

CITY OF HUNTINGTON, WEST VIRGINIA

K Y O V A

HUNTINGTON
STRATEGIC NON-MOTORIZED
CONNECTIONS STUDY

Prepared for:



KYOVA Interstate
Planning Commission
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FINAL STUDY
July 2017

This report was prepared in cooperation with the U.S. Department of Transportation, Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the West Virginia Department of Transportation (WVDOT/WVDOT), the Kentucky Transportation Cabinet (KYTC), the Ohio Department of Transportation (ODOT) and local communities. The contents of this report reflect the views of KYOVA Interstate Planning Commission which is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the West Virginia Department of Transportation (WVDOT/WVDOT), the Kentucky Transportation Cabinet (KYTC), the Ohio Department of Transportation (ODOT), the U. S. Department of Transportation, the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA). This report does not constitute a standard, specification or regulation.

INTRODUCTION

The KYOVA Interstate Planning Commission is the Metropolitan Planning Organization (MPO) for the Huntington, WV-KY-OH Transportation Management Area (TMA) of Cabell, Wayne, and a portion of Putnam County, WV, Boyd and Greenup counties, KY, and Lawrence County, OH. KYOVA has an agreement with the Regional Intergovernmental Council (RIC) to retain the planning functions for a portion of Putnam County, WV. As the region's MPO, KYOVA is responsible for ensuring wise and coordinated use of federal- and state-level transportation funds. The planning boundary for KYOVA is shown in the map below in Figure 1.

