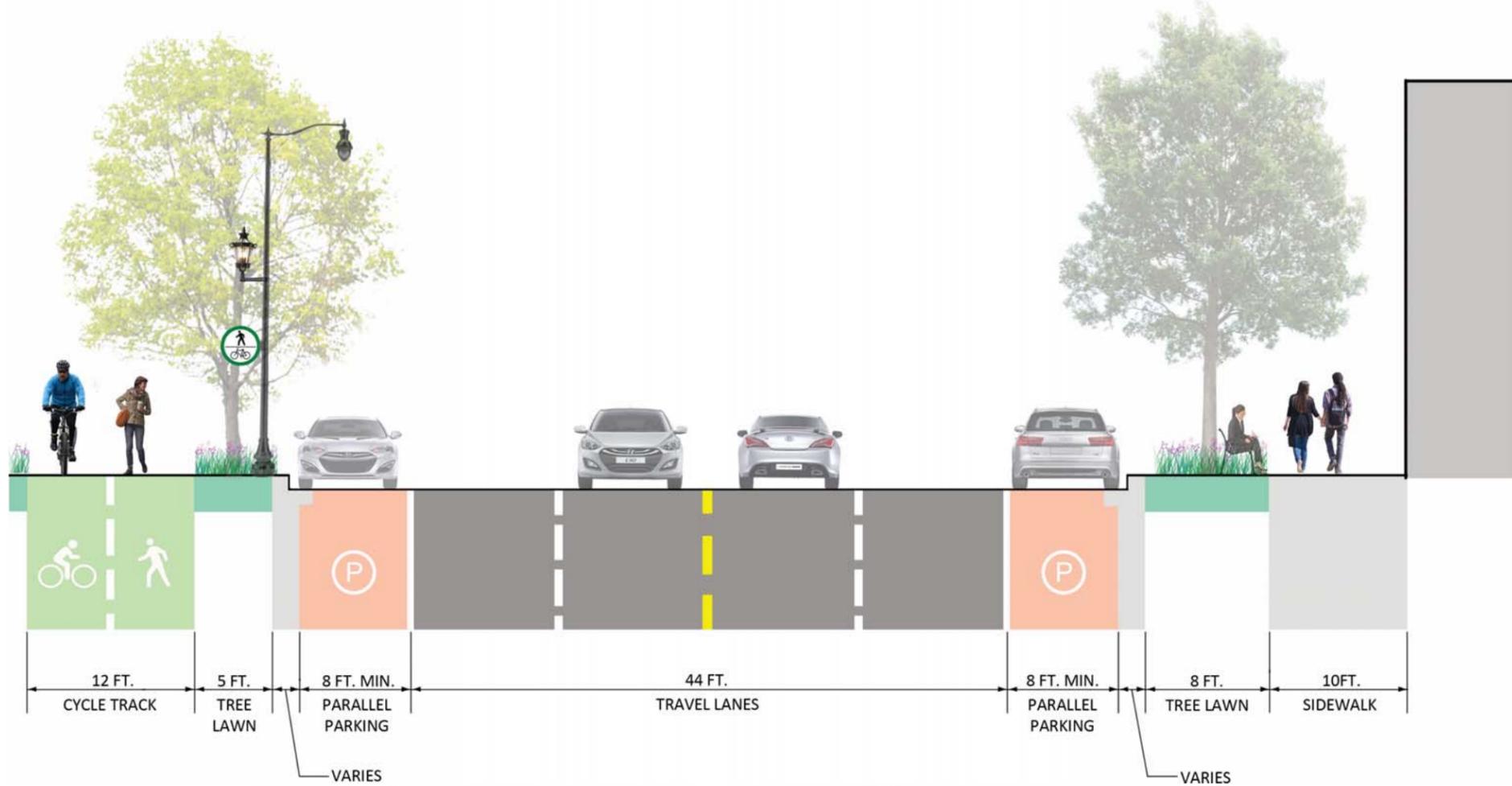


Bicycle & Pedestrian Route Sections

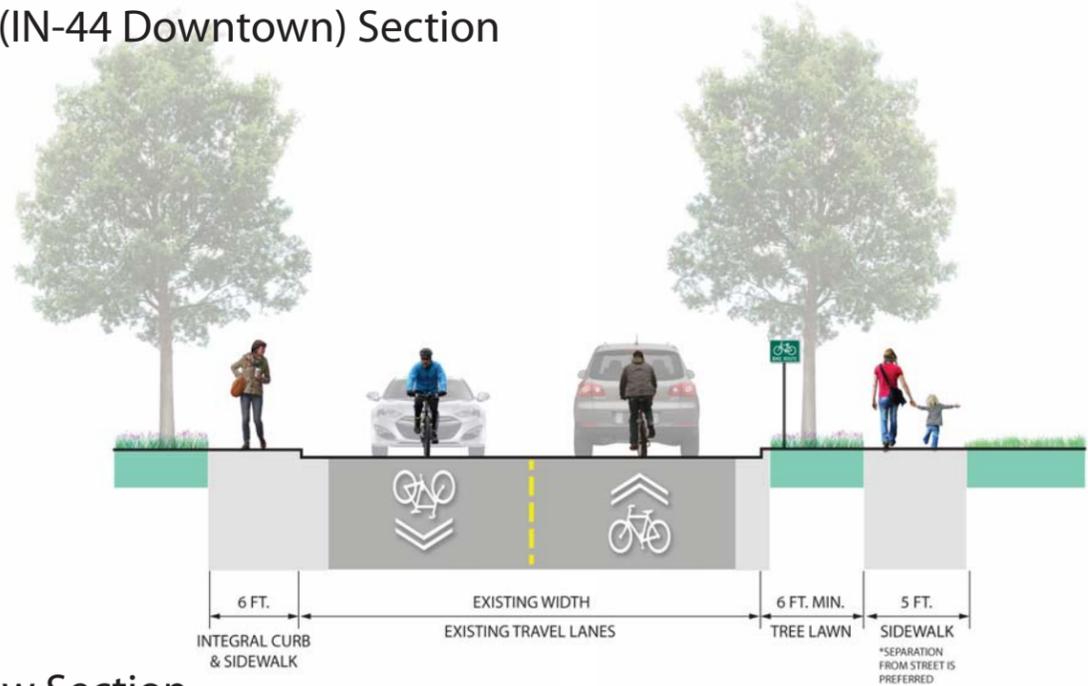
City of Shelbyville, Indiana
07 August 2015

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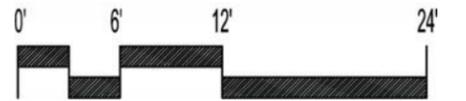




