



St. Jacob Township

Bicycle Master Plan

Acknowledgments

The planning team would like to thank the residents of St. Jacob Township for your participation and support of this effort. Your input into this planning process was invaluable, and we strived to embody your passion for the community into this work.

A special thank you and heartfelt appreciation to St. Jacob Village Mayor Richard Schiefer. Without his enthusiasm and persistence in advocating for bicycle trail connections for the Village of St. Jacob, this work and any future endeavors from this planning effort would not have come to fruition. Mayor, you are a force, and your community is lucky to have you as its advocate.

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Kathy Becker - Village Clerk

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Planning Partners:

Metro East Park and Recreation District



Agency for Community Transit



Their funding has made this planning process possible and we appreciate their support



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Executive Summary

St. Jacob Township contracted with Oates Associates to develop a bicycle master plan with three main goals in mind: Providing safe pedestrian and bicycle connections within the Village of St. Jacob, creating bicycle connections to surrounding communities, and forging opportunities to support a future Madison County Transit trail within the Township.

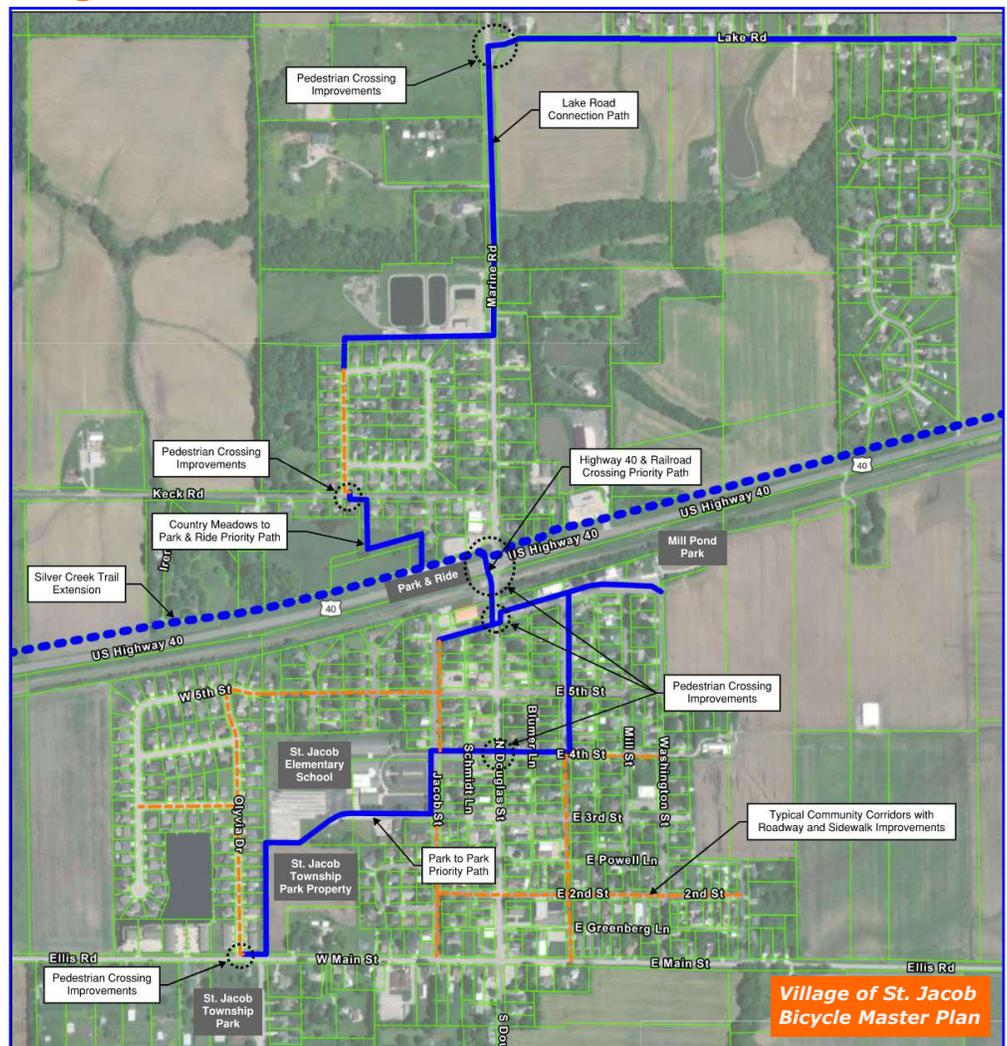
The St. Jacob Township Bicycle Master Plan began with an evaluation of the existing conditions throughout the Township. Conditions studied included transportation barriers, existing trail networks, current bicycle facilities, and desired destinations.

To determine destinations and goals for the Master Plan, the community and its

leaders were engaged through one-on-one meetings and online surveys. Key destinations were mapped, and connections between the destinations were analyzed. Results of this engagement showed a strong desire by the community for a safe connection across Hwy 40 and the railroad tracks, for sidewalks to be added or repaired around the Village, and for a direct connection to the MCT Trails. Desired destinations within the Village included the St. Jacob Township Park, St. Jacob Elementary School, and the Hwy 40 park-n-ride.

Bicycle corridors and recommendations that create safe routes between the most desired destinations have the greatest likelihood of success as projects. Therefore, recommendations were developed for several bike trail corridors within the Township and Village, which provided connections to the highest desired destinations. These recommendations include a bike trail between Mill Pond Park and St. Jacob Township Park and one along Hwy 40 connecting the Village to Troy and Highland. Other recommendations follow feedback from the community for updated sidewalks and roadways around the Village and a safe pedestrian crossing of Hwy 40.

The master planning was completed through an open house, presenting findings to the community and gathering feedback. An Action Plan is included within this Master Plan to give the Township measurable next steps to continue to grow its bicycle network.



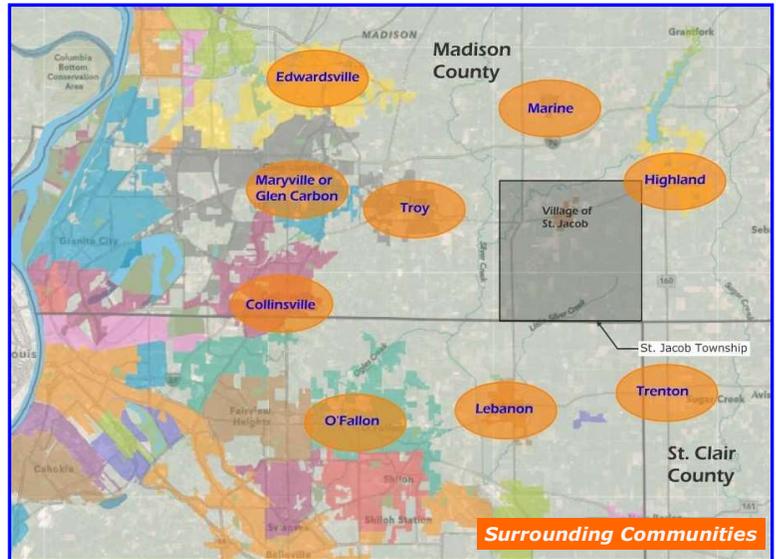
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1 Introduction

St. Jacob Township is located just outside the suburban St. Louis Metro East nestled in a rural setting. The Township is situated between several prominent communities located in two counties. Each community and each county has been focused on expanding its bike trail networks.

The Township, recognizing the opportunities that these expanding networks are bringing to the region, is looking to develop a Bicycle Master Plan that will capitalize on this regional momentum and help to keep communities within the Township comparable with surrounding communities.



1.1 Guiding Principles

Several design codes were referenced and utilized during the development of this Master Plan. They are listed below with their acronym used in reference throughout this document.

- American Association of State Highway and Transportation Officials' Guide for the Development of Bicycle Facilities 2012 Fourth Edition (**AASHTO**)
- National Association of City Transportation Officials' Urban Bikeway Design Guide Second Edition (**NACTO**)
- US Department of Transportation Federal Highway Administration's Bikeway Selection Guide 2019 (**Bikeway Selection Guide**)

1.2 Definitions

Several terms used throughout this document are defined below.

- **Shared Use Paths** are separated (off-street) bicycle and pedestrian facilities that are wide enough to accommodate both bicyclists and pedestrians. They are 8'-10' wide, made of either concrete or asphalt, and are located at least 5' off the roadway. In this document, several terms are used interchangeably with the term Shared Use Path, and they include:
Trails Paths
- St. Jacob Township Bicycle Master Plan may be referred to as: **The Plan**
- The Village of St. Jacob may be referred to as: **The Village**
- St. Jacob Township may be referred to as: **The Township**
- Metro East Parks and Recreation District: **MEPRD**
- Saint Clair County Transit District: **SCCTD**
- Illinois Department of Transportation: **IDOT**
- Madison County Transit: **MCT**
- Illinois State Route 4: **IL-4**
- US Highway 40: **Hwy 40**

2 Existing Conditions Review

An evaluation of the existing conditions within St. Jacob Township began the planning efforts. In an effort to expand on existing amenities, current facilities, and future planned facilities were analyzed to create a foundation for recommendations.

2.1 St. Jacob Township

St. Jacob Township is located in Madison County Illinois and borders St. Clair County. Several features throughout the Township impact safe biking opportunities and have an impact on planning for future bicycle facilities.

2.1.1 Communities

The Township is home to the Village of St. Jacob. The cities of Troy and Highland border the Township on the east and west. Both cities have extensive existing and future trail networks. These cities also provide services to the Township, such as shopping, dining, and social services. All of St. Jacob Township lies within the Triad School District, and the area's high school is located within Troy's city limits.

2.1.2 Triad Middle School

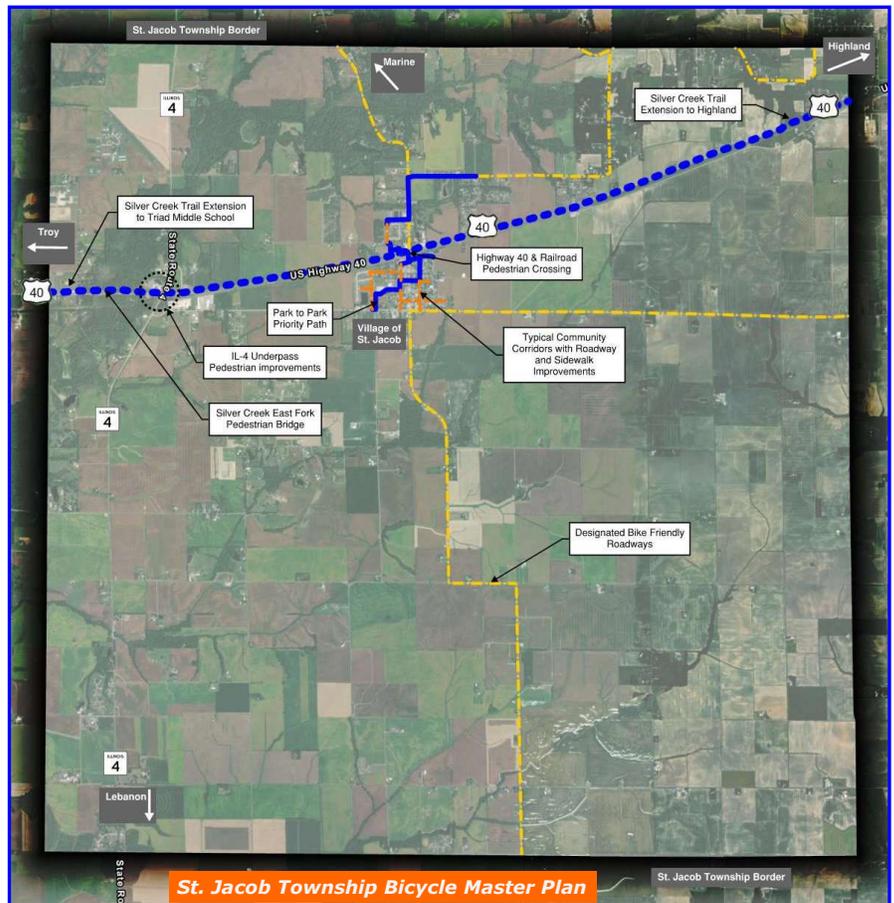
The new Triad Middle School will be constructed within the Township borders on the western edge along Hwy 40. The school is home to over 900 students and serves the entire Township.

2.1.3 Transportation Barriers

Transportation corridors such as state highways and railroads provide important growth and vital resources to communities. However, they can also be a barrier to active transportation.