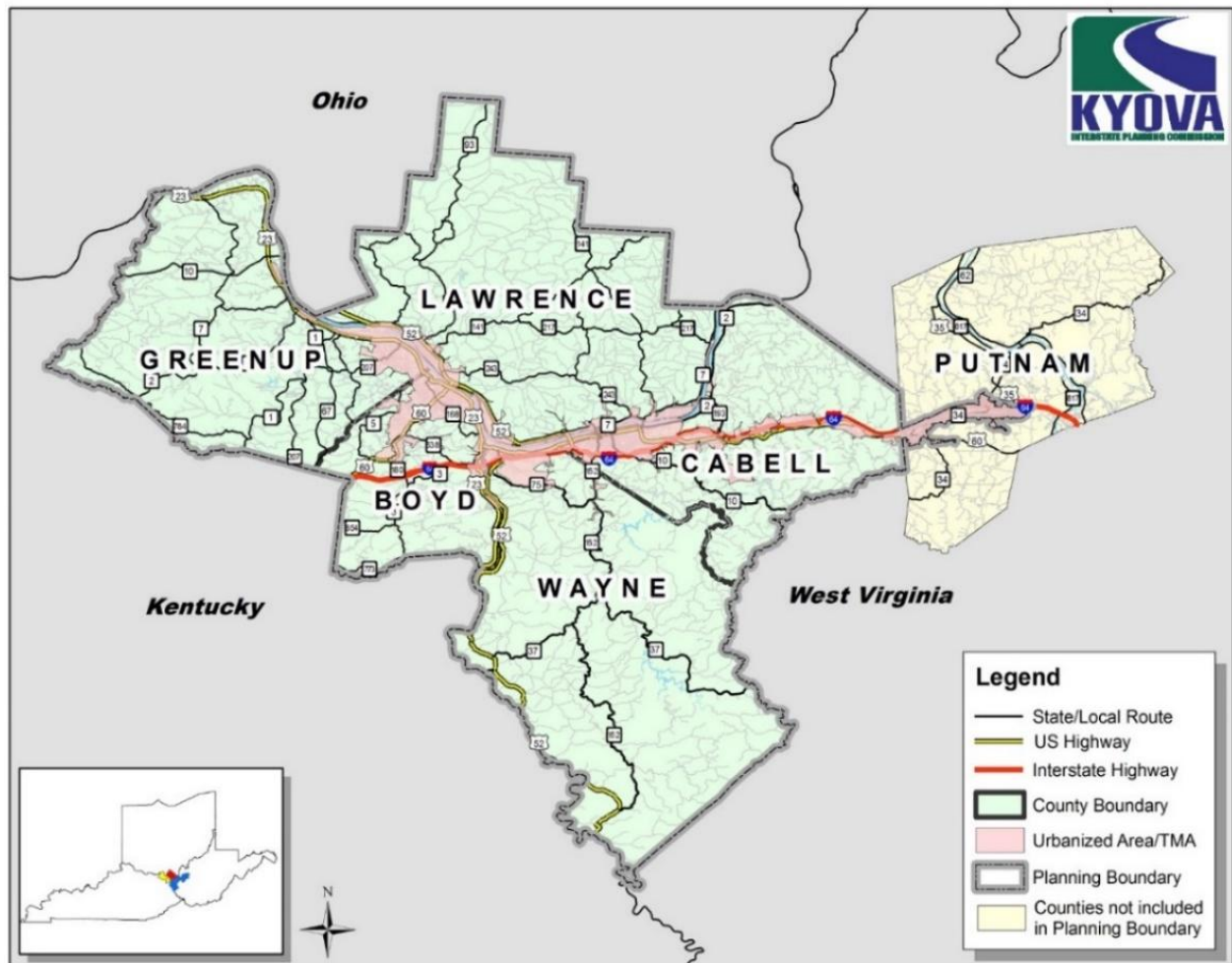


Figure 1: KYOVA Region Planning Boundary

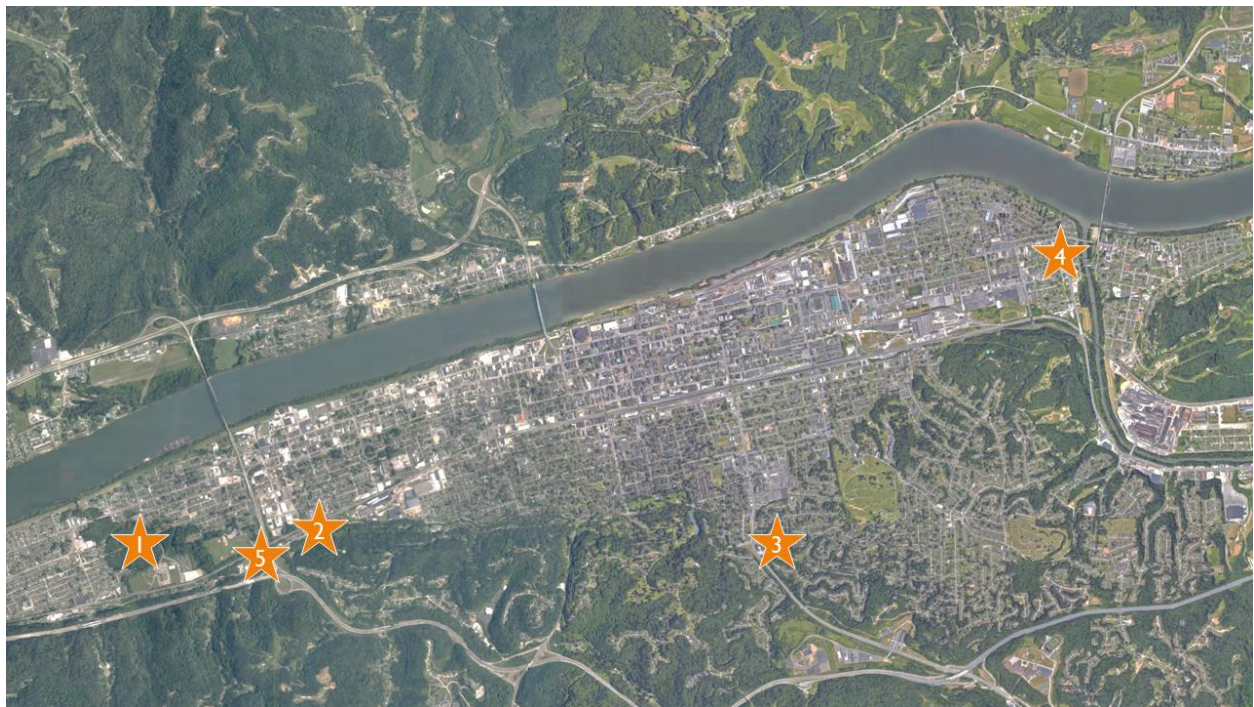
HUNTINGTON STRATEGIC NON-MOTORIZED CONNECTIONS STUDY

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To further these objectives, KYOVA commissioned the development of the Huntington Strategic Non-Motorized Connections Study. This study involved the preparation of conceptual design solutions to improve non-motorized connectivity at five specific locations in Huntington, WV. These locations were identified through collaboration between KYOVA and the City of Huntington. The numbers below correspond to locations on the vicinity map:

1. Madison Avenue between 29th Street W and 22nd Street W
2. The intersection of Memorial Boulevard and W 14th Street
3. PATH along Washington Boulevard
4. 31st Street between 3rd Avenue and 5th Avenue
5. Proposed PATH Connection between St. Cloud Commons and Memorial Park

The study assesses existing issues at the five locations by engaging stakeholder interviews and a digital field review. Concept designs illustrating the bicycle and pedestrian recommendations for each of the five locations are included in this document. Planning-level cost estimates for preliminary engineering and construction, as well as an implementable action plan are also included to describe steps moving forward.