E. Broadway St. (IN-44 Downtown) Section



F. Typical Sharrow Section



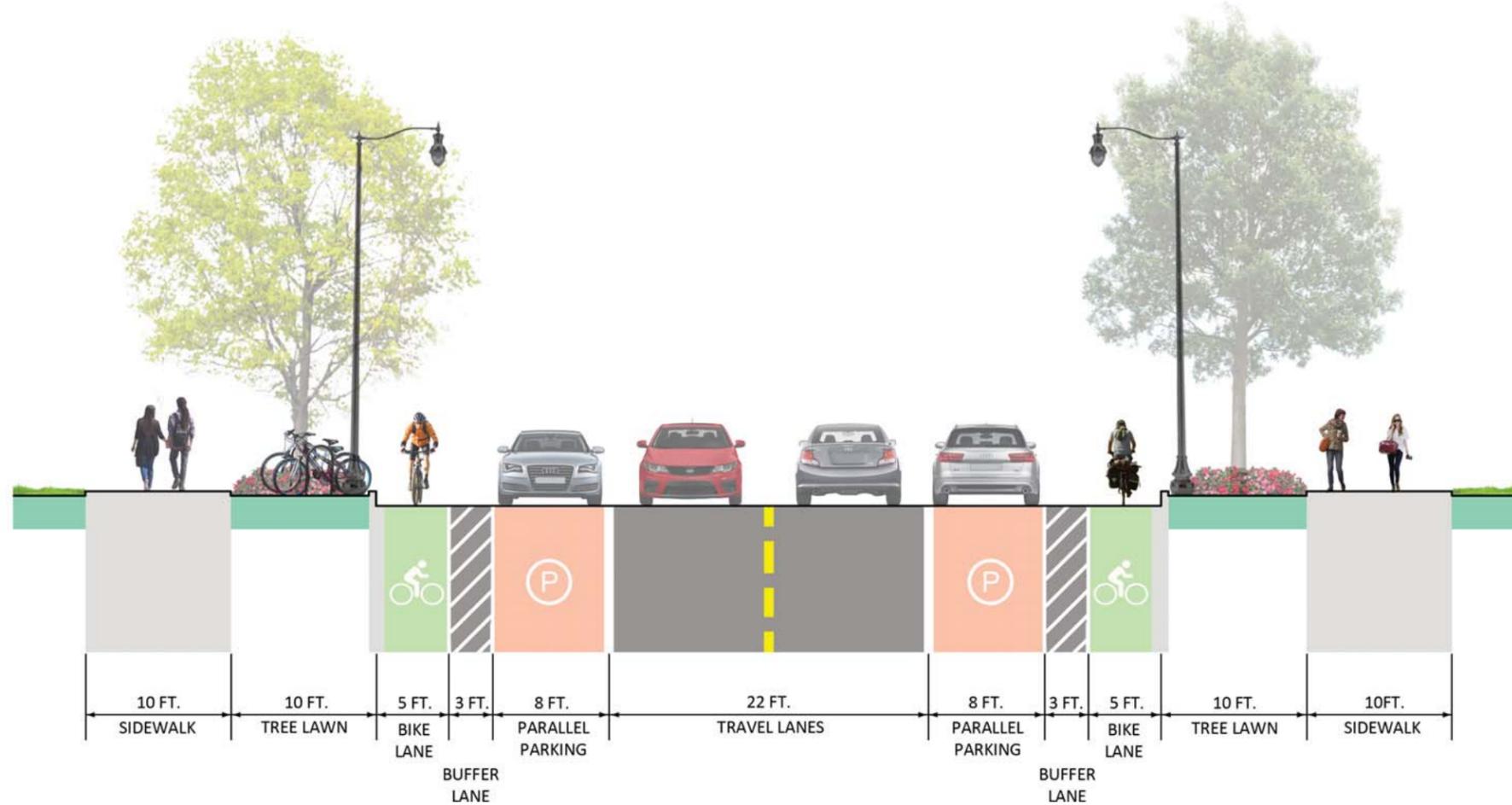
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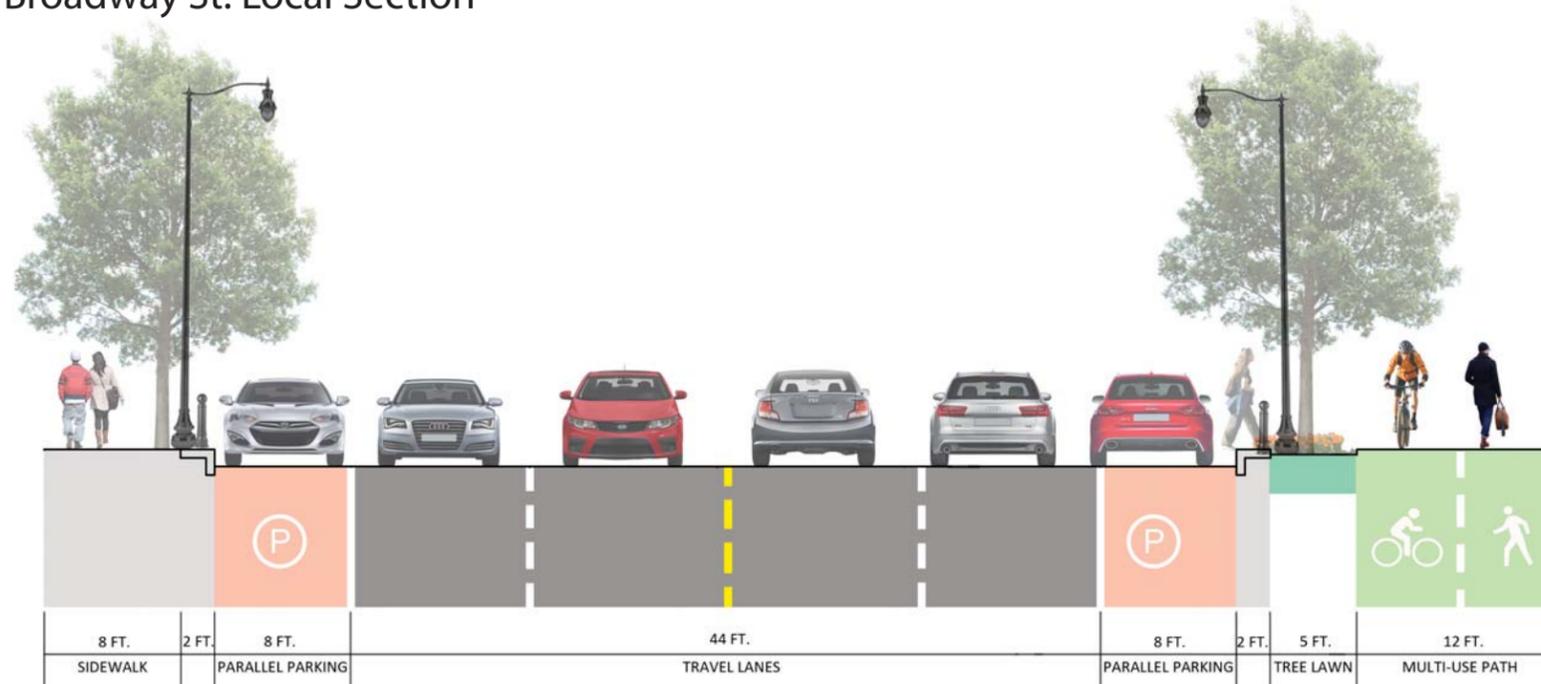


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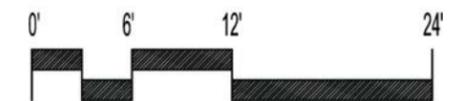




G. Broadway St. Local Section



H. Harrison St. North of Public Square



Bicycle & Pedestrian Route Sections

City of Shelbyville, Indiana
07 August 2015



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BICYCLE + PEDESTRIAN MASTER PLAN

8 JUNE 2015

SIGN-IN

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6	Matt House	mhouse@cityofshelbyvillein.com
7	Dianna Pandak	dpandak@shelbyseniorservices.org
8	Karen M. Martin	kmartin@cityofshelbyvillein.com
9	Gaye McKenney	gayemck@comcast.net
10	Tom DeBauw	thomas.debauw@cityofshelbyvillein.com
11		
12		
13		
14		
15		

City of Shelbyville

ADVISORY COMMITTEE MEETING

Regarding the
Bicycle & Pedestrian Master Plan

Please Sign In...

name	email address	mailing address
Paula Gustafson	pgustafson@masochospital.org	30 RAMPART SE170 Shelbyville
Karen M. Martin	kmartin@cityofshelbyvillein.com	23E Taylor St / 945 S. Tompkins St
Dawn Bird	dbird@cityofshelbyvillein.com	446 Washington St Shelbyville, IN 46176
Matt House	mhouse@cityofshelbyvillein.com	"
Jim Carlitz	jgarlitz@gmail.com	220 S. Noble, Shelbyville
Don Current	don.current@shelbyvilletoday.com	5565 S. Wilson Meadows P. S'ville
Shellic Ellison	shellisonfamily@yahoo.com	2017 Pin Oak Ct, Shelbyville, IN 46176
Cheryl Sunman	csunman@comcast.net	7060 N Woodwates Addn. Fairland, IN 46126
Ian Seecof	ianms@comcast.net	"
Drainna Pandalak	dpandalak@shelbyseinienservices.org	1504 S. Harrison Shelbyville

July 23rd, 2015

City of Shelbyville

ADVISORY COMMITTEE MEETING

Regarding the
Bicycle & Pedestrian Master Plan



Please Sign In...

name	email address	mailing address
Ian Seecof	ianms@comcast.net	7060 N. Woodnotes Addition Fairland 46112
Cheryl Sunman	csunman@comcast.net	"
Gaye McKenney	gayemck@comcast.net	1357 E. Meiks Rd Shelbyville, IN 46176
Dawn Bird	dbird@cityofshelbyvillein.com	446 W. Washington S'ville, IN 46176
Matt Horse	mhorse@ "	"
Deanna Pandak	dpandak@shelbysuninsewer.org	1504 S. Harrison 227 W. Mechanic St. Shelbyville, IN 46176
Marsha Apsey	Marsha.apsley@comcast.net	Shelbyville, IN 46176
Don Current	don.current@shelbyvilletoday.com	9455. Tompkins
Karen M. Martin	kmartin@cityofshelbyvillein.com	9455. Tompkins
Kristian Rawlins	info@saturdayshelby.com	310 W. South St Shelbyville IN 46176

August 12th, 2015

City of Shelbyville

ADVISORY COMMITTEE MEETING

Regarding the
Bicycle & Pedestrian Master Plan



Please Sign In...

name	email address	mailing address
Don Current	don.current@shelbyvilletoday.com	
Ian Seecof	ianms@Comcast.net	
Matt House	mhouse@cityofshelbyville.com	
Dann Bird	dbird@cityofshelbyville.com	
Shellic Ellison	theellisonfamily@yahoo.com	
P. GUSTAFSON	PGUSTAFSON@MAJORHOSPITAL.ORG	
Diana Pandak	dpandak@shelbyseminservices.org	

September 17th, 2015

City of Shelbyville
PUBLIC MEETING

Regarding the
Bicycle & Pedestrian Master Plan

Please Sign In...

name	email address	mailing address
Cheryl Sunman	CSunman@comcast.net	7060 N. Woodnotes Addr. Fairland, IN 46126
Tan Seeco f	ianms@Comcast.net	7060 N. Woodnotes Addr Fairland 46126
Kristiaan Pawlings	info@SaturdayShelby.com	PO Box 962 Shelbyville, IN 46176
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KERRY MAY	KMAY1950@yahoo	910 Revell St
Tom Winterrowd	winterrowdt@comcast.net	250 W. McKay Rd
Kris Schwickratz	Kschwic@gmail.com	246 W. Hendricks St.
Denise N. Holland	dholland@majorhospital.org	150 W Washington
Amy Haacker	BLUF	54 W. Broadway
Deborah Baatz	dbaatz@ivytech.edu	911 Hale Rd. lot 12

June 29th, 2015

City of Shelbyville
PUBLIC MEETING

Regarding the
Bicycle & Pedestrian Master Plan



Please Sign In...

name	email address	mailing address
Dann Bird	dbird@cityofshelbyville.in.gov	2017 Pin Oak Ct Shelbyville, IN 46176
Shellie Ellison	theellisonfamily@yahoo.com	" "
Daniel Ellison	" "	" "
Jason Aldridge	jaldridge@yahoo.com	1576 E Redwood Dr., Shelbyville
Jim Carlitz	jgcarlitz@gmail.com	220 S Noble Shelbyville
Betty Rypstra		
Dotie Sollen		401 Peninsula Dr. ⁴⁶¹⁷⁶
Alfonso Andolz	aandolz@sharesinc.org	1022 Highpointe Blvd. 46176
Brandon Schreeg	brandon@remenschneider.com	212 W. 10th St.; Suite B43