Notable barriers within the Township include the CSX railroad line traveling from west to east from south of Troy, through the Village of St. Jacob, and on to Highland. The railroad line runs parallel to US Highway 40, which also bisects the Township. Illinois State Route 4 runs north to south through the western edges of the Township, and US Interstate 70 lies just north of the Township borders.

None of the above-mentioned corridors has marked facilities for safe pedestrian crossings within the borders of St. Jacob Township. Therefore, each poses a significant barrier to active transportation within the Village and the Township. Coordination between the Illinois Department of Transportation and CSX will be paramount to finding safe bicycle and pedestrian connections for the Township community.



2 Existing Conditions Review

2.2 Trail Networks

St. Jacob Township is located within Madison County, which has a growing bicycle trail network within the communities surrounding the Township. Although currently there are no bike trails within the boundaries of the Township, it is important to understand the surrounding trail network to determine how to bring St. Jacob Township into this growing community asset.

2.2.1 Madison County Transit Trails

Madison County Transit trail system has over 140 miles of bike trails within Madison County. The MCT Heritage Trail runs east-west and is located north of the Township, connecting Edwardsville and Marine. The MCT Goshen Trail runs north-south and connects St. Clair and Madison Counties. The Goshen Trail also connects the cities of Edwardsville and O'Fallon and lies west of the Township. Both of these major regional trails are located within 6 miles of the Township borders.

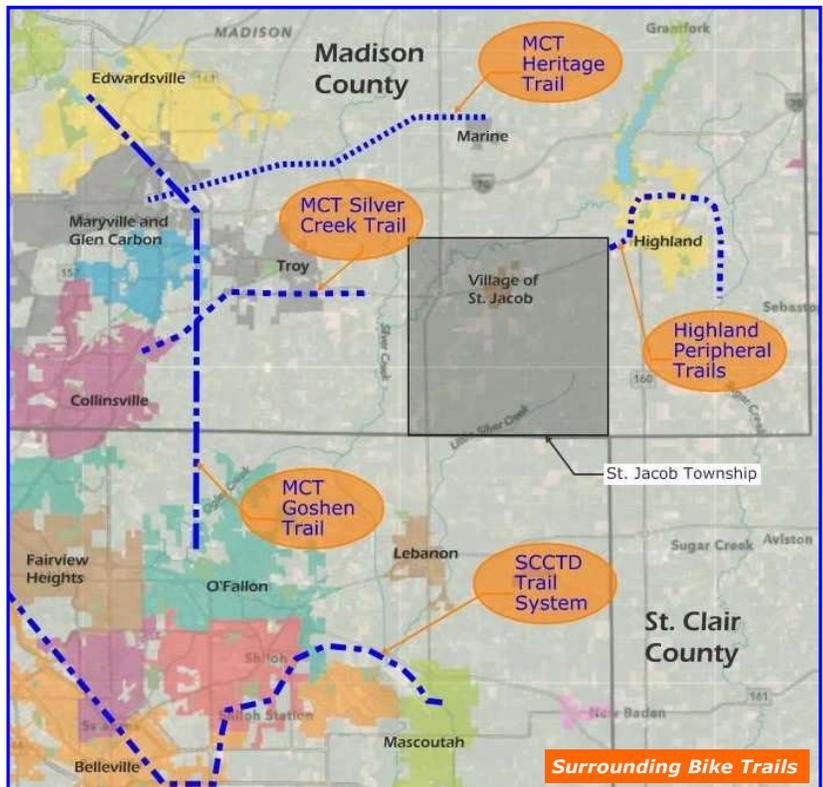
MCT's newly released master plan defines the US Highway 40 corridor as a future MCT Trail project. This future MCT Silver Creek Trail is preliminarily planned to follow the Hwy 40 corridor and connect Troy to Highland through the Village of St. Jacob. Portions of the corridor trail have already been constructed or are coming soon within the city of Troy. If these completed portions were to connect to the MCT Goshen Trail and the remainder of the corridor were to come to fruition, this trail would have a significant impact on the Township.

2.2.2 Troy and Highland Trails

Troy, located to the west of the Township, and Highland, located to the east of the Township, have both made significant progress on their community trail networks in the last several years. Highland contains over 8 miles of shared use paths surrounding 3/4 of the city's perimeter. Troy has extended their trails into downtown and Tri-Township Park and is currently working on expanding the Hwy 40/Silver Creek Trail corridor with funding and partnerships for trail segments that would connect the Goshen Trail to the west and Triad High School to the east.

2.2.3 St. Clair County Transit Trails

St. Clair County Transit has recently expanded its trail system from Belleville, through Scott Air Force Base, and out to Mid America Airport. This newly expanded trail is located 7 miles south of the Township.



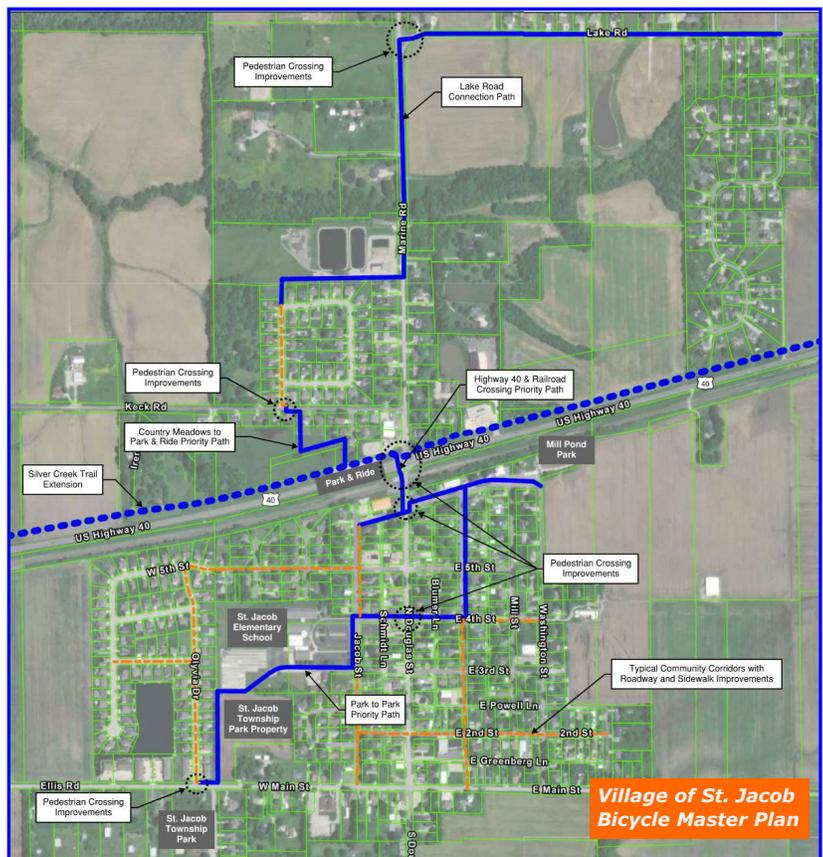
2 Existing Conditions Review

2.3 The Village of St. Jacob

With 1500 residents, two parks, and an elementary school, the Village of St. Jacob is the heart of the Township. It is home to St. Jacob Elementary, Mill Pond Park, St. Jacob Township Park, and several other community amenities. The Village, bisected by Hwy 40 and the CSX railroad tracks, has developing neighborhoods to the north of the barriers and most community amenities located to the south of the barriers.

2.3.1 St. Jacob Elementary School

St Jacob Elementary serves over 200 students from Pre-K through fifth grade. The school is located on the west side of the Village and south of Hwy 40 and the CSX railroad tracks. The school serves the entire Township, has one bus, and a few families walk or bike to school, with most families dropping off by car.



2.3.2 Mill Pond Park

Mill Pond Park is located on the east side of town and directly south of the CSX railroad tracks. The park is home to a small walking trail, pavilions, pond, newly built restrooms, and bike rack.

2.3.3 St. Jacob Township Park

Located on the south side of the Village, St. Jacob Township Park is a 20+ acre park complete with a half-mile walking trail, ball fields, playgrounds, including an all-inclusive playground, several pavilions, and restroom facilities. Recently, the Village installed a new pedestrian crossing of Mais Street. The new crossing is complete with push-button warning lights to give the community safe pedestrian access to the park.

2.3.4 Community Amenities and Destinations

Community amenities located north of Hwy 40 include a Hwy 40 park-n-ride, convenience store, and dollar store. Amenities south of Hwy 40 include Village Hall, post office, activity center, and dining locations.

2.3.5 Existing Transportation Network

The Village consists mainly of oil-and-chip and asphalt roadways with ditches for drainage and 3'-4' wide sidewalks. Two main roadways run through the Village. Douglas Street is the main north-south road and provides access to a vehicular crossing of CSX railroad tracks and a signalized intersection of Hwy 40. Main Street/Ellis Road is the main east-west roadway located on the south side of the Village.

3 Determine the Goals

In order to understand the community's goals, community outreach was the next step in the master planning process. This was accomplished through interviews with both community leaders and school leaders, as well as through a community-wide online survey.

3.1 Community Leaders

Conversations with leadership for St. Jacob Township and with the Village of St. Jacob established the first goals of the Master Plan.

3.1.1 Leadership Goals

- Provide safe pedestrian and bicycle connections within the Village of St. Jacob
- Create bicycle connections to surrounding communities
- Explore options for future regional trail corridors within the Township

3.2 Community Survey

An online survey was conducted to gather input from the community on potential improvements of existing facilities and visions for future trails. The survey was open from September 26, 2024, to November 1, 2024, and received a total of 170 responses. Of the 170 respondents, 42% live within the Village of St. Jacob, and over 90% of respondents ride or walk at least monthly for transportation or recreation.

3.2.1 Survey Goals

- Improving neighborhood streets and sidewalks
- Provide a pedestrian crossing of Hwy 40 and the railroad tracks
- Desired Destinations
 - St. Jacob Township Park
 - St. Jacob Elementary School
 - Hwy 40 Park-n-ride
 - MCT Trails in either Troy or Marine
 - Highland Peripheral Route Trails



The graphic is a vertical rectangular poster with a blue border. At the top, it features the St. Jacob Township logo (a map outline with a bicycle) and the text "St. Jacob Township Bicycle Master Plan" in orange and blue. Below this, it says "COMMUNITY SURVEY On BIKING & WALKING" in bold orange letters. The main text reads: "We want to make it safer & easier for people to walk, bicycle or roll to their destinations. Your feedback is essential for designing a Master Plan." It then says "Scan the QR Code with your mobile device or visit the website below" and includes a large QR code. At the bottom, it provides the URL "https://www.surveymonkey.com/r/StJacobCommunitySurvey" and a red banner that says "SURVEY CLOSES NOVEMBER 1, 2024".

Survey Advertisement and Publicity



This block shows a snippet of a news article. The headline is "Communities encouraged to participate in St. Jacob and Jarvis Twp. Biking Surveys". The byline is "By Editor | October 22, 2024 | 0". The author is "By Josh Jones, Times Tribune Editor, jjones@timestribunews.com". The text says: "There is still time for people to respond to a survey that will help determine the future of cycling in St. Jacob and Jarvis Townships. According to information provided by Oates Associates, they are trying to spread the word on a community biking survey that they are conducting to create a Bicycle Master Plan. A bicycle master plan is a document that outlines a city or region's long-term goals for developing its bicycle infrastructure. These plans can include: bicycle paths, protected bike lanes, bicycle parking, and integration with public transit, according to online sources. The Jarvis Township survey is titled 'Jarvis Bike Plan Survey', which can be found at https://www.surveymonkey.com/r/jarvisbikesurvey. The St. Jacob Township survey is titled 'St. Jacob Township Biking and Walking Community Survey'. People can participate in the survey by visiting https://www.surveymonkey.com/r/stjacobcommunitysurvey. Each survey is listed at only a few minutes long. The surveys will close on Nov. 1."

3 Determine the Goals

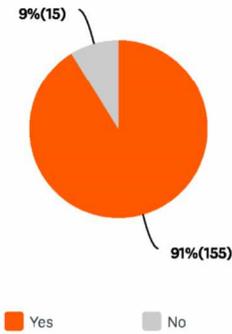
3.2.2 Survey Results

Key takeaways from the survey include learning that most respondents like to walk on the Township Park walking trail and would appreciate better sidewalks throughout the Village to walk on, as well as safer streets to bike on. A sample of the survey questions and a summary of the responses follow in the next few pages. The full survey and results are located in the **Appendix**.