PROJECT SHEETS

The following pages include project sheets for each location, including preliminary details on existing conditions and comments received from stakeholder engagement. Conceptual diagrams of each location are included in the project sheets to provide specific information about where the various improvements are needed.

Madison Avenue | 29th Street W to 22nd Street W

BACKGROUND

The section of Madison Avenue from 29th Street W to 22nd Street W is a two-lane, undivided roadway that runs east-west between West Huntington and Westmoreland. The speed limit along the easternmost portion of the segment is 30 mph and decreases to 25 mph in Westmoreland. Transit runs along this portion of Madison Avenue with a bus stop located on the north side of the roadway to the east of Park Avenue. The Cabell County Human Services Department immediately to the south of this location, along Park Avenue.

Madison Avenue is a scenic route with a lush tree canopy, making the route attractive to cyclists and pedestrians. However, no bicycle and pedestrian facilities are currently available along the route. Madison Avenue has 11-foot travel lanes, making it difficult and unsafe for competing modes to share the roadway. A review of the study area revealed ruts worn in the ground on the north side of the roadway, indicating that a significant number of non-motorists are traveling along the route by walking in the grass. Approximately 470 feet west of 29th Street W, Madison Avenue crosses Fourpole Creek as a two-lane bridge, forcing non-motorists into the roadway at this location.

Stakeholders indicate that motorists often exceed the posted speed limit when traveling this section of Madison Avenue. Because of this and of visibility issues associated with the topography of the corridor, stakeholders strongly support a separated pedestrian and bicycle facility along this route and a bridge structure that can support both motorists and non-motorists.

RECOMMENDED IMPROVEMENTS

A bicycle and pedestrian facility would allow for a safe connection between the residential area of Westmoreland and the residential and commercial areas of West Huntington. The conceptual design includes plans for a buffered bicycle and pedestrian path along the north side of the roadway. The path would cross the Fourpole Creek on a separated pedestrian bridge that would accommodate both modes. Buffering the path provides a safer facility for non-motorists by separating them from vehicular traffic.

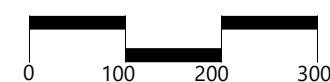
Plans also include the construction of sidewalks that would fill in gaps in between the new path and the existing sidewalk facility along Madison Avenue, east of the study area. The concept also includes the installation of high-visibility crosswalks across Madison Avenue at Park Avenue and at 22nd Street W, and across 22nd Street at Madison Avenue. These pedestrian features allow connectivity to the transit stop and to the existing sidewalk network, while also improving safety for pedestrians crossing along the corridor, especially if crossing patterns are sporadic.