City of Shelbyville
PUBLIC MEETING

Regarding the
Bicycle & Pedestrian Master Plan

Please Sign In...

name	email address	mailing address
Rick Lindsay	rickalindsay@yahoo.com	2428 Trotters Chase Shelbyville, IN 46176
John Thompson		2463 Derby Shelbyville ⁴⁶¹⁷⁶ IN
Andy Profflet	Aprofflet@shelbynews.com	123 E Washington Shelbyville
Jason Chisham	ctsp03@gmail.com	4136 Winthrop Ave Indianapolis, IN 46205
Brad Bouchard	brad@remenschneider.com	212 W 10th St. Indianapolis, IN
Don Current	don.current@shelbyvilletoday.com	
Karen M. Martin	kmartin@cityofshelbyvillein.com	23 E Taylor St Shelbyville, IN 46176
Derrick Byers	dbird@cityofshelbyvillein.com	4700 W 220 W Shelbyville, IN 46176
Joe Lux	Joe.lux@inco.com	2417 Owllook Dr
Brittany Ardolz	brittanyardolz@gmail.com	1082 Highpointe Blvd. Shelbyville, IN
Ken Remenschneider	kenremenschneider.com	212 W. 10th, Indianapolis

June 29th, 2015

City of Shelbyville
PUBLIC MEETING

Regarding the
Bicycle & Pedestrian Master Plan



Please Sign In...

name	email address	mailing address
Deborah Baatz	dbaatz@ivytech.edu	911 Hale Rd. Lot 12 Shelbyville, IN 46176
Gabrielle Reed	gabreed@SaturdayShelby.com	2410 Valley Rd Shelbyville, IN 46176
Greg Knarr	gregknarr@gmail.com	2793 Dylan Drive Shelbyville IN 46176
Jason Aldridge	hjaldrige@yahoo.com	1576 E Redwood Dr, Shelbyville, IN 46176
Jessica Catania	jessicacatania@aol.com	7459 W 900 S Edinburgh IN 46124
Mark Beck	mbeck@crossroaderync.com	1943 N. Blairwood Pr. Shelbyville IN 46176
Theresa Hopper	paxton 950@ATT.net	2672 W. Old Franklin Shelbyville IN
Lori Pettit		212 Frances St. Shelbyville
Shellie Ellison	shelliefamily@yahoo.com	2017 Pin Oak Ct. Shelbyville, IN 46176
Gary Nolley	gary.nolley@gmail.com	1049 Springway Dr Shelbyville IN 46176
Tony Pettit	t.pettit@office3s.com	212 Frances St 46176

City of Shelbyville
PUBLIC MEETING

Regarding the
Bicycle & Pedestrian Master Plan



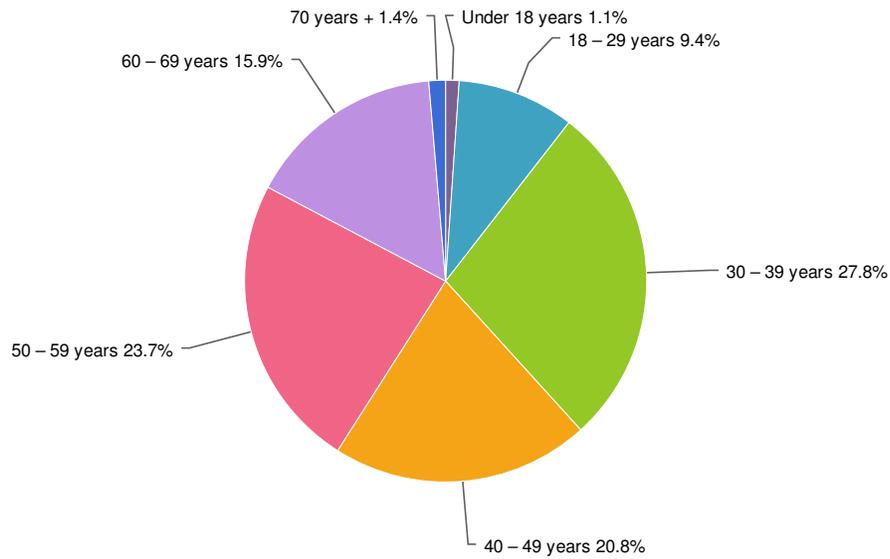
Please Sign In...

name	email address	mailing address
V. Tutterow		327 W. BROADWAY 46176
Karin M. Martin	kmartin@cityofshelbyvillein.com	945 S. Tompkins St Shelbyville, In. 46176



New Summary Report - 25 June 2015

1. What age group do you belong to?

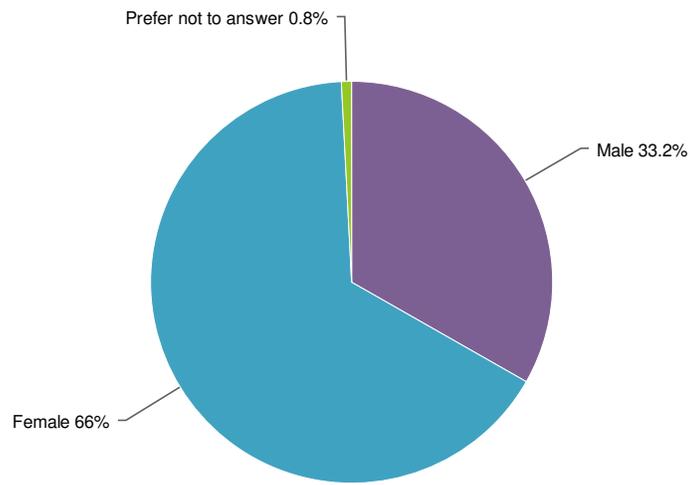


Under 18 years	1.1%	<div style="width: 1.1%; height: 10px; background-color: #000080;"></div>	4
18 – 29 years	9.4%	<div style="width: 9.4%; height: 10px; background-color: #008080;"></div>	35
30 – 39 years	27.8%	<div style="width: 27.8%; height: 10px; background-color: #70C040;"></div>	103
40 – 49 years	20.8%	<div style="width: 20.8%; height: 10px; background-color: #FF8C00;"></div>	77
50 – 59 years	23.7%	<div style="width: 23.7%; height: 10px; background-color: #E91E63;"></div>	88
60 – 69 years	15.9%	<div style="width: 15.9%; height: 10px; background-color: #9932CC;"></div>	59
70 years +	1.4%	<div style="width: 1.4%; height: 10px; background-color: #000080;"></div>	5
Total			371

Statistics

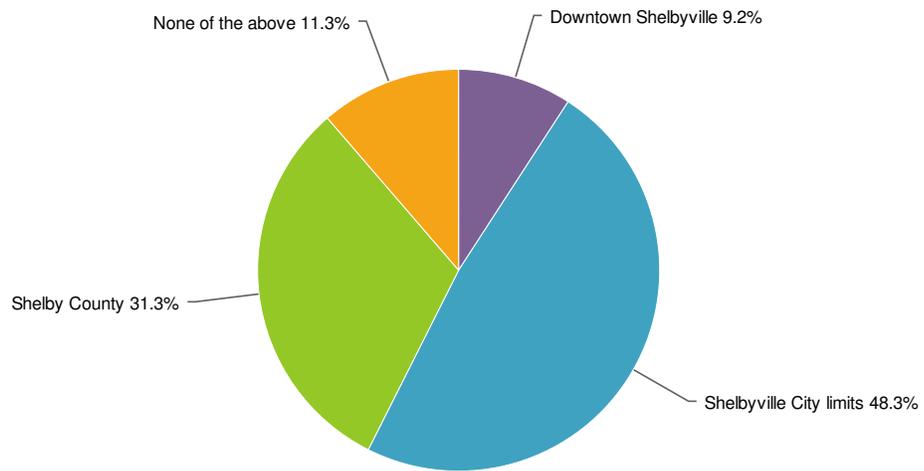
Sum	15,090.0
Average	41.1
StdDev	13.2
Max	70.0

2. What is your gender?



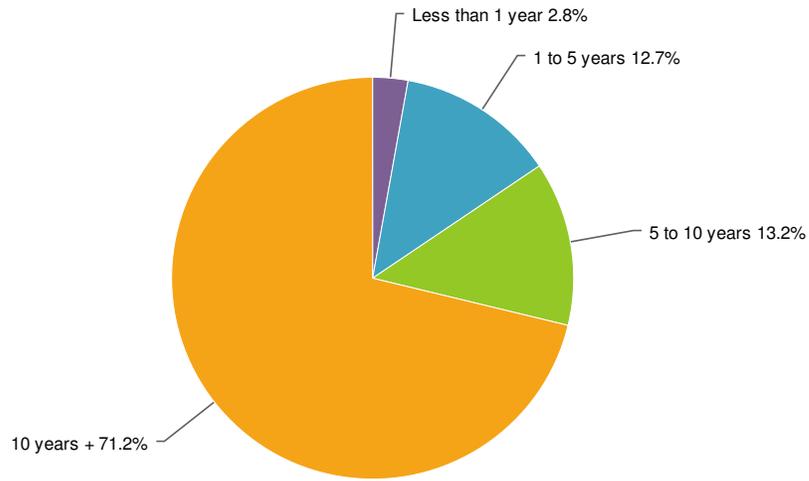
Male	33.2%		123
Female	66.0%		244
Prefer not to answer	0.8%		3
Total			370

3. Do you live in?



Downtown Shelbyville	9.2%		34
Shelbyville City limits	48.3%		179
Shelby County	31.3%		116
None of the above	11.3%		42
Total			371