Survey Results

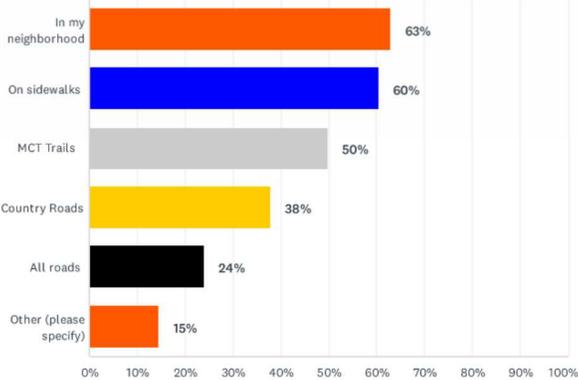
Q2 Do you walk or ride a bike as a means of transportation or for recreation?

Answered: 170 Skipped: 0



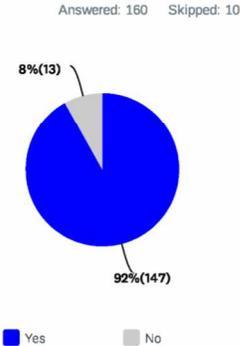
Q4 Where do you walk or ride a bike as a means of transportation or for recreation? Select all that apply.

Answered: 151 Skipped: 19

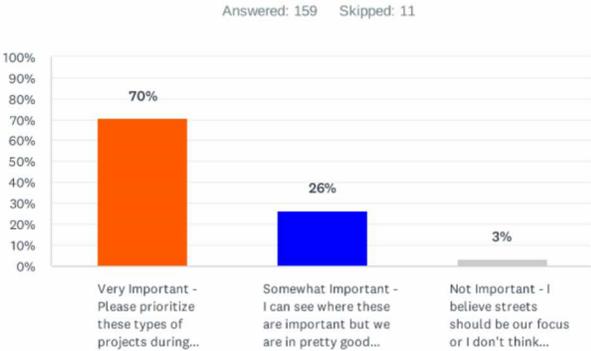


Survey Results

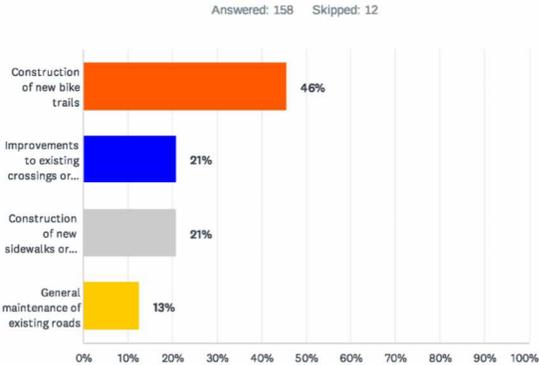
Q6 Would you walk or ride a bike in St. Jacob Township more often if more bicycle lanes, safer road crossings, or more trails and sidewalks were built?



Q8 How do you rate the importance of improving sidewalks or bicycling facilities for the Township of St. Jacob?



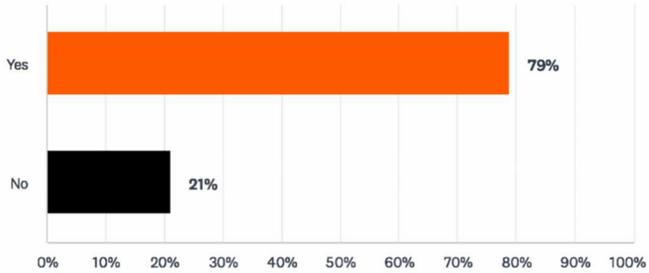
Q9 Please select what should be the Township's highest priority regarding pedestrian and bicycle transportation.



Survey Results

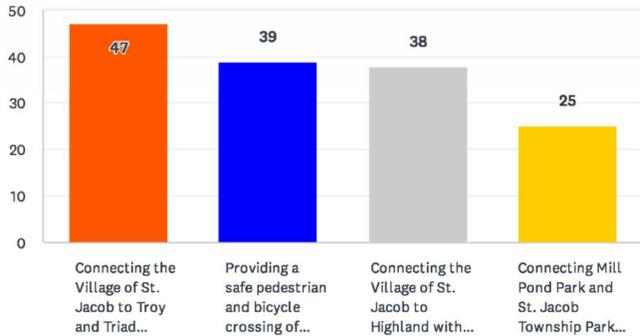
Q17 Currently, there are no pedestrian signals or pedestrian crossings at this intersection. Would you use pedestrian signals, crosswalks, and sidewalks if they were provided at this intersection to walk or bike across the highway and railroad tracks?

Answered: 152 Skipped: 18



Q23 Select the project below that you think should be the highest priority for St. Jacob Township

Answered: 149 Skipped: 21



Top 3

Points of Interest

- > St. Jacob Township Park
- > St. Jacob Elementary School
- > Activity Center, Fire Department, Frosty Pony, Lucky Rooster

Top 3

Regional Connections

- > City of Troy
- > City of Highland
- > Village of Marine

Top 3

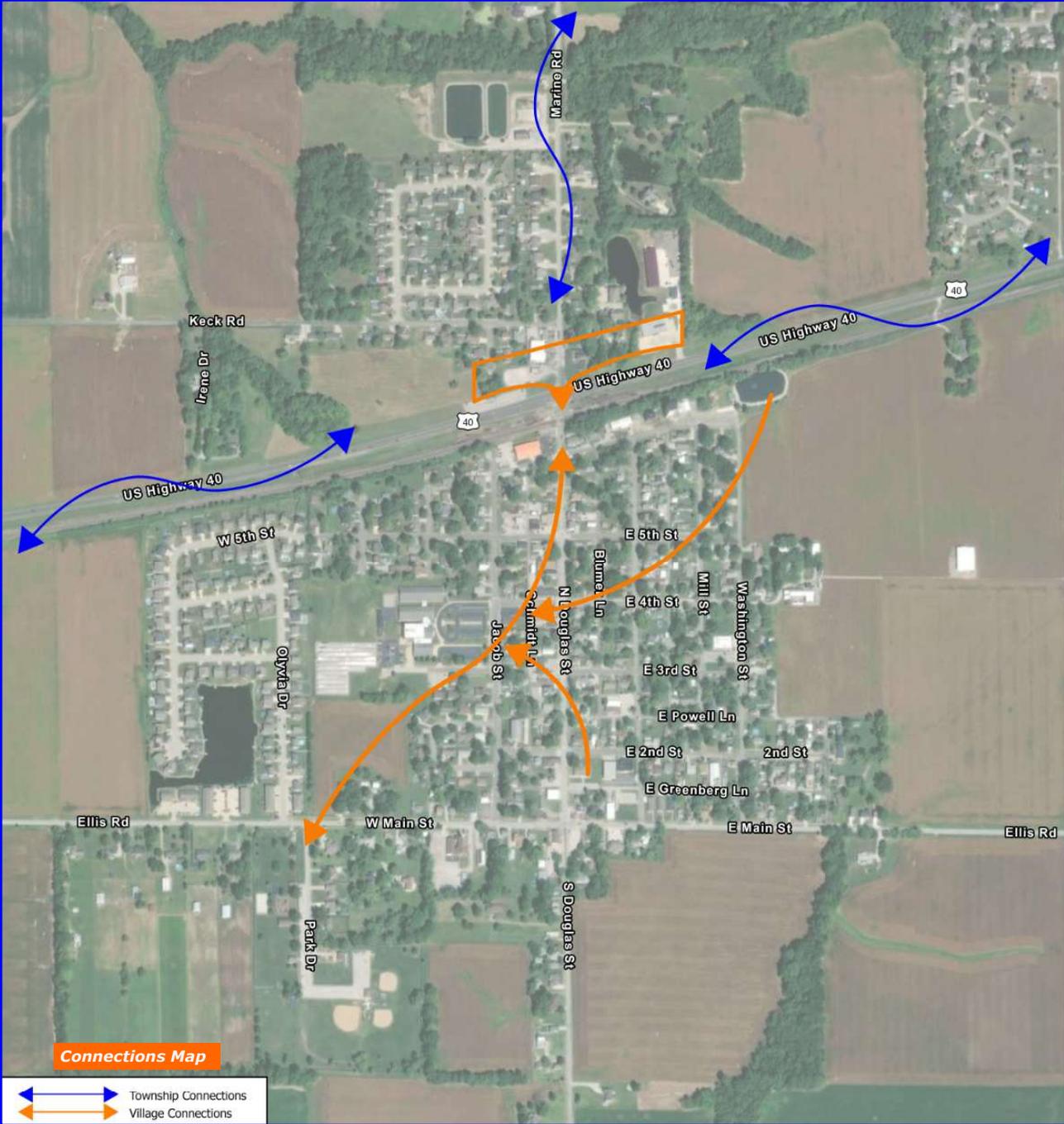
Trail Connections

- > MCT Silver Creek Trail
- > Highland Peripheral Trails
- > MCT Heritage Trail

3 Determine the Goals

3.3 Connections Map

Combining the goals set forth by community leaders and determined through the online community survey, the following Connections Map was developed. This map shows both Village-focused and Township-wide connections that the community would like to see created with new, safer bicycle facilities. This map will guide the final Master Plan recommendations to ensure they are tailored to the desires of the community that this Plan serves.



4 Recommendations for Improvements

Using the Connections Map and goals determined through community engagement, several priority paths and recommendations for improvements were evaluated and developed for St. Jacob Township.

4.1 Silver Creek Trail

Connecting the Village of St. Jacob to the MCT Trail system was a top goal for community leaders and the community survey. A concept plan and typical sections for this corridor are located in the **Appendix**.

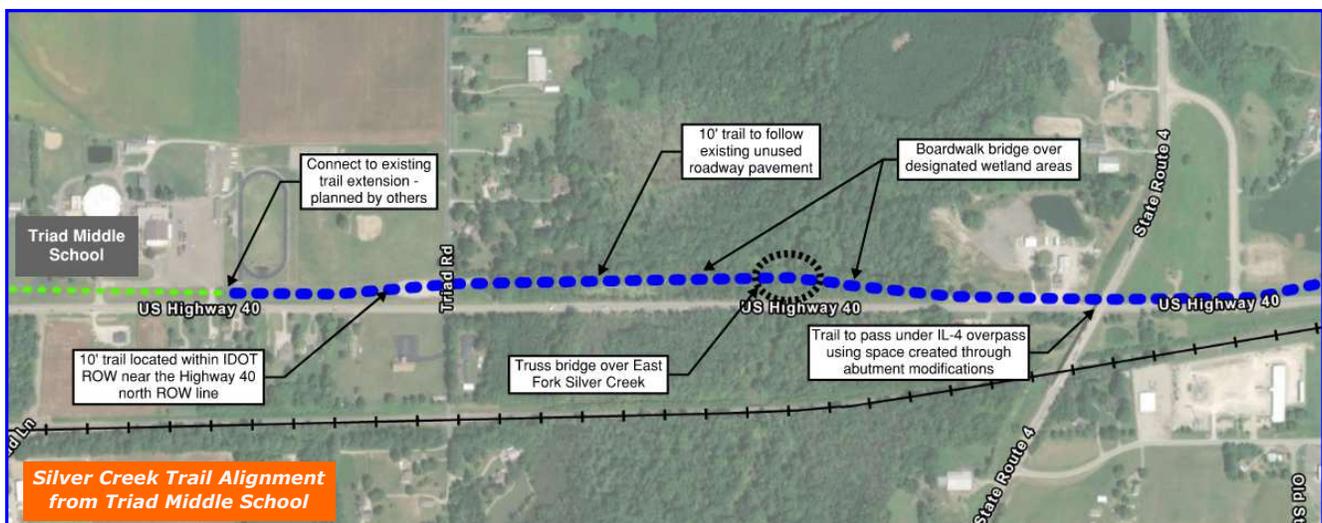
4.1.1 Hwy 40

Hwy 40 has long been a desired corridor for MCT's future trail expansion, and this corridor remains a Priority Capital Project in MCT's recent Master Plan. Currently, MCT is working on the Ridge Prairie Trail that will connect Collinsville to the Goshen Trail, as well as an alignment and possible bridge over Hwy 40 that will bring the Goshen Trail to the Silver Creek Trails already built along Hwy 40 by the City of Troy. Troy has obtained funding to extend their Hwy 40 trail work from the intersection of Main Street to the east, reaching Triad High School and Bethany Lane. Jarvis Township hopes to continue its work to the Middle School, which is located on St. Jacob Township's border. This allows the Township to continue work developing the trail through their borders to extend the trail all the way to the City of Highland and completing this exciting connection for the MCT Trail network and the communities of Troy, Highland, the Village, and the Township of St. Jacob.