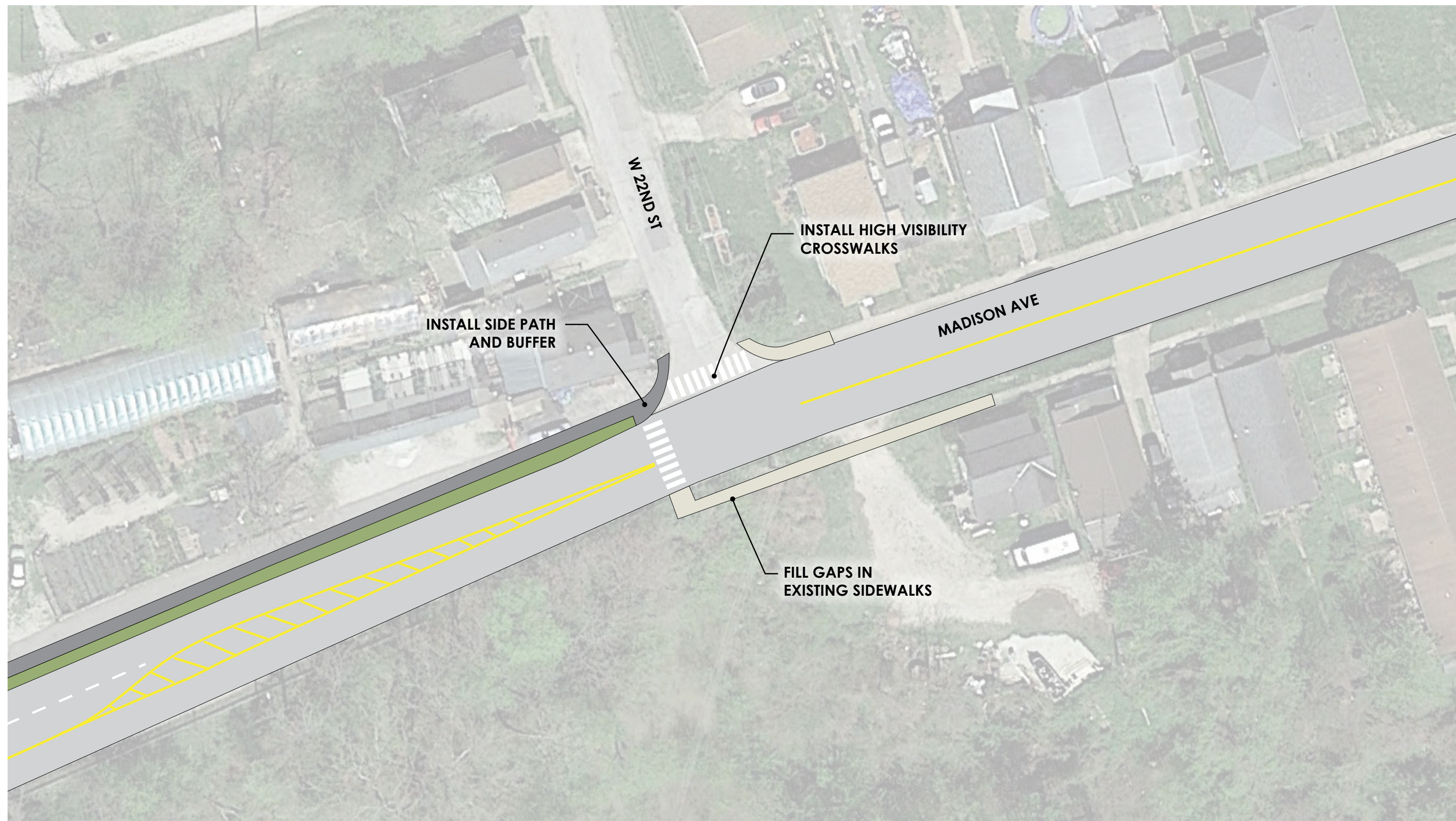
PLANNING COST ESTIMATE

A planning-level estimate for this concept includes construction of the path, the pedestrian bridge, three high-visibility crosswalks, and sidewalk to fill in existing network gaps for a total of \$590,000. Funding may be sought through the City's Department of Public Works or through partnership with KYOVA leveraging TAP or STP funding.



Madison Ave Bridge
Pedestrian Improvements





Madison and 22nd
Intersection and Sidewalk Improvements



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Memorial Boulevard | at W 14th Street

BACKGROUND

The intersection of Memorial Boulevard at W 14th Street is an unsignalized three-leg intersection directly south of the CSX rail line, east of the US 52 overpass. The intersection is adjacent to the northern limit of Memorial Park, and the Paul Ambrose Trail for Health (PATH) runs parallel to this section of Memorial Boulevard in Memorial Park. Both roadways are two-lane, undivided roadways, and the southbound and westbound legs of the intersection have channelized right-turn lanes. Striped islands are present along the channelized right-turn lanes. No bicycle or pedestrian features are present at the study intersection, and no connection to the PATH is provided. There is an existing sidewalk that runs along the west side of W 14th Street; however, it terminates at the north end of Old James River Road, north of the study intersection.

The intersection experiences pedestrian traffic due to its proximity to Memorial Park and the PATH, as well as its proximity to both residential and commercial land uses to the north. W 14th Street provides an important access point underneath the CSX rail line that connects the north and south. Stakeholders place a very strong emphasis on the importance of connecting the existing sidewalk network north of the study intersection to the PATH. Improving connectivity to the trail improves existing user experience and can attract new users, contributing to overall community and health benefits.