4. If you live in the City of Shelbyville, how many years have you been a resident?

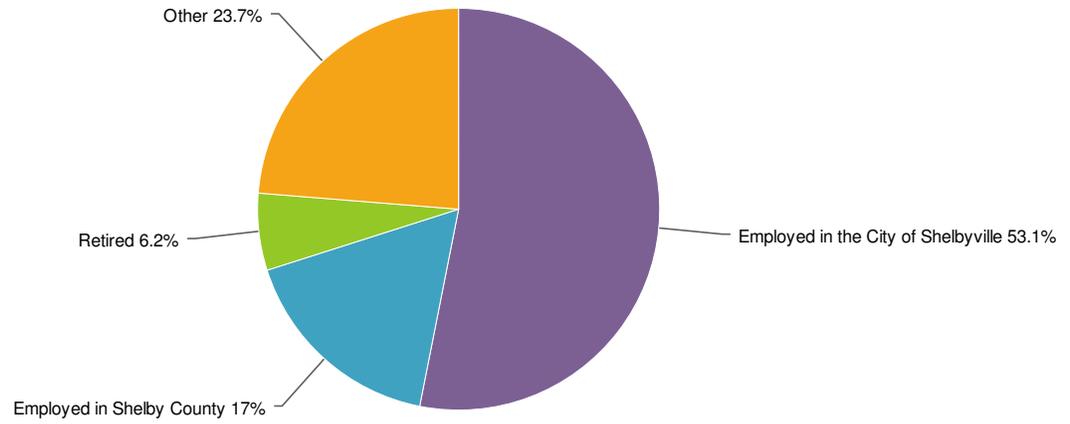


Less than 1 year	2.8%		6
1 to 5 years	12.7%		27
5 to 10 years	13.2%		28
10 years +	71.2%		151
Total			212

Statistics

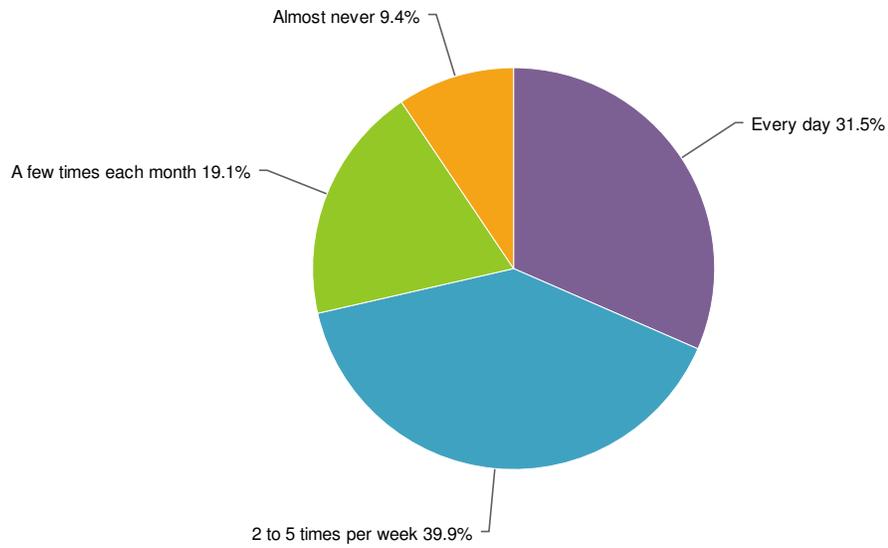
Sum	1,677.0
Average	8.1
StdDev	3.2
Max	10.0

5. Are you?



Employed in the City of Shelbyville	53.1%		197
Employed in Shelby County	17.0%		63
Retired	6.2%		23
Other	23.7%		88
		Total	371

6. How often do you walk two or more blocks? Note: count all trips between buildings, around your neighborhood, dogwalking, etc. DO NOT include very short trips between a car and a building.



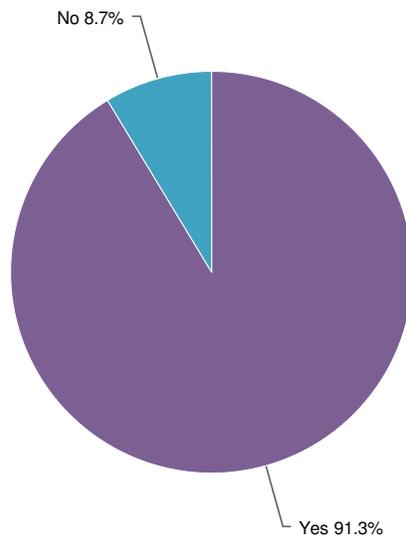
				Statistics	
Every day	31.5%			117	
2 to 5 times per week	39.9%			148	
A few times each month	19.1%			71	
Almost never	9.4%			35	
Total				371	
					Sum
					296.0
					Average
					2.0
					Max
					2.0

7. Why do you walk?



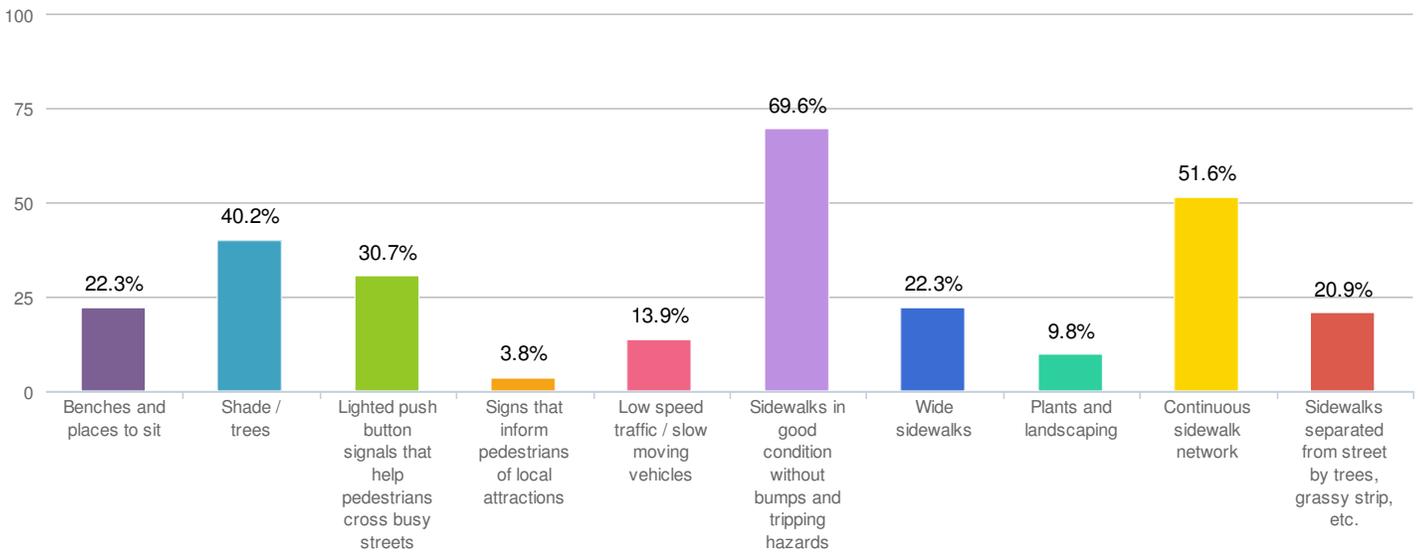
I walk mostly for transportation (to work, school, grocery, etc.)	6.3%		23
I walk mostly for recreation (for fun, walking the dog, etc.)	68.7%		252
Half for transportation, half for recreation	18.8%		69
I do not walk	6.3%		23
Total			367