Hwy 40 is an IDOT jurisdictional roadway. A coordination meeting with IDOT was held to discuss the Hwy 40 corridor and several conditions that exist along this corridor. Documentation of this meeting can be found in the **Appendix**.

4.1.2 Opportunities and Challenges

With over 100' of right-of-way, mainly located on the north side of Hwy 40, this corridor is promising for a future trail on the north side of Hwy 40. However, several challenges exist along the corridor's western portion between the Village of St. Jacob and Troy. For this segment of the corridor there is a crossing of East Fork Silver Creek, previous highway alignment road pavement, wetlands, and an underpass of IL-4.



4 Recommendations for Improvements

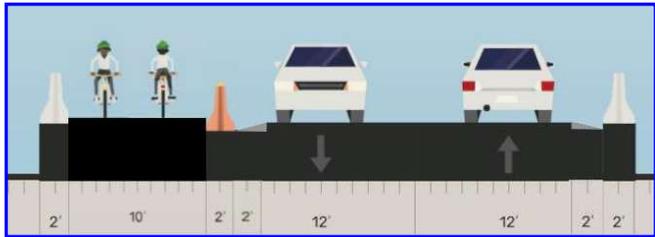
4.1.3 East Fork Silver Creek Crossing

The first challenge of the Hwy 40 corridor within St. Jacob Township is a crossing of East Fork Silver Creek. Wetlands, existing roadway pavement from an previous highway alignment, and the creek all impact trail development in this area.

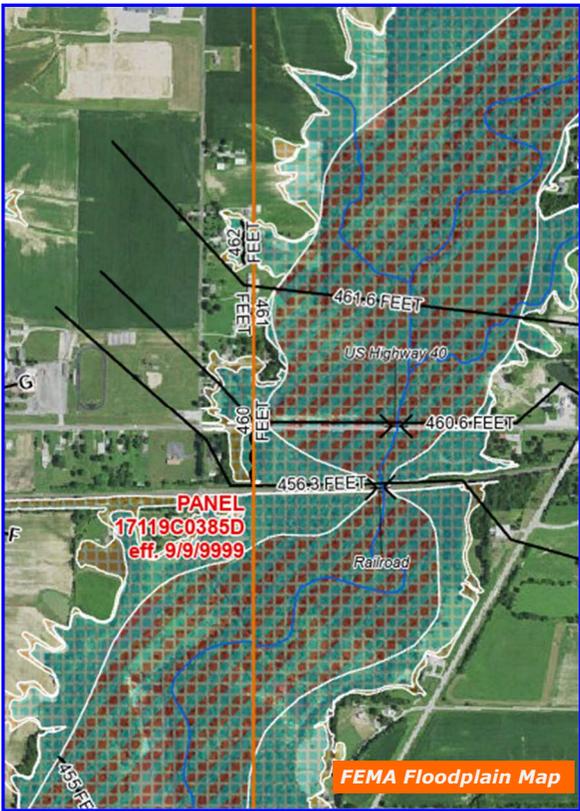
The Hwy 40 existing bridge structure is potentially wide enough for a shared use path to be added to the existing structure. However, this would require the lanes to be shifted and a concrete barrier installed between vehicle traffic and trail users. The barrier would likely require a structure impact study for the bridge, and trail users would be near vehicles on the highway. A separated bicycle/pedestrian bridge is the preferred option for this crossing and is supported by IDOT.



Existing East Fork Silver Creek Crossing Structure



Lane Configuration of a Shared Structure



The new pedestrian bridge would need to limit impacts to the floodway since this project area is located within the floodplain and in the floodway. A pre-engineered truss bridge is typical of the type of structures found within the MCT Trail network. The bridge for this crossing would likely consist of a single-span 250' truss bridge with a construction cost between \$1—\$2 million.

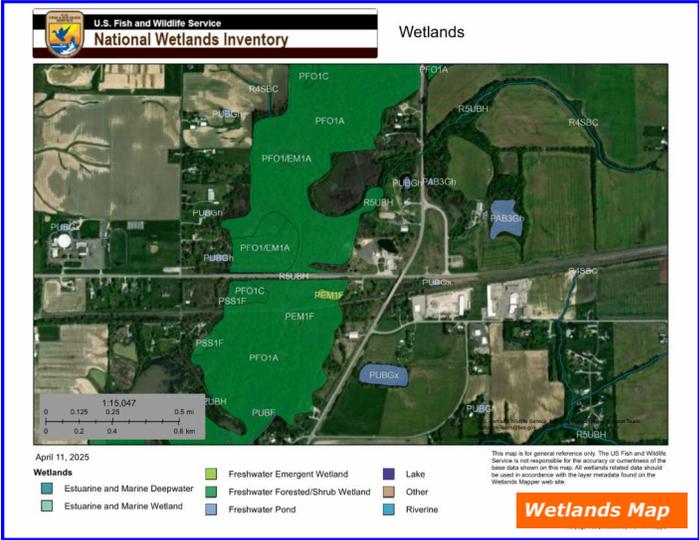


MCT Pedestrian Bridge on Goshen Trail

4 Recommendations for Improvements

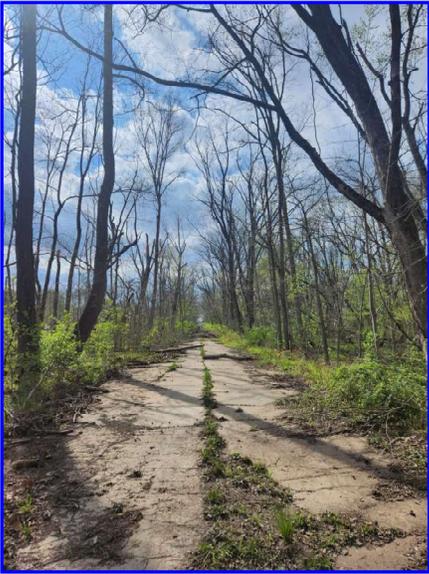
4.1.4 Wetlands

Near the East Fork Silver Creek crossing, the project would pass through an area of mapped wetlands and would likely require some degree of wetland mitigation. The actual amount of impacted wetlands is expected to be less than what is shown on the mapper due to the previous highway alignment pavement still present in the areas mapped as wetlands. This pavement is likely not included in the wetlands and could be used for the future trail location. A wetland delineation would need to be performed to fully understand the impacts of a trail and creek crossing in this location and whether or not the previous roadway pavement is considered wetlands. Wetland mitigation may add up to \$60,000 in design fees and mitigation expenses to the cost of trail development in this location.



4.1.5 Previous Highway Alignment Location

The previous highway alignment is visible on both the east and west sides of the creek crossing. The west side contains an 18'-20' wide paved roadway with at least 6' wide shoulders. The pavement is in poor condition. On the east side, the pavement has been removed; however, the grading remains intact for a trail alignment. Elevation of the previous road alignment on both sides of the creek appears to be lower than the new Hwy 40 road alignment elevation. The existing pavement elevation should be evaluated regarding tolerable flood risks to fully understand the impact to the cost of a trail segment utilizing previous roadway pavement. Using this alignment will help ensure stable soils and minimal grading for the new trail during construction.



**Previous Highway Alignment
West of Creek**



**Previous Highway Alignment
East of Creek**

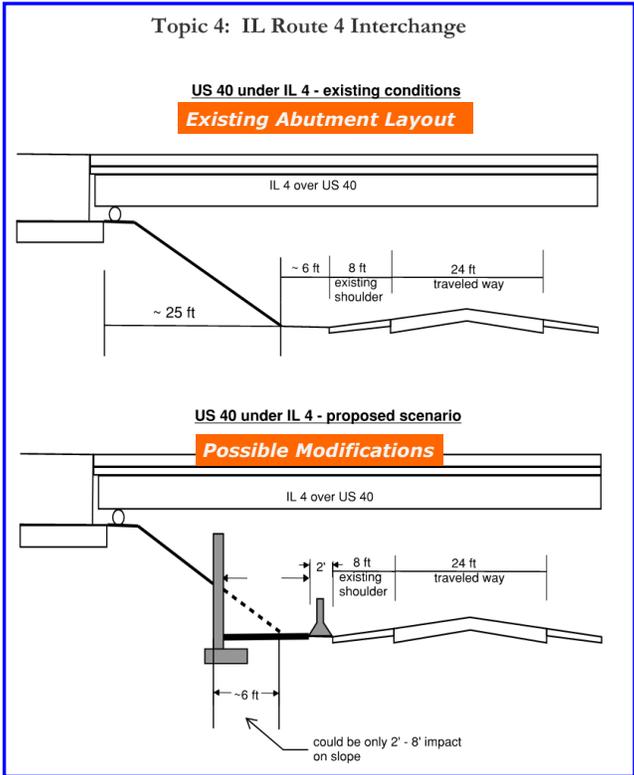
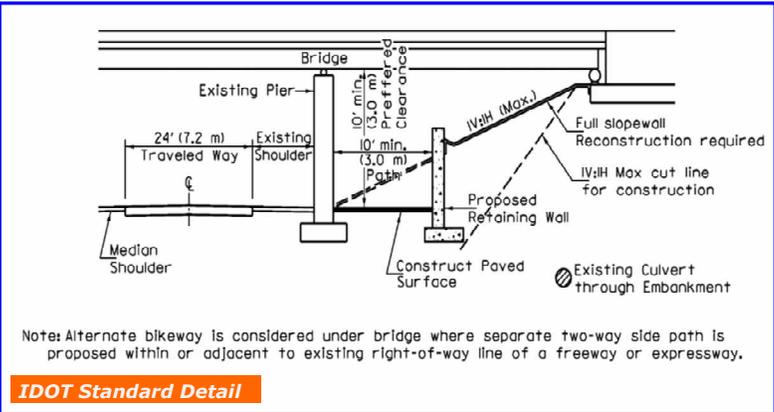
4 Recommendations for Improvements

4.1.6 IL-4 Underpass

Between the East Fork Silver Creek crossing and the Village of St. Jacob, IL-4 crosses Hwy 40 via an overpass. The overpass is supported through sloped embankments constructed on piers. The Hwy 40 pavement is located 8-10 feet from the base of the sloped abutments.



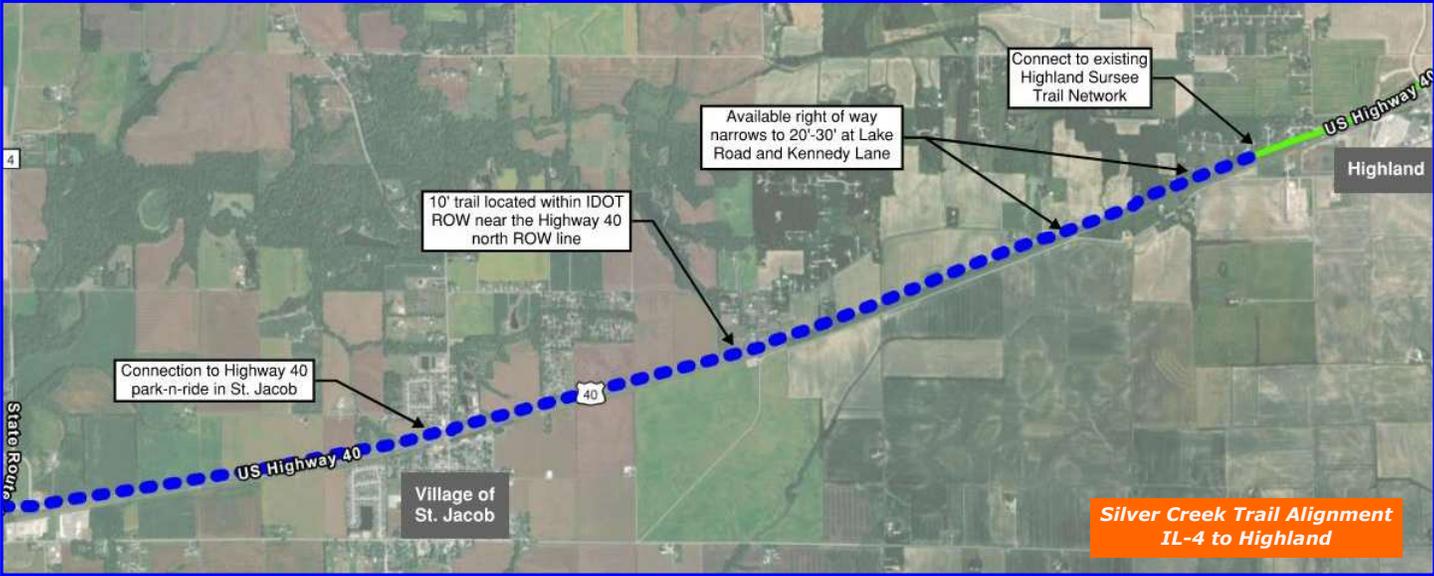
With IDOT approval gained during the master planning process, development of a trail could utilize the IDOT standard detail shown here. This will allow for the trail to pass under IL-4 along the north side of Hwy 40. Depending on the level of modifications that can be made to the existing abutments and the exact location of the pier supports, the trail may need to be protected with a concrete barrier at this location.