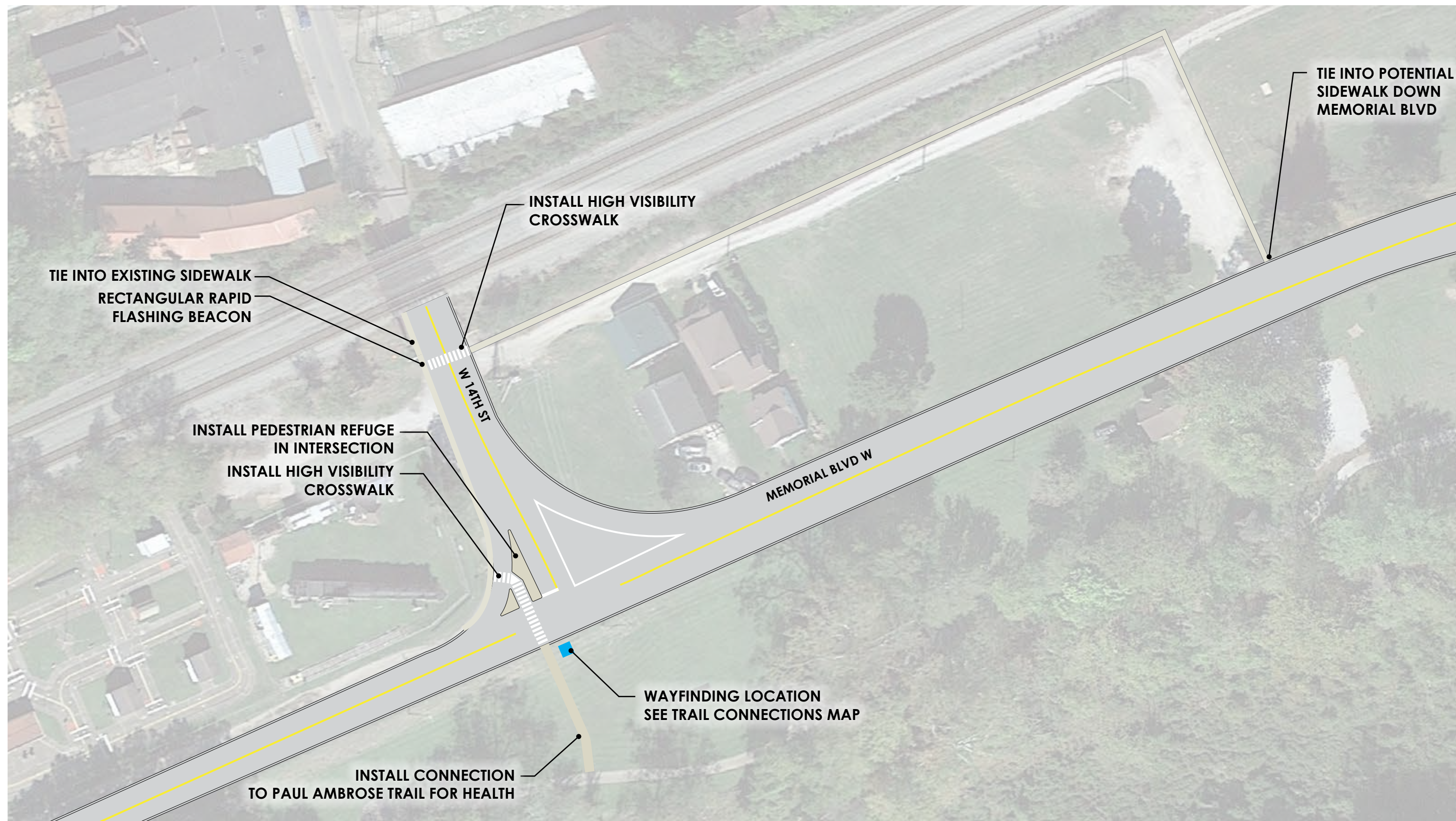
Stakeholders also have concern over the safety of pedestrians crossing Memorial Boulevard that often “get lost” in intersection operations, in comparison to motorists. Motorists also often exceed the posted speed limit at this location, placing crossing pedestrians in additional danger.

RECOMMENDED IMPROVEMENTS

The conceptual design includes construction of sidewalks along the west side of W14th Street and south of the intersection to connect the existing sidewalk north of the study intersection to the PATH south of the study intersection. To provide a safe crossing at Memorial Boulevard for pedestrians, the concept includes installation of high-visibility crosswalks across the southbound slip lane and across the west leg of the intersection, as well as construction of a pedestrian refuge island along the southbound slip lane. The pedestrian refuge island allows for two-stage crossings, improves visibility of pedestrians to motorists, and provides a physical barrier as a traffic-calming measure. The concept also includes installation of wayfinding, which improves accessibility and connectivity of the non-motorized network.