8. Do you want to walk more often than you do now?



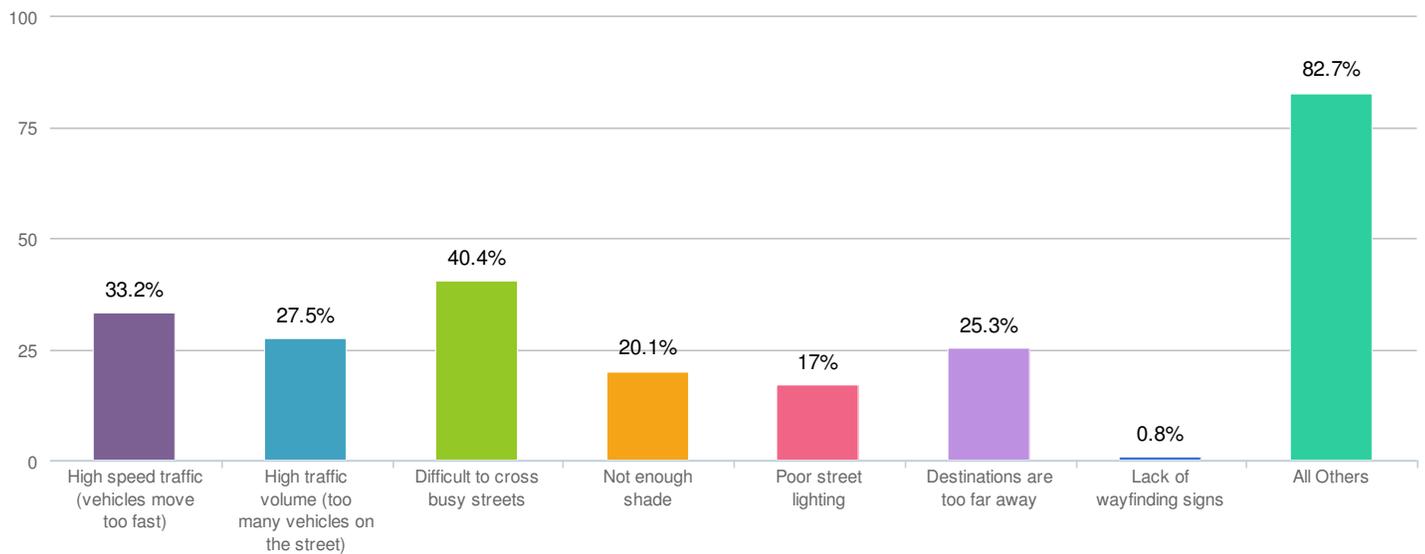
Yes	91.3%		337
No	8.7%		32
Total			369

10. Which of the following makes a street a good place to walk? Choose 3:



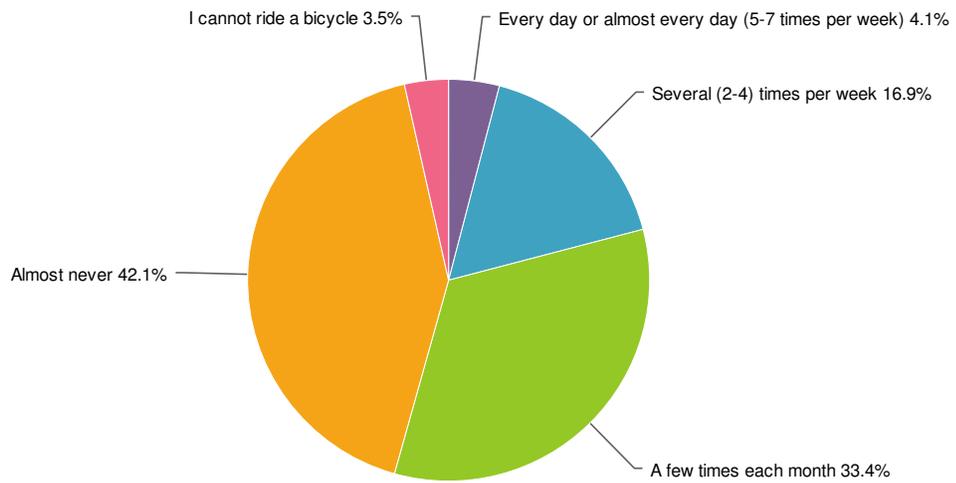
Benches and places to sit	22.3%		82
Shade / trees	40.2%		148
Lighted push button signals that help pedestrians cross busy streets	30.7%		113
Signs that inform pedestrians of local attractions	3.8%		14
Low speed traffic / slow moving vehicles	13.9%		51
Sidewalks in good condition without bumps and tripping hazards	69.6%		256
Wide sidewalks	22.3%		82
Plants and landscaping	9.8%		36
Continuous sidewalk network	51.6%		190
Sidewalks separated from street by trees, grassy strip, etc.	20.9%		77
		Total	368

11. What prevents you from walking more? Choose 3:



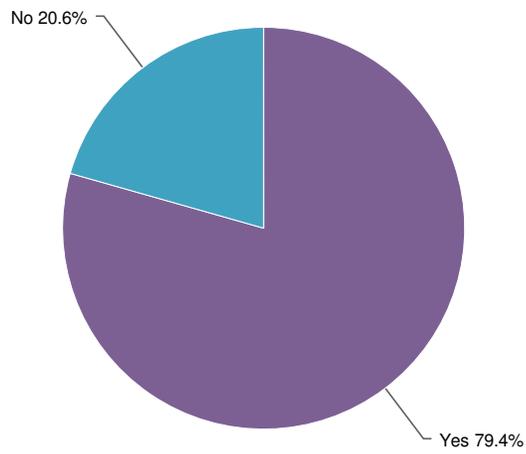
High speed traffic (vehicles move too fast)	33.2%		121
High traffic volume (too many vehicles on the street)	27.5%		100
Difficult to cross busy streets	40.4%		147
Not enough shade	20.1%		73
Poor street lighting	17.0%		62
Destinations are too far away	25.3%		92
Lack of wayfinding signs	0.8%		3
No one else is out walking	5.8%		21
Lack of continuous sidewalk network	54.4%		198
Poor health	3.3%		12
Other	19.2%		70
		Total	364

12. How often do you ride a bicycle?



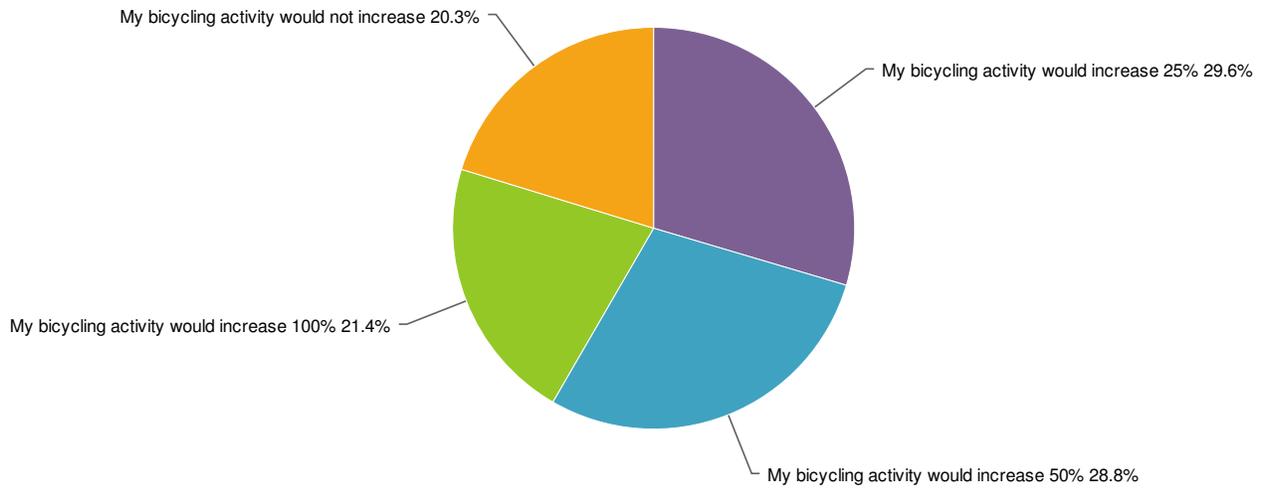
Every day or almost every day (5-7 times per week)	4.1%		15
Several (2-4) times per week	16.9%		62
A few times each month	33.4%		123
Almost never	42.1%		155
I cannot ride a bicycle	3.5%		13
Total			368