4 Recommendations for Improvements

4.1.7 St. Jacob to Highland

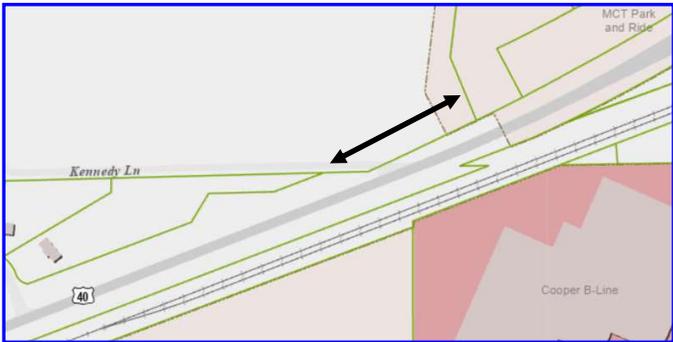
With significantly fewer challenges between St. Jacob and Highland, this segment of the trail corridor is likely to be easier to develop. Highland has brought its trail system to within a half-mile of the eastern St. Jacob Township limits. Work between the County, Highland, and the Townships of St. Jacob and Helvetia would be needed to complete this trail and bring Highland into the MCT Trail network.



There are two locations where the available right-of-way on the north side of Hwy 40 narrows to between 20'-30'. These locations, shown below, occur near the Lake Road and Kennedy Lane intersections with Hwy 40 in the last 1.5 miles of the Hwy 40 alignment. The trail in these areas, if remaining on existing right-of-way, would need to be located much closer to the highway compared to the rest of the alignment along Hwy 40. Both locations are not currently developed and the land in the vicinity is currently being used for farmland.



**Location of Reduced Right-of-Way
Lake Road**



**Location of Reduced Right-of-Way
Kennedy Lane**

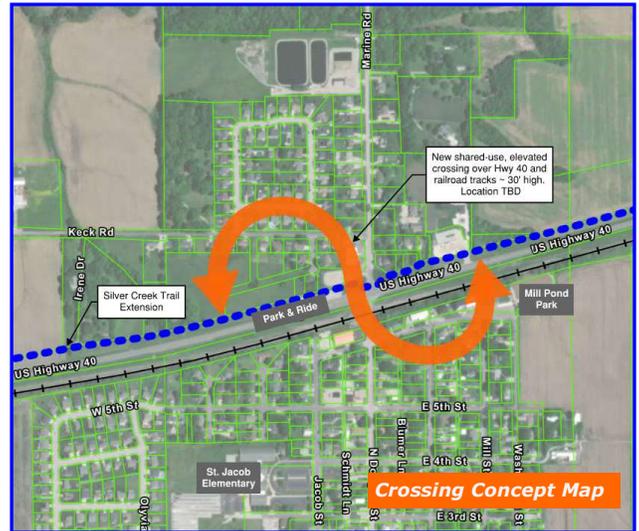
4 Recommendations for Improvements

4.2 Highway 40 and Railroad Crossing

Providing a safe pedestrian and bicycle friendly crossing of Hwy 40 and the railroad tracks was determined as a priority through the community survey. Several options for a crossing were analyzed during the study.

4.2.1 Above Grade Crossing Alternatives

The safest option for a crossing of these two transportation barriers would be an above grade crossing consisting of a bridge over the highway and railroad tracks. Three locations studied for feasibility included utilizing the IL-4 overpass structure, as well as locations both east and west of the Village. The IL-4 alternative would allow the trail to use an existing structure if feasible. According to IDOT, since IL-4 has minimal shoulders, the IL-4 overpass shoulders are often used by trucks for pulling off the roadway, and therefore, bicycle accommodations would not be safe or feasible utilizing the existing bridge. Feasibility analysis for an above grade structure then shifted to locations closer to the Village of St. Jacob, where a bridge could better serve the Village.



4.2.2 Above Grade Crossing Requirements

CSX railroad requires a minimum bottom of structure height above their rail lines of 23' and for no bridge abutment to be located closer than 25' from the centerline of the track. A summary of CSX design criteria can be found in the **Appendix**. Hwy 40 and its right-of-way is several feet lower than the adjacent tracks. This topography and requirements would require a structure to be 30' or more high. Bikeable ramps to the top of the structure would need to be ADA compliant and extend for over 650 feet, making the path from ascent to descent almost a third of a mile long.



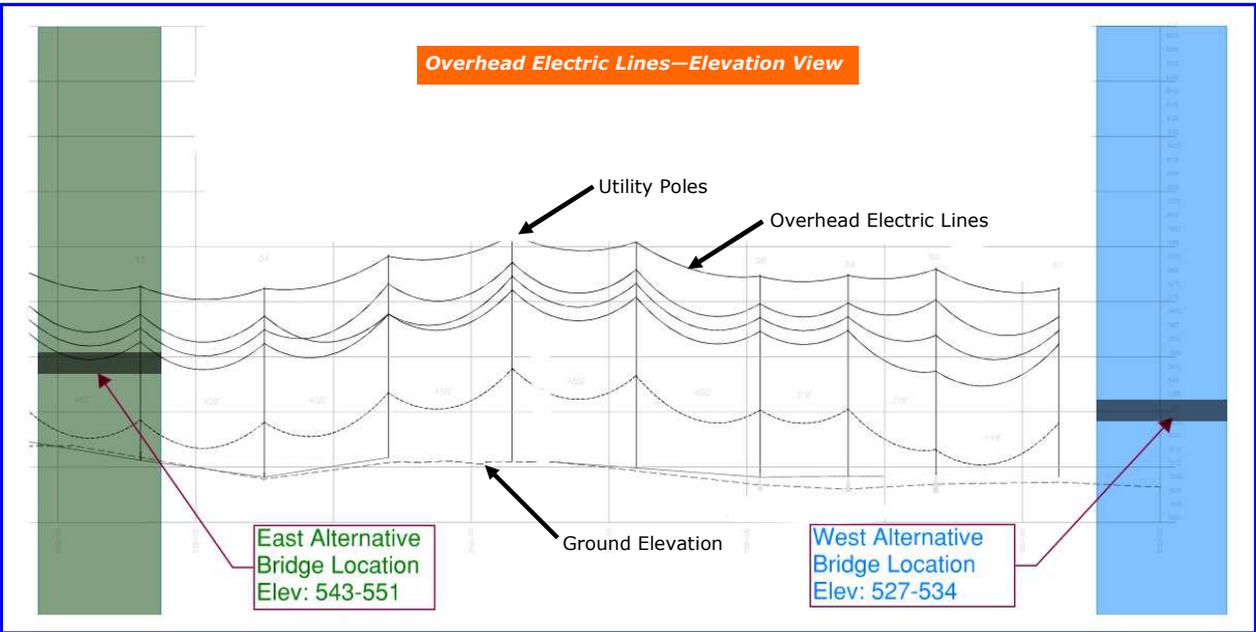
Ramps on the north side of Hwy-40 could parallel the highway; however, the south side is taken by the railroad tracks. Ramps on the south side would therefore need to be looped on property on either side of the Village. These ramps would require parcels of land to be acquired. Both locations have viable entry locations into the roadways of the Village, making land acquisition the likely final deciding factor for the location of a structure near the Village. An example of conceptual layout alternatives can be found in the **Appendix** for both the east and west sides of the Village. The range in construction cost for these provided concepts would be \$5—\$10 million.

4 Recommendations for Improvements

4.2.3 Above Grade Crossing Utility Conflicts

Several utilities lie along the Hwy 40 corridor, including gas, fiber, water, and electric. Accurate utility locations are necessary to complete design of the bridge support structures. A complete log of utilities contacted for this study is located in the **Appendix**.

Most notably, two sets of overhead transmission lines are located between Hwy 40 and the Village. One set is owned and operated by the City of Highland, and the other by Ameren. At the time of this study, the City of Highland was in the process of selling its lines. Both sets of overhead electric line elevations and clearance requirements mean some portion of these lines will need to be elevated to clear a new bridge structure. Cost for elevating overhead electric lines such as these typically range between \$100,000—\$500,000 depending on the height and number of poles impacted. Below is an elevation view of one of the sets of overhead lines showing their location in relation to elevation and location to two bridge location alternatives.



4 Recommendations for Improvements

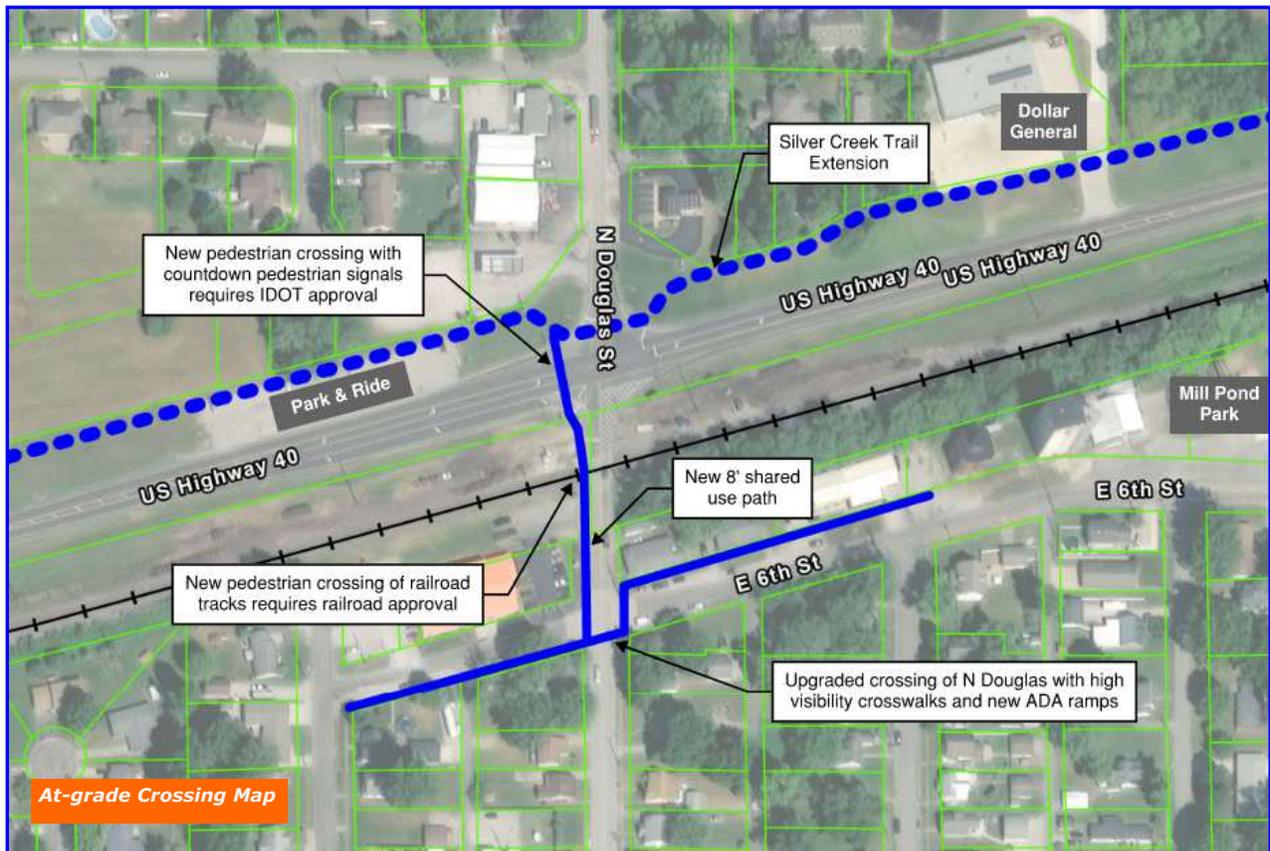
4.2.4 Douglas and Hwy 40 Intersection Pedestrian Improvements

The intersection of Hwy 40 and Douglas Street does not currently have crosswalks or pedestrian push buttons and signals. Adding pedestrian facilities to this crossing was determined as a high priority goal from the community survey. If feasible, updates to this intersection would alleviate the barrier between the north and south side of the Village. A concept plan and cost estimate for this corridor can be found in the **Appendix**.