PLANNING COST ESTIMATE

A planning-level cost estimate for this concept includes construction of the sidewalks and the pedestrian island, installation of a wayfinding sign where the sidewalk meets the PATH, and installation of high-visibility crosswalks across the southbound slip lane and across Memorial Boulevard, for a total of \$25,000. Funding may be sought from a variety of sources such as: Department of Public Works; RTI Foundation funds; TAP/STP funds.



14th and Memorial
Intersection and Sidewalk Improvements



Kimley»Horn

PATH along Washington Boulevard | Holderby Road to Military Road

BACKGROUND

The section of Washington Boulevard from Holderby Road to Military Road is a two-lane, undivided roadway that connects commercial land uses along Hal Greer Boulevard to residential land uses to the east. Meadows Elementary School is adjacent to the western limit of the study segment, in the southwest corner of Washington Boulevard at Hal Greer Boulevard. The only sidewalk present along the study segment is located in front of the school and connects to sidewalk networks to the west. No bicycle facilities are located along the study segment; however, a section of PATH runs east of the intersection of Washington Boulevard at Military Road. The Washington Boulevard travel lanes are 18-feet wide, and on-street parking is present along the north travel lane.

Stakeholders are concerned about the disjointed segments of the non-motorist network and about gaps in the PATH trail system. Specific interest has been placed on this location due to the opportunity to connect Meadows Elementary School to PATH. Additionally, stakeholders indicated concerns about safety crossing Washington Boulevard at Military Road, where that segment of the PATH terminates.