13. Do you want to ride a bicycle more often?



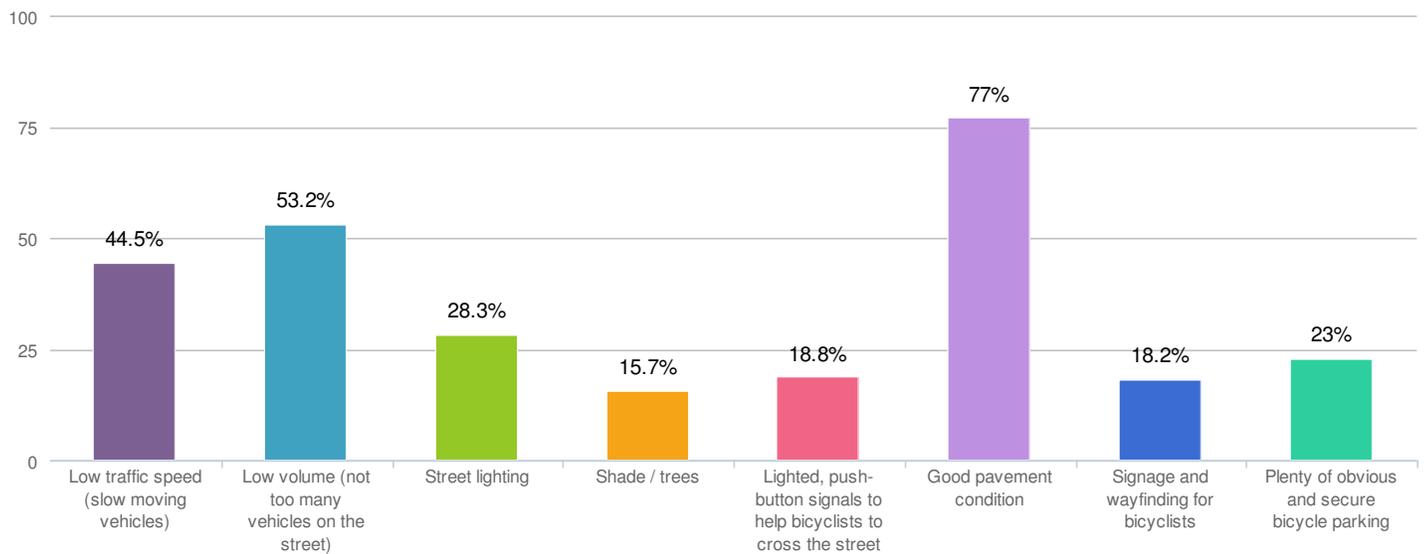
Yes	79.4%		289
No	20.6%		75
Total			364

14. Would your bicycling activity change with improved bike lanes, trails, side paths and safer street crossings?



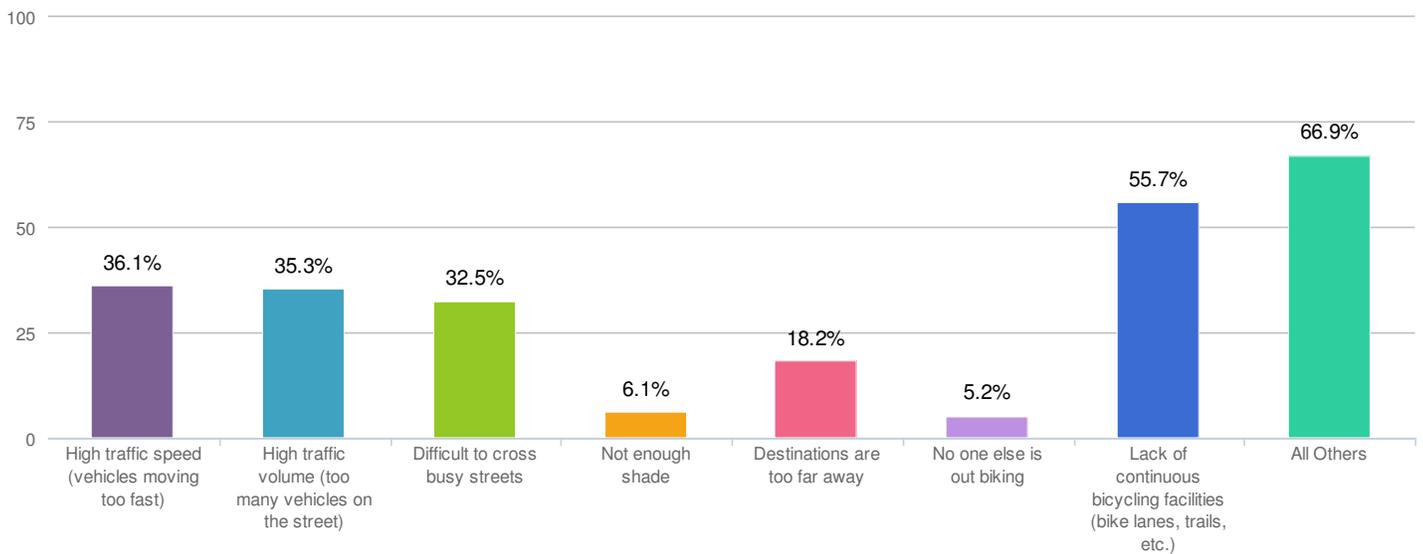
My bicycling activity would increase 25%	29.6%		108
My bicycling activity would increase 50%	28.8%		105
My bicycling activity would increase 100%	21.4%		78
My bicycling activity would not increase	20.3%		74
Total			365

15. Which of the following makes a street a good place to bicycle? Choose 3:



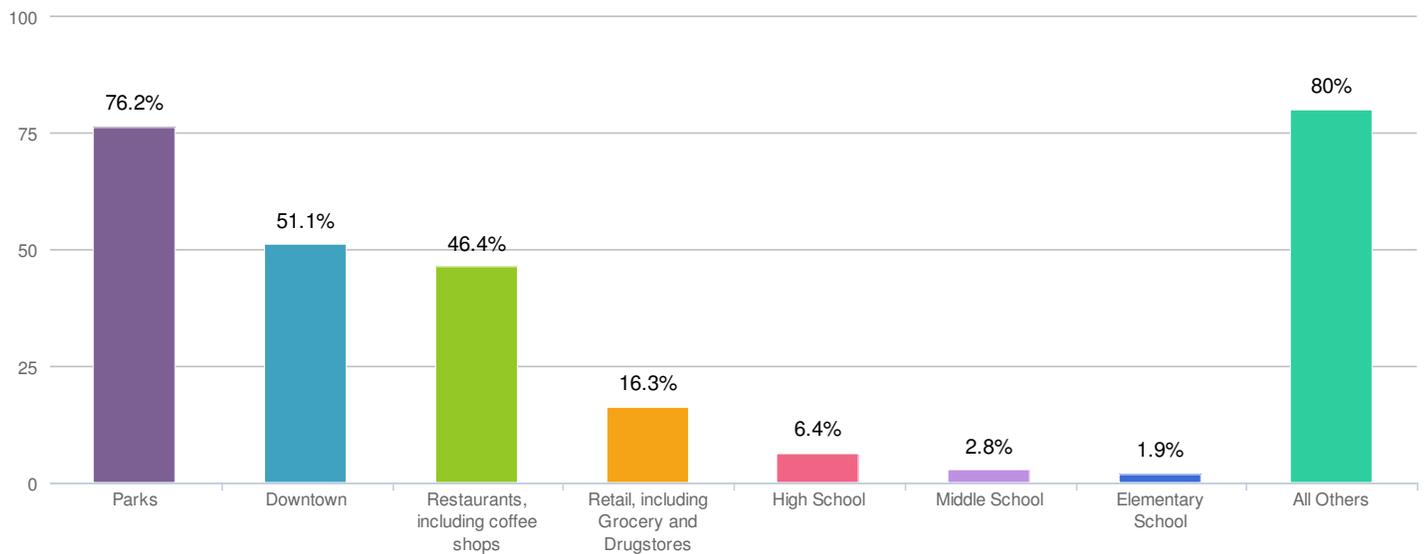
Low traffic speed (slow moving vehicles)	44.5%		159
Low volume (not too many vehicles on the street)	53.2%		190
Street lighting	28.3%		101
Shade / trees	15.7%		56
Lighted, push-button signals to help bicyclists to cross the street	18.8%		67
Good pavement condition	77.0%		275
Signage and wayfinding for bicyclists	18.2%		65
Plenty of obvious and secure bicycle parking	23.0%		82
		Total	357

16. What prevents you from bicycling more often? Choose 3:



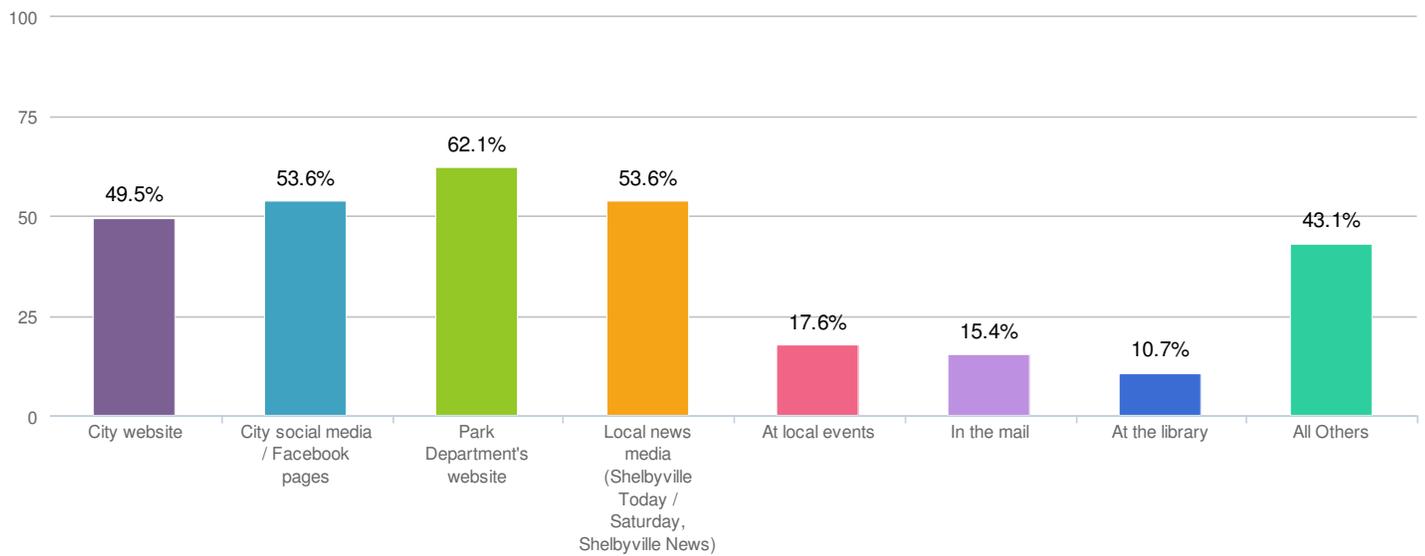
High traffic speed (vehicles moving too fast)	36.1%		131
High traffic volume (too many vehicles on the street)	35.3%		128
Difficult to cross busy streets	32.5%		118
Not enough shade	6.1%		22
Destinations are too far away	18.2%		66
No one else is out biking	5.2%		19
Lack of continuous bicycling facilities (bike lanes, trails, etc.)	55.7%		202
Poor pavement quality	30.3%		110
I don't own a bicycle	12.4%		45
I can't ride a bicycle	2.5%		9
I don't know the laws for bicycling	3.3%		12
Poor health	3.0%		11
Other	15.4%		56
		Total	363

17. What places would you like to walk or bicycle to? Choose 3:



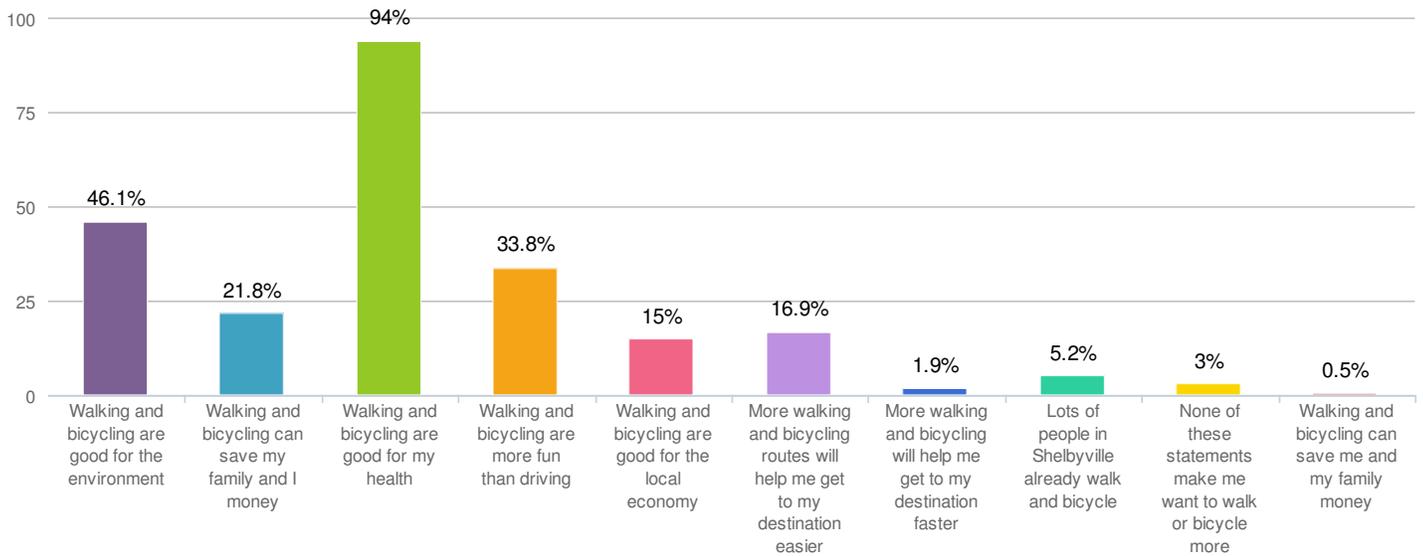
Parks	76.2%		276
Downtown	51.1%		185
Restaurants, including coffee shops	46.4%		168
Retail, including Grocery and Drugstores	16.3%		59
High School	6.4%		23
Middle School	2.8%		10
Elementary School	1.9%		7
Library	9.7%		35
Community Centers	5.8%		21
Indiana Grand Racing & Casino	3.0%		11
Big Blue River	21.8%		79
Major Hospital	8.0%		29
Areas outside of Shelbyville	22.9%		83
Other	8.8%		32
Total			362