4.2.5 IDOT and CSX Pedestrian Crossing Coordination

IDOT was first approached regarding the addition of pedestrian push button signals and crosswalks for this intersection. IDOT expressed that they would not be opposed to having these facilities installed; however, with the railroad tracks to the south of the intersection, there is not currently a sidewalk or a destination for the facilities to provide travel to. IDOT agreed to allow these pedestrian facilities if the railroad would allow a pedestrian crossing of the tracks. This will provide a sidewalk to be linked to the intersection and extend to the park-n-ride.

CSX provided a preliminary agreement to consider a pedestrian crossing at this location. Coordination with both entities has been documented in the **Appendix**.



4 Recommendations for Improvements

4.3 Park to Park Path

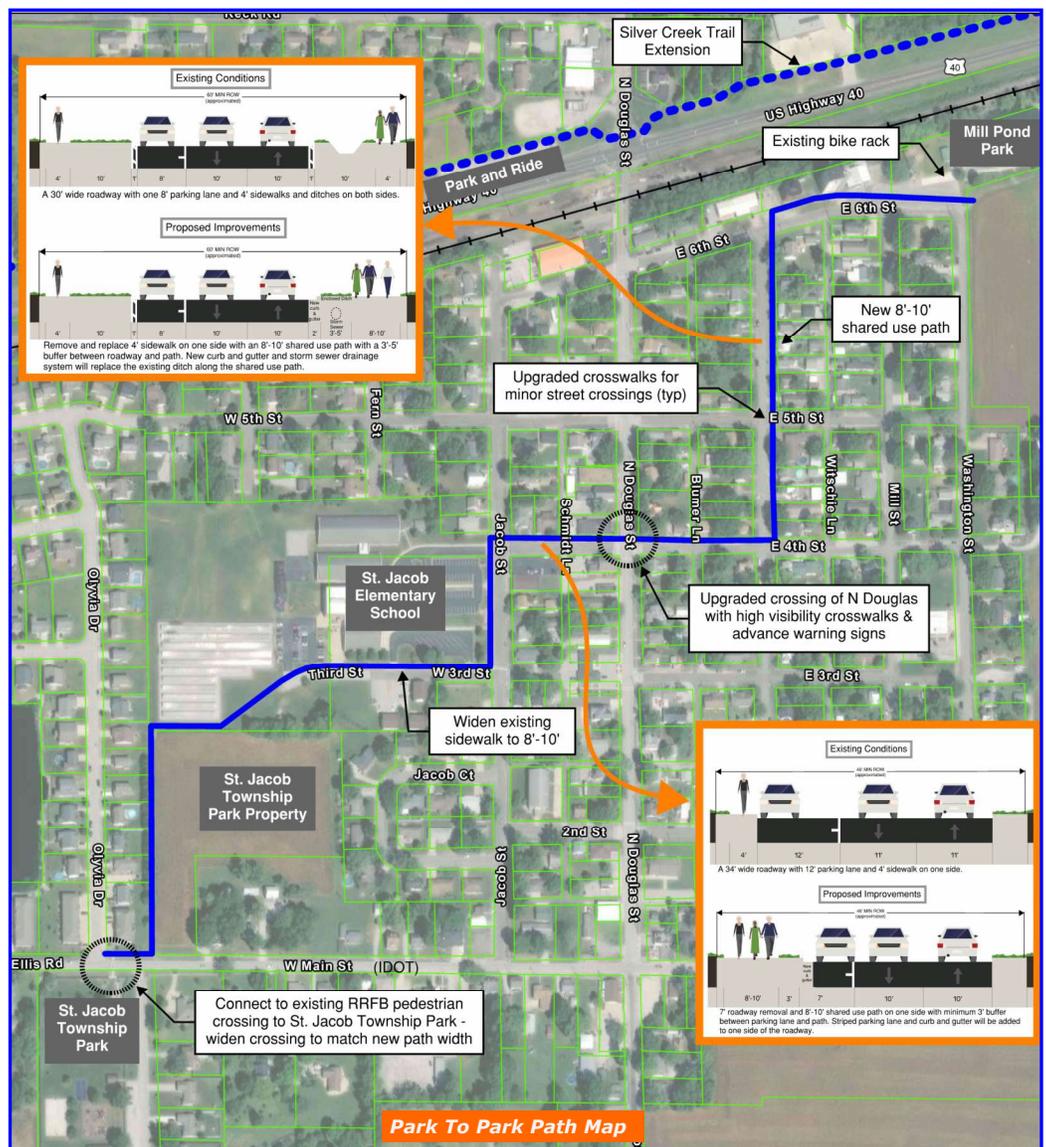
In order to connect multiple desired destinations within the Village of St. Jacob, a corridor was studied that would link one end of the Village to the other. This corridor could provide a separated bicycle and pedestrian connection through the Village that can act as a spine for pedestrian and bicycle traffic. This spine will connect both parks, bring students to school, and help funnel pedestrians to one crossing location on the busy Douglas Street. A concept plan, typical sections, and a conceptual cost estimate for this corridor are located in the **Appendix**.

4.3.1 St. Jacob Township Park and Main Street

The first segment of this shared use path would connect Olyvia Drive to St. Jacob Elementary and the St. Jacob Township Park. By utilizing the new rapid flashing beacon crossing of Main Street to the park walking trail, this path will create a safe and compliant path for village members to the #1 destination found through the community survey.

Main Street is an IDOT jurisdictional roadway. Work along this segment would require IDOT coordination and enclosing the ditches on the north side of the road. An alternative would be to work with property owners of the housing units north of Main Street to connect the path through this area and directly to Olyvia Drive.

From Main Street, the path can travel through newly acquired Park property that resides between Main Street and the school property. The park district has agreed to support a connection through this new property and is open to discussions regarding the exact alignment location.



4 Recommendations for Improvements

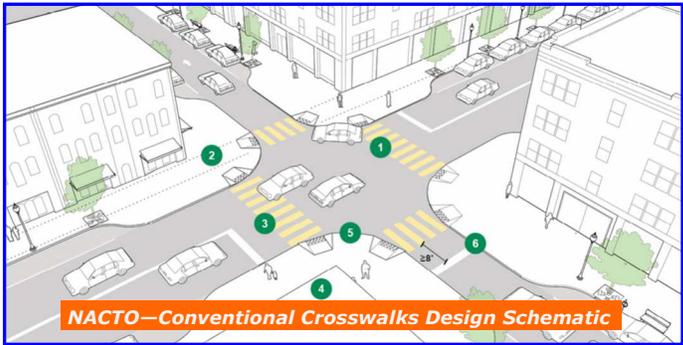
4.3.2 St. Jacob Elementary

The path would travel through school property and tie into the south doors near the bus loading parking lot which will provide a direct connection from the path to the school doors where none currently exists. The path can continue within school property or along public right-of-way by either utilizing existing wide sidewalks within the school property or with a new shared use along the right-of-way.



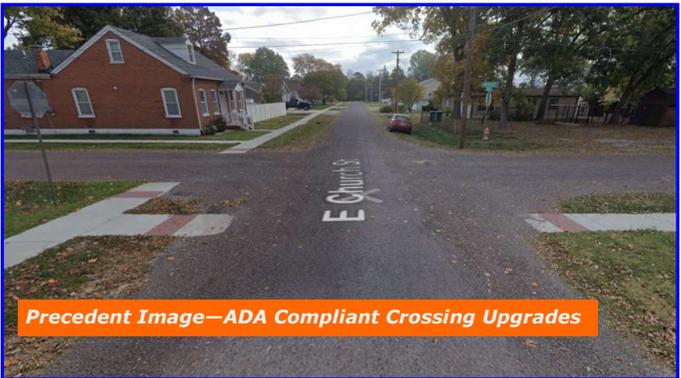
4.3.3 Douglas Street Pedestrian Crossing

Continuing from the school along 4th Street, the Park to Park Path will utilize the existing 4-way stopped controlled intersection of Douglas Street and 4th Street. This intersection can be upgraded with enhanced safety amenities for pedestrians and bicyclists, such as advanced warning signs and high visibility cross walks as shown here.



4.3.4 Residential Streets

Traveling through residential streets and connecting to Mill Pond Park, the path will help to create safe spaces for walking and riding through the heart of the Village. The Village lacks ADA-compliant ramps and safe sidewalks. The path would replace the narrow sidewalks, fill in ditches, and provide curb ramps and defined crossings.



4 Recommendations for Improvements

4.4 Country Meadows Connection

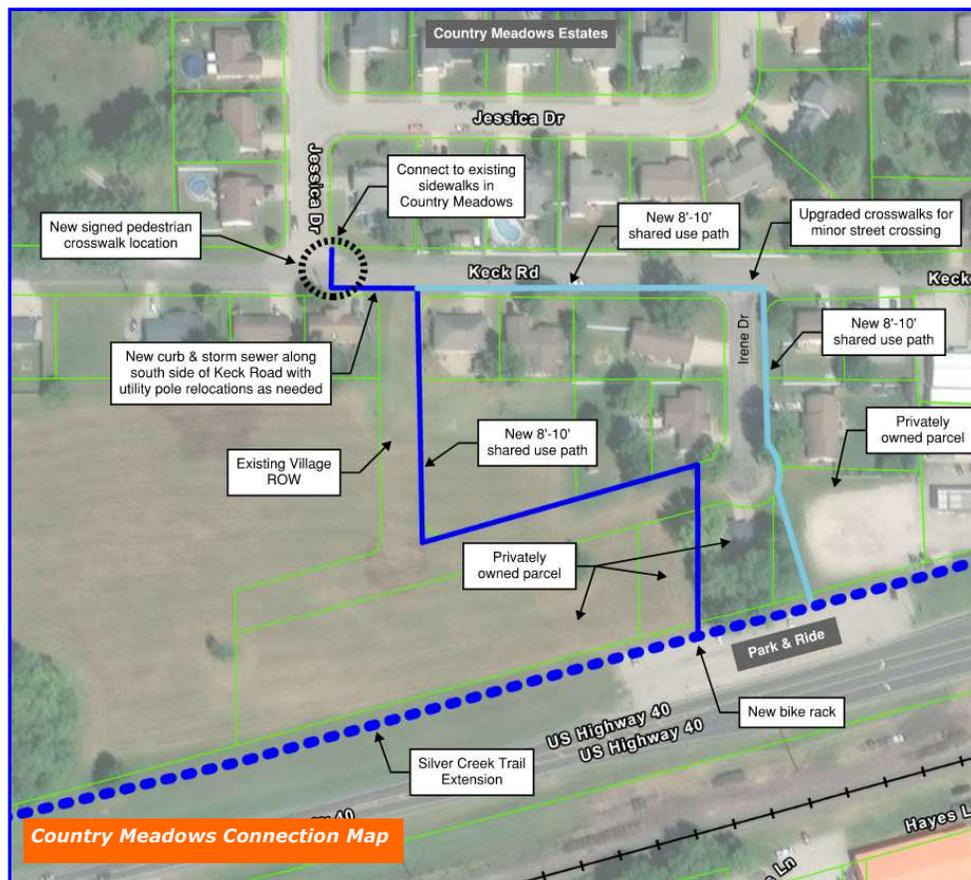
Connecting subdivisions north of Hwy 40 to the park-n-ride and the future pedestrian crossing of the highway and railroad tracks can be accomplished through a shared use path connection from Jessica Drive to the park-n-ride. A concept plan, typical sections, and a conceptual cost estimate for this corridor are located in the **Appendix**.

4.4.1 Available Right-of-Way and Keck Road

The property just north of the park-n-ride is subdivided and platted for a road that the trail can follow to Keck Road. Alternatively, the path could follow Irene Drive and travel along Keck Road by enclosing the ditch along the south side of Keck Road and adding a curb and gutter stormwater drainage system. A midblock crossing and rapid flashing beacon should be added to Keck Road to reach the Country Meadows Subdivision safely.