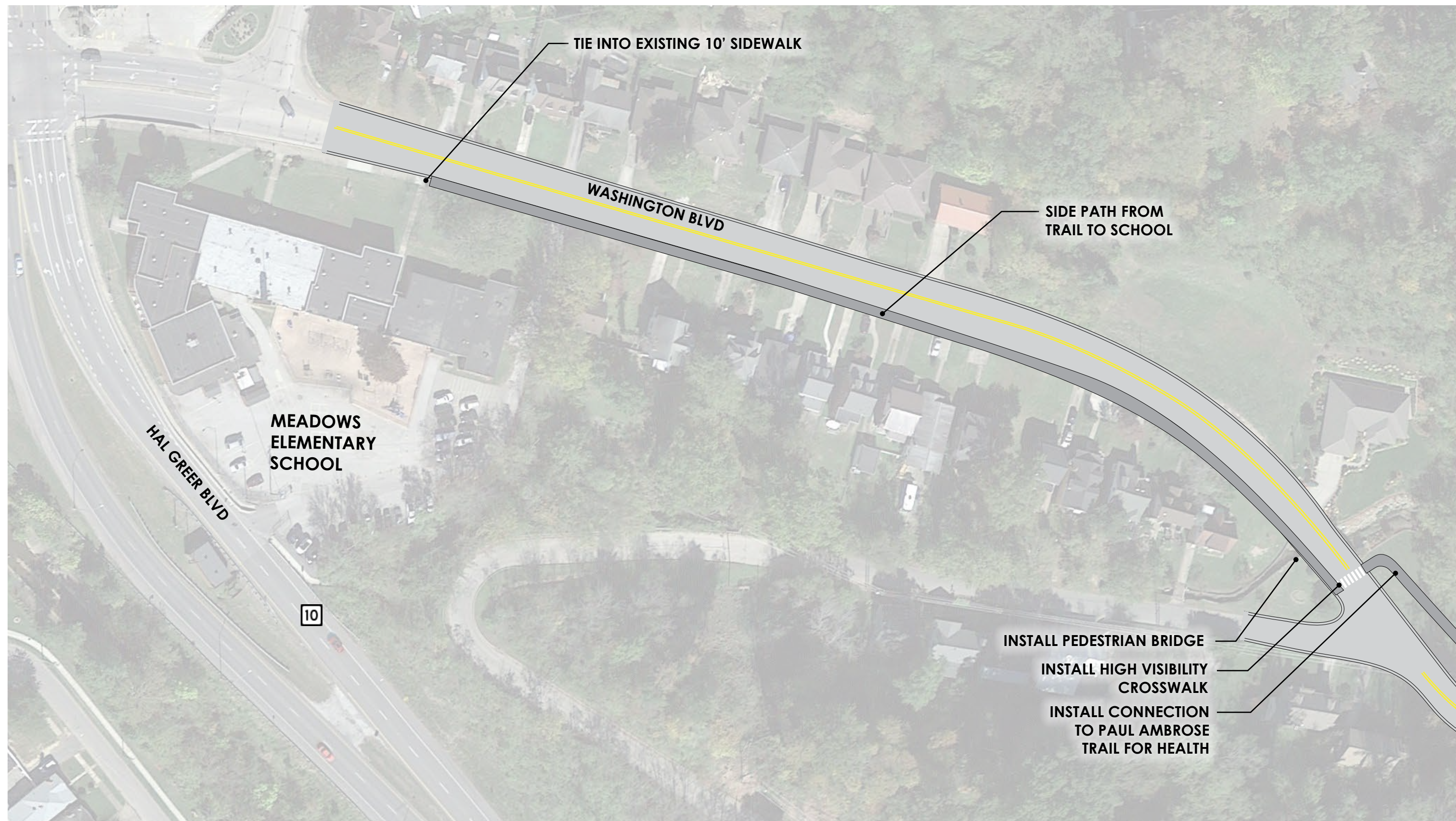
RECOMMENDED IMPROVEMENTS

Connection is provided in the conceptual design by constructing a section of the PATH along the south side of Washington Boulevard from the sidewalk in front of Meadows Elementary School to the PATH entrance at Military Road. Due to the residential nature of the study area, connecting the sidewalk network to the PATH network has the potential to attract many new users while improving existing user experience, resulting in overall community and health benefits. Additionally, because of its proximity to an elementary school, the proposed facility will most likely attract some additional younger, more inexperienced pedestrians and bicyclists. The protected nature of the PATH provides additional safety benefits for these users. West of Military Road, Washington Boulevard crosses Fourpole Creek. To accommodate the proposed PATH extension, the conceptual design includes construction of a pedestrian bridge to cross the creek. Finally, to provide a safe crossing across Washington Boulevard, a high-visibility crosswalk is proposed across the west leg of the intersection at Military Road. High-visibility crosswalks have been shown to increase motorists yielding and help emphasize the presence and primacy of non-motorists.

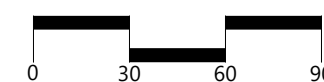
An alternative cross section across Fourpole Creek is also included. Given the high cost estimates for a pedestrian bridge, the cross section shows an alternative that includes lane diets to the existing road to accommodate for a 10 foot sidepath. Additional studies will be needed to decide the type of curb and gutter treatment required to accommodate the lane diet.

PLANNING COST ESTIMATE

A planning-level estimate for this concept includes construction of the path, the pedestrian bridge, and one high-visibility crosswalk, for a total of \$220,000. Funding may be sought through partnership with KYOVA leveraging TAP or STP funding. This may also present an opportunity for a partnership with GHPRD as they own the property north of the roadway.



Washington Boulevard
Sidewalk and Crosswalk Improvements



Kimley»Horn

31st Street | 3rd Avenue to 5th Avenue

BACKGROUND

The section of 31st Street from 3rd Avenue to 5th Avenue is a four-lane undivided roadway that runs parallel to Guyandotte River. All three minor streets, 3rd Avenue, 4th Avenue, and 5th Avenue, provide access over the river to the east side, along which a segment of PATH traverses. Sidewalks are present along the major and minor streets; however, no bicycle facilities are present along the study segment.

The study segment's proximity to commercial and residential land uses, as well as its potential to connect to the PATH on the east side of the river, make this corridor a desirable connection point for the non-motorist network. Stakeholders indicate that conditions of existing pedestrian facilities are poor and that there is currently no safe passage to the PATH along the Guyandotte River. Bicyclists will often use the roadway on 4th or 5th Avenue to cross the river, but will find themselves in difficult and unsafe traffic conditions with motorists. Stakeholders also have observed pedestrians crossing 31st Street mid-block, which can be attributed to both the poor quality of pedestrian facilities and to poor crosswalk striping at the minor street.

RECOMMENDED IMPROVEMENTS

The outside travel lanes of 31st Street are wide, and the conceptual design takes advantage of that width by proposing installation of bicycle lanes along each side. A well-defined bicycle network provides a safer ride for cyclists and may attract new users to the facility. To improve pedestrian safety along the corridor, the concept includes installation of new high-visibility crosswalks across all legs of the intersections at 4th Avenue and at 5th Avenue. The concept also maintains the existing sidewalk network, fixing breaks in the network where necessary to promote pedestrian mobility. Sidewalk improvements and crosswalk improvements provide a safer experience for pedestrians, while also decreasing the need to cross mid-block due to poor quality of facilities.