18. Where would you look for more information about biking and walking in Shelbyville? Choose all that apply:



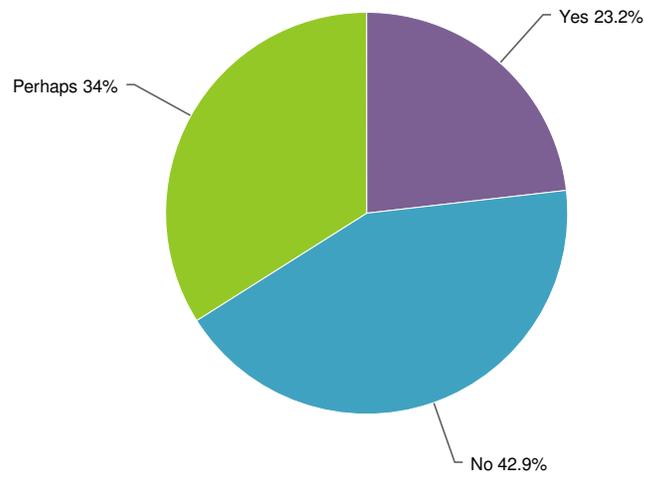
City website	49.5%		180
City social media / Facebook pages	53.6%		195
Park Department's website	62.1%		226
Local news media (Shelbyville Today / Saturday, Shelbyville News)	53.6%		195
At local events	17.6%		64
In the mail	15.4%		56
At the library	10.7%		39
From schools	9.3%		34
From employers	10.4%		38
From the hospital	14.3%		52
Other	8.5%		31
Park Department's social media (Facebook, Twitter, etc.)	0.6%		2
Total			364

19. Which of the following statements make you want to walk or bicycle more? Choose 3:



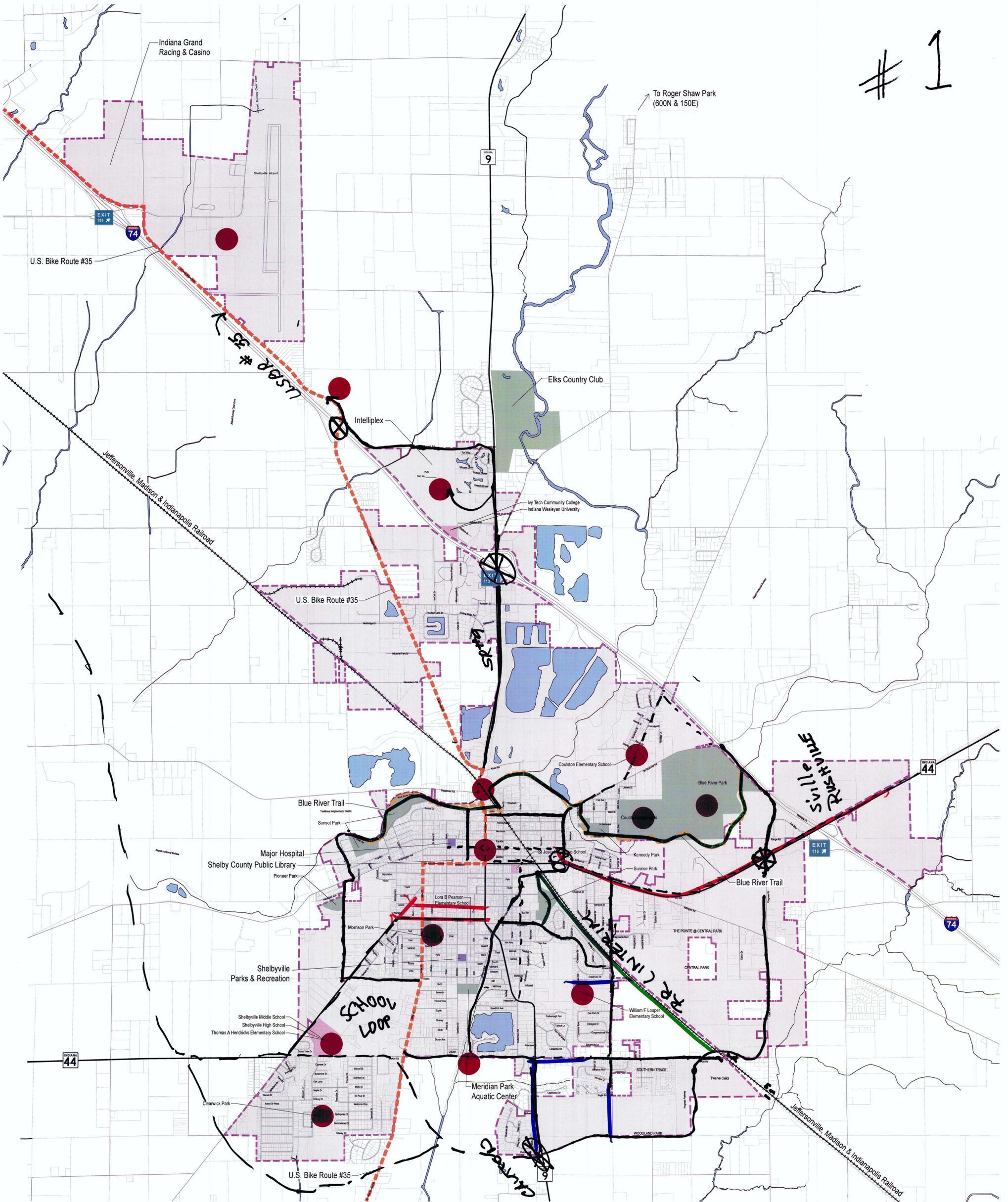
Walking and bicycling are good for the environment	46.1%		169
Walking and bicycling can save my family and I money	21.8%		80
Walking and bicycling are good for my health	94.0%		345
Walking and bicycling are more fun than driving	33.8%		124
Walking and bicycling are good for the local economy	15.0%		55
More walking and bicycling routes will help me get to my destination easier	16.9%		62
More walking and bicycling will help me get to my destination faster	1.9%		7
Lots of people in Shelbyville already walk and bicycle	5.2%		19
None of these statements make me want to walk or bicycle more	3.0%		11
Walking and bicycling can save me and my family money	0.5%		2
		Total	367