4.4.2 Additional Future Connections

This path could be expanded in the future to reach further north of Hwy 40 by utilizing the detention pond property on the northwest side of Country Meadows Subdivision and traveling through the Village property at their treatment facility to reach Marine Road. The path can travel north along Marine Road to Lake Road. Heading east along Lake Road, the path could reach the Stonebrook subdivision, thus adding more community members to the active transportation network with the Village.

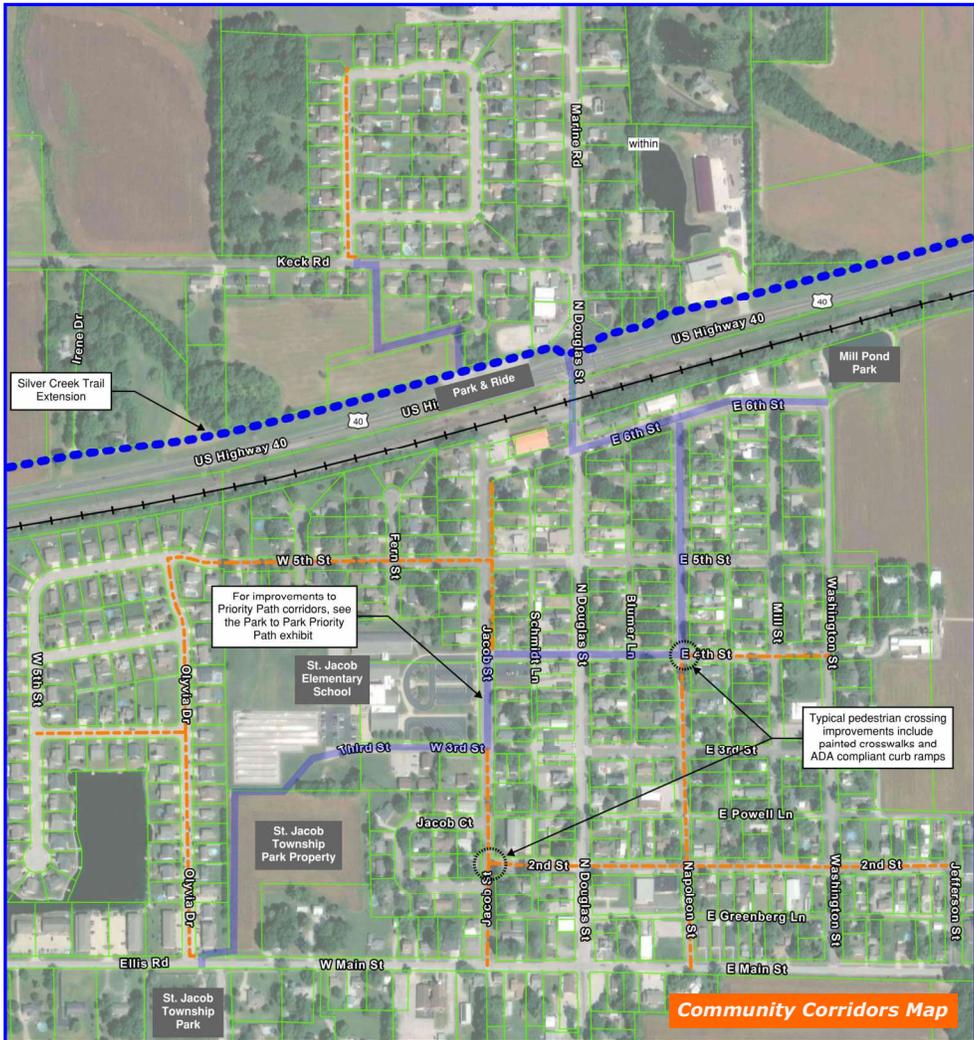
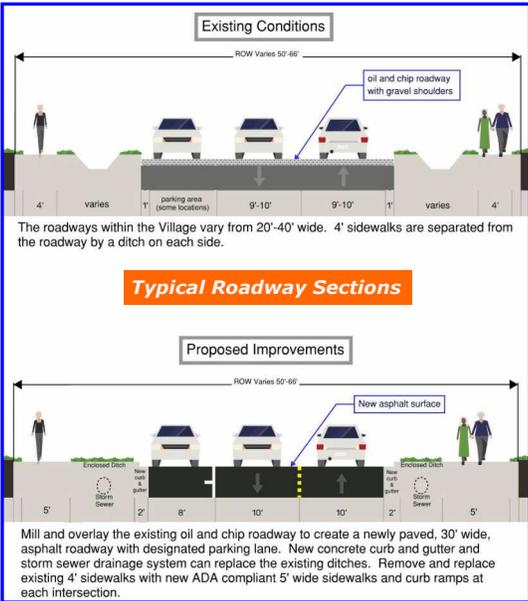


4 Recommendations for Improvements

4.5 Community Corridors

Community Corridors are roadways within the Village designated for improvements that will provide safe and accessible walking and biking options around the Village. New sidewalks, enclosed stormwater collection systems, curb ramps, and marked crossings will provide safe paths for walking. And since low-volume roadways are acceptable for bicyclists to share the roadway with vehicles, upgrades to the existing roadways will help improve bicycling options for the Village. Roadways designated as Community Corridors should be upgraded with newly paved and striped roads with designated parking areas. Typical roadway sections are shown here as an example of the types of improvements that would elevate these corridors to pedestrian and bicycle friendly Community Corridors.

These improvements will not only provide the members of the Village of St. Jacob safe routes for walking, but will also provide a safe way to access the Park to Park Path as the spine of the Village's active transportation network. They will lead community members to destinations throughout the Village. A proposed typical roadway section and conceptual cost estimate for one village block of the recommended improvements to the Community Corridors are provided in the **Appendix**. The cost estimate provided represents one village block, approximately 400' of roadway and one complete intersection is included in the estimated project cost.



4 Recommendations for Improvements

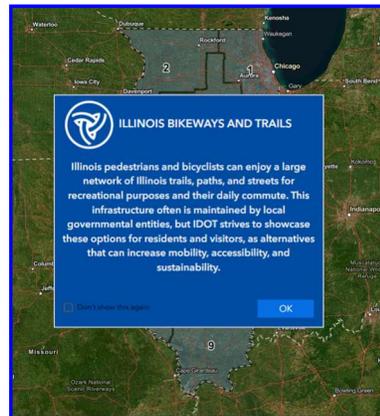
4.6 Frequently Biked Roadways

From the community survey, biking on the country roads throughout Madison County is a popular choice for recreation and exercise. Therefore, the Plan includes a map of frequently biked roadways through the Township to help guide those looking for longer rides on low-traffic roads in rural settings. The map will help with travel through the Township and into surrounding communities.

4.6.1 Determination

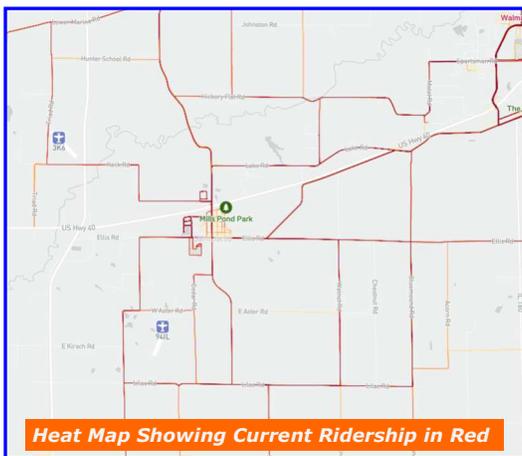
The Frequently Biked Roadways were determined using a combination of three criteria in order to provide a complete and connected route through and around the Township.

- Illinois District 8 Bike Map was used to determine roads in the Township that meet IDOT's rating system for bikeable roadways. Their rating system, downloaded map, and online map can all be accessed through their website.
- Publicly available heat maps were used to determine which roads within the Township are currently being traveled by bicyclists.
- In order to meet the goals of the bike plan, roadways were evaluated for those that help connect the Township to surrounding areas, the Village, and the popular MCT Trail network.

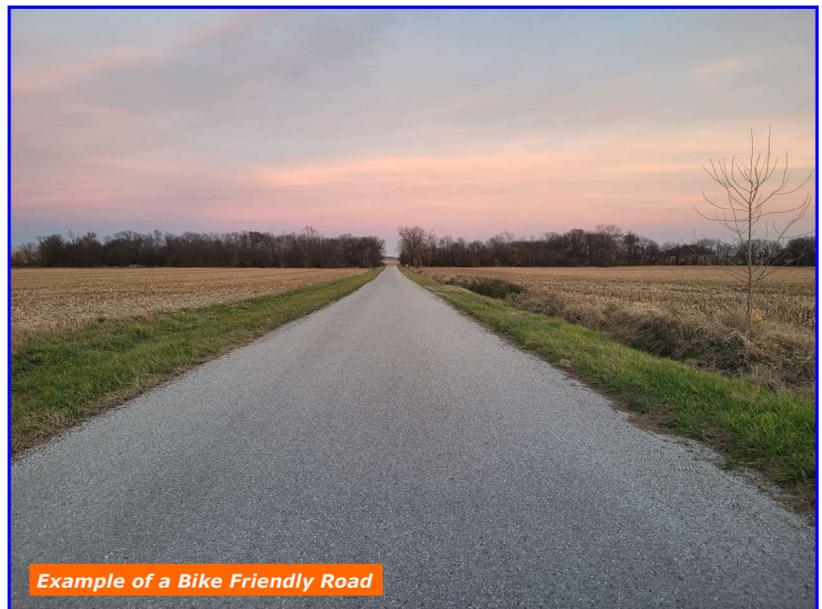


IDOT Bike Map and Online Database

<https://experience.arcgis.com/experience/973edd2b56014715a767ddd1cceb854b>



Heat Map Showing Current Ridership in Red



Example of a Bike Friendly Road

4 Recommendations for Improvements

4.6.2 Frequently Biked Roadways Map

The frequently biked roads were mapped below for use by avid cyclists. Care should be taken when traveling these roadways by bicycle. They are not intended for use by children or other vulnerable bicyclists. A full version of this map can be found in the **Appendix**.



5 Finalizing the Plan

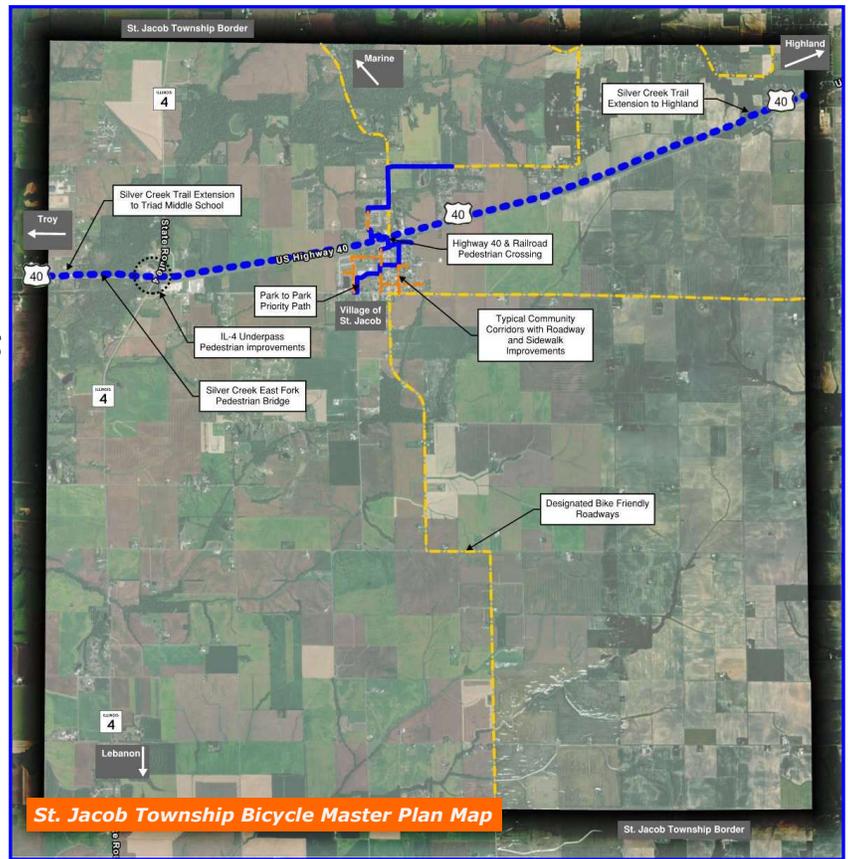
Once the recommendations developed were agreed to by the Village and the Township, final maps and an action plan were developed so that the Plan could be presented to the community at an Open House.