20. Would you use a bike share system if available in Shelbyville?



Yes	23.2%		86
No	42.9%		159
Perhaps	34.0%		126
Total			371

#1



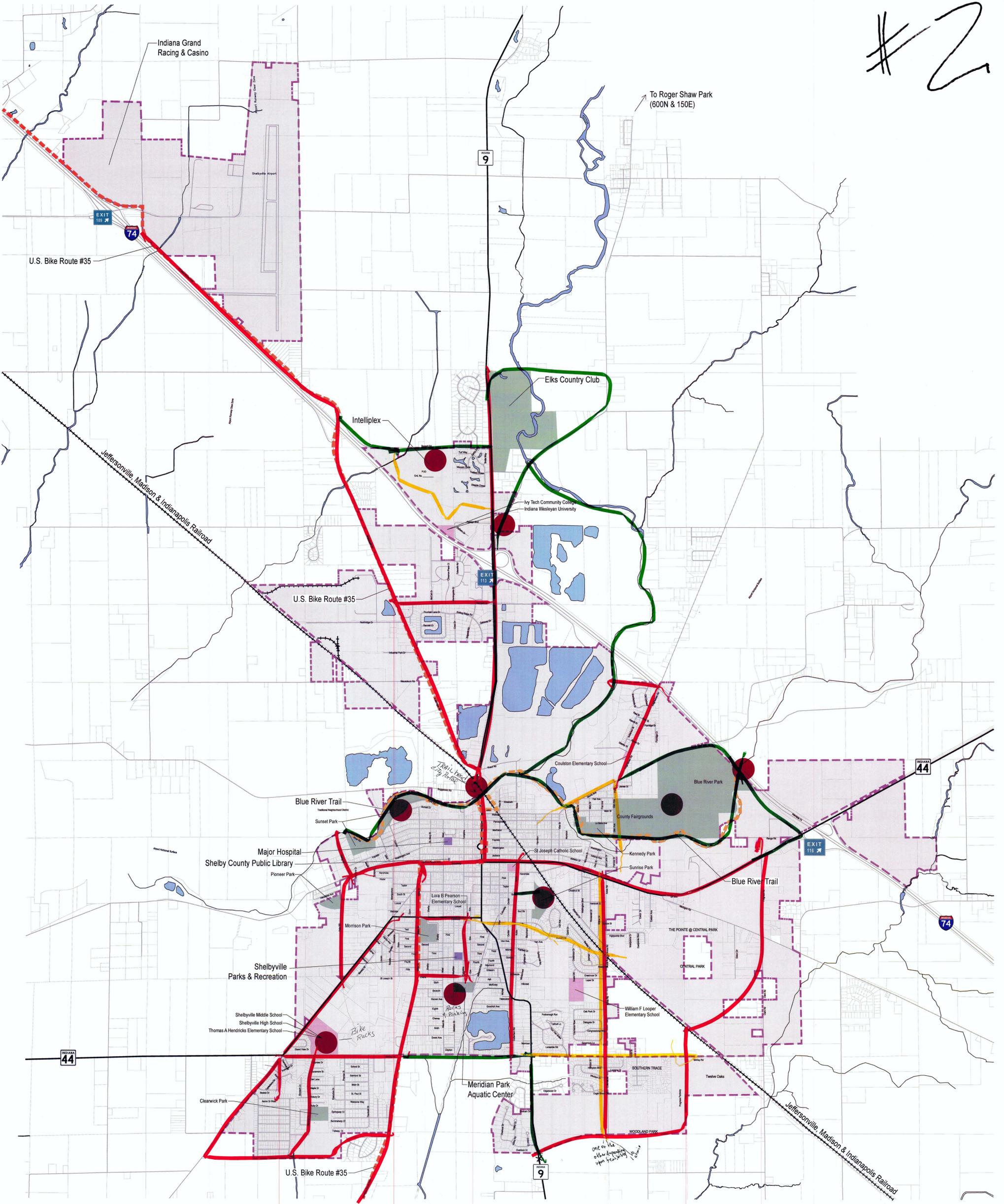
Bicycle & Pedestrian Master Plan

City of Shelbyville, Indiana
29 June 2015

REMENSCHNEIDER
ASSOCIATES, INC.
landscape architecture & planning



#2



Bicycle & Pedestrian Master Plan

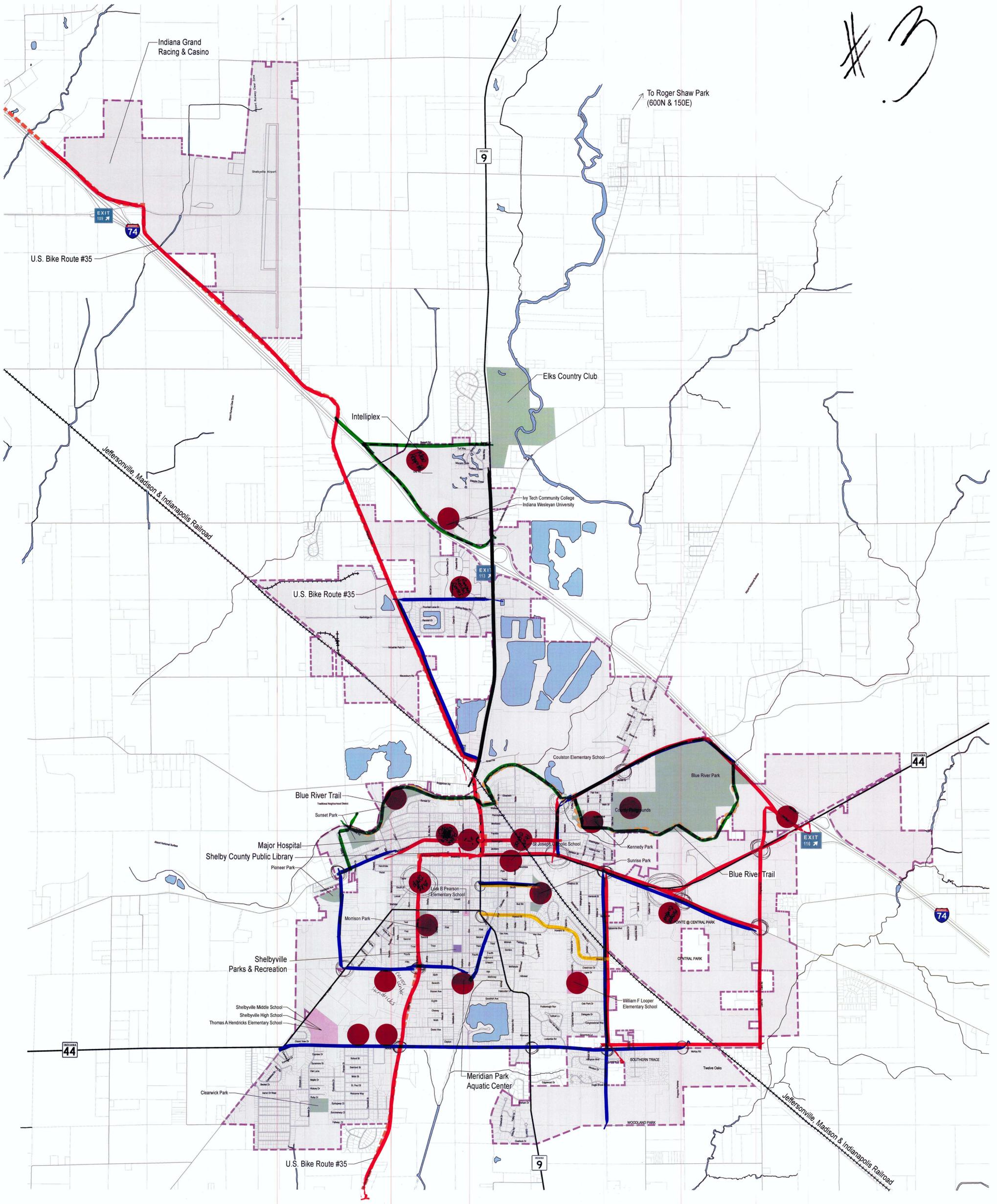
City of Shelbyville, Indiana
29 June 2015

select Major Partners to provide Shelbyville patient population from Portue to Hospital / satellite plus 2 bike carriers mounted

REMENSCHNEIDER ASSOCIATES, INC.
landscape architecture & planning



#3



Bicycle & Pedestrian Master Plan

City of Shelbyville, Indiana
29 June 2015

REMENSCHNEIDER
ASSOCIATES, INC.
landscape architecture & planning





Type	Cost/Ft.	Cost/Mile	Cost (Low)	Cost (High)	Includes
Broadway St Bike Lanes	\$10	\$50,000			
Harrison Street North of Square	\$155	\$820,000			
Cycle Track	\$150 - \$500	\$800,000 - \$2.7 mil			
Greenway/Sidepath	\$80	\$400,000			
Sidepath for Rail with Trail	\$88	\$440,000			
Sidewalk - New	\$20	\$100,000			
Sidewalk - Replace	\$25	\$130,000			
Bike Lanes	\$4	\$20,000			Signs, Lane Lines, Symbols
Shared Lanes	\$2	\$10,000			Signs, Sharrow Symbols
HAWK Signal			\$50,000	\$70,000	
RRFB Signal			\$15,000	\$20,000	
Pedestrian Signals at Existing Traffic Signals			\$10,000	\$20,000	Full Intersection, Ped Signals & Buttons
Crosswalk - Ladder			\$5,000	\$10,000	Pavement Markings, Signs
Crosswalk - Simple			\$2,000	\$5,000	Pavement Markings, Signs
ADA Curb Ramp			\$500	\$2,000	Concrete Ramp & Detectable Warnings

NOTE:

The above listed costs are conceptual and do not include project specific facility development costs such as land acquisition, utility relocation, etc.



Guide for the Development of Bicycle Facilities, AASHTO, 2012
Available for Purchase Only

NACTO Urban Bikeways Design Guide, 2013
<http://nacto.org/cities-for-cycling/design-guide/>

MUTCD 2011
<http://www.in.gov/dot/div/contracts/design/mutcd/2011MUTCD.htm>

Active Transportation Alliance
<http://www.activetrans.org/>

National Complete Streets Coalition
<http://www.completestreets.org>
<http://www.smartgrowthamerica.org/complete-streets>

League of American Bicyclists
<http://bikeleague.org/>

Bicycle Indiana
<http://www.bicycleindiana.org/>

IndyCOG
<https://indycog.org/>

National Safe Routes to School / Walk Bike to School
<http://www.saferoutesinfo.org>
<http://saferoutespartnership.org/>
<http://walkbiketoschool.org/ready/why-walk-or-bike>

Health by Design
<http://www.healthbydesignonline.org>

Central Indiana Bicycling Association
<http://www.cibaride.org/>

ISDH, Division of Nutrition and Physical Activity, 317-234-6808

The American Planning Association
<http://www.planning.org>

Ewing, R. Pedestrian and Transit-Friendly Design: A Primer for Smart Growth. International City/County Management Association and Smart Growth Network. 1999
http://www.epa.gov/smartgrowth/pdf/ptfd_primer.pdf

Federal Highway Administration. Designing Sidewalks and Trails for Access: Part I of II: Review of Existing Guidelines and Practices. 1999
http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/index.cfm



Federal Highway Administration. Designing Sidewalks and Trails for Access: Part II of II: Best Practices Design Guide. 2001

<http://www.fhwa.dot.gov/environment/sidewalk2/index.htm>.

City of Redmond, Washington

<http://www.redmond.gov/Transportation/GettingAroundRedmond/Walking/>

Cleveland Neighborhood Development Coalition. Pedes-trian Retail Overlay (PRO) District

<http://www.cndc2.org/prod.html>.

Leaf, W.A. and Preusser, D.F. "Literature Review on Ve-hicle Travel Speeds and Pedestrian Injuries." U.S. Depart-ment of Transportation. DOT HS 809 021. October 1999

<http://www.nhtsa.dot.gov/people/injury/research/pub/hs809012.html>.

US Environmental Protection Agency

<http://www.epa.gov>