5.1 Bicycle Master Plan Maps

A compilation of the recommendations of this Master Plan is included in two maps for use in future planning by both the Township and the Village. Full versions of the maps can be found in the **Appendix**.

5.1.1 Township Bicycle Master Plan Map

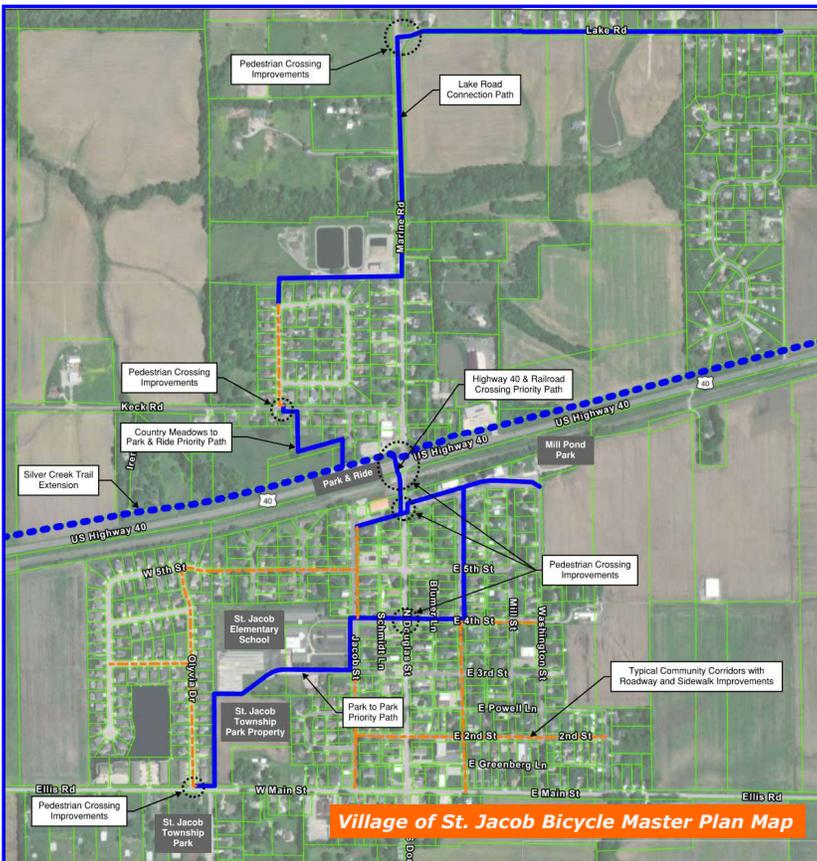
Included in the Township Bicycle Master Plan Map are frequently biked roadways, the regional Silver Creek Trail alignment, and future trail corridors that lie outside of the Village borders.



St. Jacob Township Bicycle Master Plan Map

5.1.2 Village Bicycle Master Plan Map

Included in the Village Bicycle Master Plan Map are the Community Corridors, Park to Park Path, secondary path recommendations within Village limits, and the proposed improvements to the Hwy 40 and CSX railroad crossing location.



Village of St. Jacob Bicycle Master Plan Map

5 Finalizing the Plan

5.2 Open House

The Master Plan was presented to the community through an Open House hosted on April 29th, 2025, at the Village of St. Jacob Activity Center. Over 30 community members attended and shared their comments. 70% of attendants expressed a preference to the at-grade crossing of Hwy 40 and the railroad over a bridge crossing option. 90% preferred the Silver Creek Trail extension to be a priority, and 50% also selected the Park to Park Path as another high priority for the Village and Township. Copies of the Feedback Forms submitted at the open house are in the **Appendix**.

OPEN HOUSE



Planning Our Path Forward:
Join the Bike Master Plan Discussion

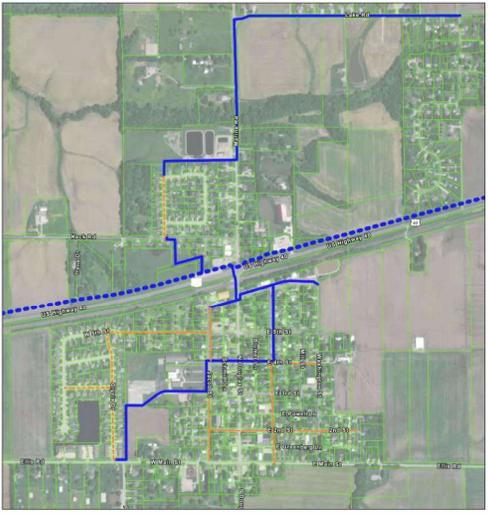
April 29th 5-7 pm

St. Jacob Activity Center
108 N. Douglas Street, St. Jacob IL, 62281



OPEN HOUSE FEEDBACK FORM

1. Please circle the path or trail you think will impact the community most.
2. Please circle the Community Corridor you think should be considered next by the Village.
3. Which alternate below is your preferred crossing of Highway 40 and the Railroad?
 At-Grade Crossing Above-Grade Crossing
4. Please provide any additional comments or questions.



Legend

- Silver Creek Trail Extension
- Shared Use Path
- Community Corridor
- Parcels






This study has been funded in part by the generous grants of our local partners: ACT and MPRD



5 Finalizing the Plan

5.3 Action Plan

To help guide the Township and the Village on a path to fulfill the recommendations of this Plan, an Action Plan was developed.

5.3.1 Adoption and Advocacy

Adoption: The first step in creating a more bikeable township is the adoption of this Plan. By adopting the Plan, the Township is committing to the development of more bicycle accommodations for its citizens and supporting improvements that will make the Township and Village more connected to the region's bicycle networks.



Advocacy: The next step for St. Jacob Township in implementing the improvements proposed in this Plan is to designate an "Advocate" for the Plan. This person could be a volunteer, board member, or other elected official of the Village or the Township. To ensure that the "Advocate" has the backing of the Township or Village and a clear understanding of roles and responsibilities, it is suggested that a job description and related responsibilities be modified and adopted by the Township or Village for the inclusion of the "Advocate" in everyday governance and policy-making decisions. The "Advocate" could then participate on a committee for the Village. With a clear designation of expectations, this "Advocate" could report annually on the progress of this Plan, help coordinate grant funding opportunities, work with the schools on biking and walking programs, and keep an updated report to the community.

5.3.2 Engagement

Community Engagement: Listening to the community and providing a place for comments and updates will help to keep the work of this Plan in line with the wishes of the community. The "Advocate" could determine how best to engage and report to the community. Keeping the community invested in the work will ensure their continued support, which is key to the future success of the recommendations of the Master Plan.



Planning Partners: Many proposed projects and improvements recommended in this Plan occur along roadways owned and maintained by local transportation partners including IDOT, Madison County, MCT, the Township, and the Village. The Township should maintain open communications with these planning partners to be sure that any infrastructure development within the Township happens cohesively with respect to both bicycle and pedestrian accommodations. By keeping an open dialogue, the Township can ensure that the recommendations of this Plan are considered early in future planning and design projects by others.

5 Finalizing the Plan

5.3.3 Funding

Utilizing the various funding sources for alternative transportation projects allows the Township to maximize development while limiting the impact on the community's available funds. Possible funding sources include:

Special taxing districts can be used to create additional funding. Business Districts have a special sales tax rate that can be used to generate construction funds for projects. Other districts could include TIF to collect property taxes for infrastructure projects and Enterprise Zones to abate sale tax on construction materials.

Federal grant funding programs such as RAISE, Highway Safety Improvement Program, and Safe Streets 4 All are available for the development of transportation projects critical to the region or that offer significant safety improvements to the transportation network.

East-West Gateway's CMAQ, STP-S, and TAP grant programs are offered each year and can be used for projects on roadways with alternative transportation components. The programs typically offer funding for 80% of project costs for awarded projects.

The State of Illinois administers several grant opportunities such as the Recreational Trails Program, Illinois Transportation Enhancement Program, Safe Routes to School, Bike Path Grant Program, Community Development Block Grant, Park and Recreational Facility Construction Grant, Open Space and Lands Acquisition and Development, Land and Water Conservation Fund, and several other Department of Commerce and Economic Opportunity programs.

Locally, MEPRD and ACT offer grants for trail development meant to complement grant-funded projects. Their grants can help municipalities with their portion of the local match for both state and federally funded projects.



Illinois Department of Transportation



5 Finalizing the Plan

5.3.4 Master Plan Recommendation Next Steps

In order to complete the recommendations of the Master Plan, the Township or Village should follow the action plan defined here.

Silver Creek Trail: The Township should continue talks and coordination with IDOT and MCT regarding this regional trail opportunity. Jarvis Township is currently completing its Bicycle Master Plan, and the two townships can work with the City of Highland and Helvetia Township to continue efforts to bring a regional trail to this area of Madison County. Annual meetings with IDOT will help maintain their involvement and give a continuation to the agreements arrived at during the planning process. Annual meetings with MCT will help ensure this corridor remains a high priority for the transit district as well.

Highway 40 and CSX Railroad Crossing: The Village and Township should continue coordination with IDOT and CSX regarding a pedestrian crossing of this vital intersection. Funding to begin the design of the intersection improvements and complete the railroad coordination needed can begin with HSIP or TAP funding. Since projects that impact railroads can be harder to fund and take longer to develop, work should start right away. Funding should be sought for preliminary engineering only in order to maximize chances of award for construction once the project has gone through the railroad coordination procedures. The project has tentative agreements with both the railroad and IDOT, and this opportunity is best capitalized before any other changes can occur. If talks with the railroad or IDOT were to fall through, the alternate bridge crossing should be explored. Conversations with property owners will guide the future location and feasibility of this structure.

Park to Park Path: The Village can begin development of this trail in phases. The first phase, a trail from Olyvia Drive to the school, would be a great Safe Routes to School grant project. The Village should apply for funding for this phase of the trail in the next grant cycle. Subsequently, the Village should look to upgrade the crossing of 4th and Douglas with the increased pedestrian safety features. Next, the Village can implement portions of the trail along 4th and Napoleon as they upgrade streets around the Village. As an alternative the remainder of the path can be developed through an ITEP grant application when available.

Note: Eventually linking this trail to the future MCT Silver Creek Trail will help both projects progress and win available funding as well as impact planning partners such as IDOT and CSX.

Country Meadows Connection: Although not a priority connection through community engagement, this connection should be a current focus for the Village in order to take advantage of the ongoing sale of the property north of the park-n-ride. The property surrounding this location is still for sale and currently underdeveloped. Making now the most ideal time for development or planning for this connection. The trail can be incorporated into any future development that the sale of the property may create and minimize the impact to surrounding property owners and any future infrastructure.

5 Finalizing the Plan

Community Corridors: The Village should continue its partnership with community members to share the cost of filling in the ditches and replacing them with culverts and stormwater management facilities. As the Village looks to update the streets around the Village, the main community corridors mapped through this Plan should be the highest priority for the Village. Opportunities to implement the recommendations of this Plan for these corridors should be sought during other routine maintenance and implementation projects around the Village, such as utility upgrades, street repairs and redevelopment. This will help lower the cost of the improvements and reduce impacts to property owners.

Sidewalks: Although not a typical goal of a bicycle master plan, sidewalks were often mentioned by community members as something they would like to see improved around the Village. By allowing bicycles to be used on sidewalks, these improvements can help support young riders and foster a healthier lifestyle for families. The Village can accomplish this through passing a new ordinance allowing bicycle riding on sidewalks or ensure there isn't a current ordinance prohibiting bicycles on sidewalks

A sidewalk construction or repair program can help the Village set aside money on an annual basis for necessary improvements and ensure that high-priority sidewalks are addressed first. Asset management is often not a goal for smaller municipalities; however, given the cost savings of proper planning, smaller municipalities are the ones that can benefit the most from these types of programs.

Frequently Biked Roadways: The Township should coordinate with the County to establish designated bike routes throughout the Township. These routes should be marked with shared roadway signs in accordance with AASHTO and MUTCD guidelines. Once signed and designated, MEPRD can add the roads to its trail map for publication. In the future, these designated roadways should continue to be well-maintained with pavement in good repair and adequate shoulder widths where applicable. The Township should also post to their website or social media page which days are planned for oil and chip applications. This maintenance is often limited to the summer months when bicyclists will be more apt to use the roads for recreation. Since pavement maintenance is usually planned well in advance, it can be advertised to give a warning to bicyclists to avoid the newly chipped roadways and the hazards of the loose gravel.