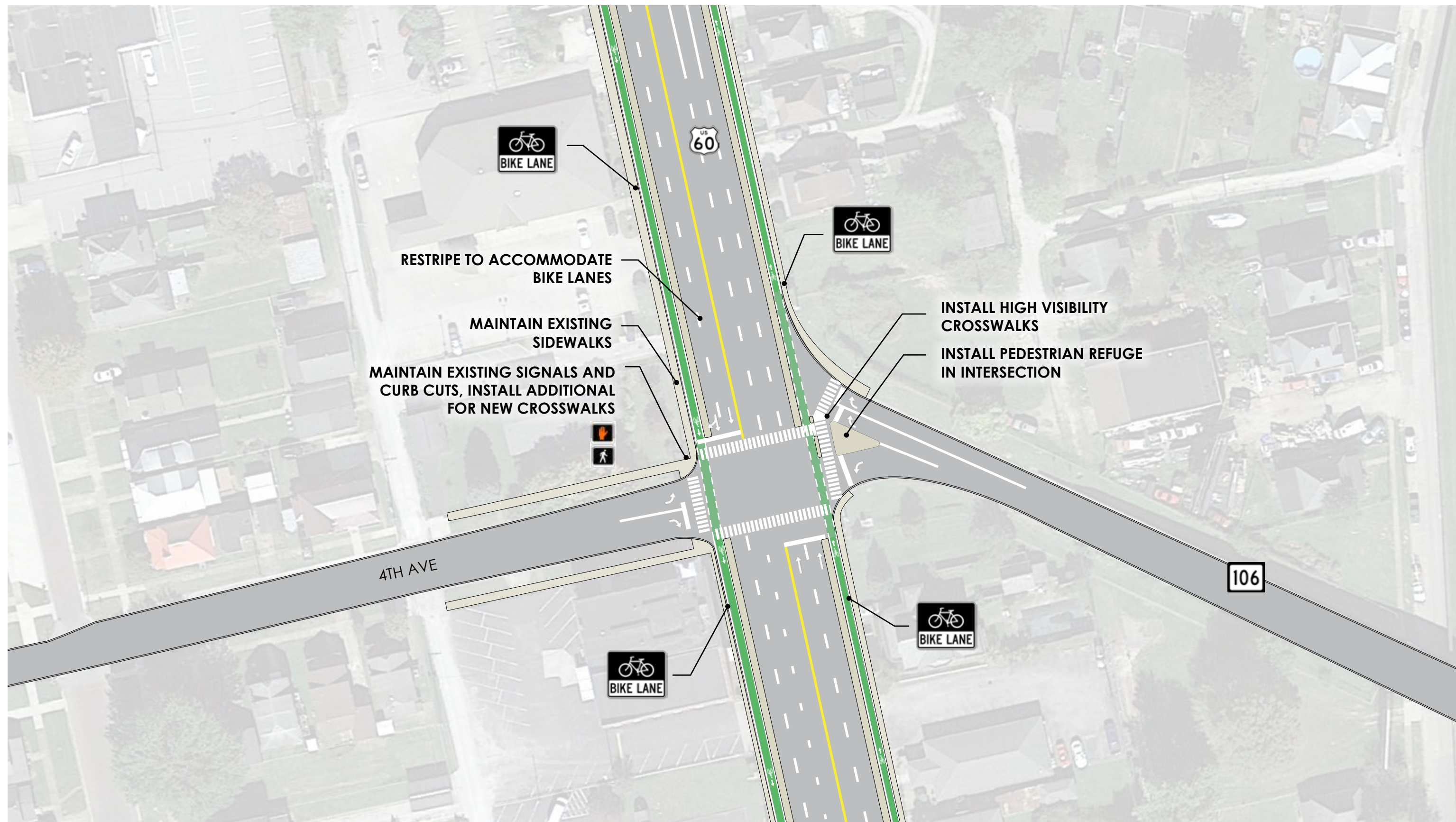
At 4th Avenue, the east leg of the intersection is skewed and the right-turn lanes are channelized, which affects pedestrian visibility to motorists. The concept includes a pedestrian island to emphasize the presence of pedestrians and to allow for two-stage crossings. At 5th Avenue, the east leg of the intersection is separated from on-street parking by a wide striped gore, making the crossing longer and more dangerous for pedestrians. To address this, the concept also includes a pedestrian island on this leg of the intersection.

Two alternative cross sections are also shown here to accommodate 1) a cycle track with parking on one side; and 2) buffered bicycle lanes. Both treatments require lane diets, particularly for the portion of the road that includes the left-turn lane and/or the two-way left turn lane.

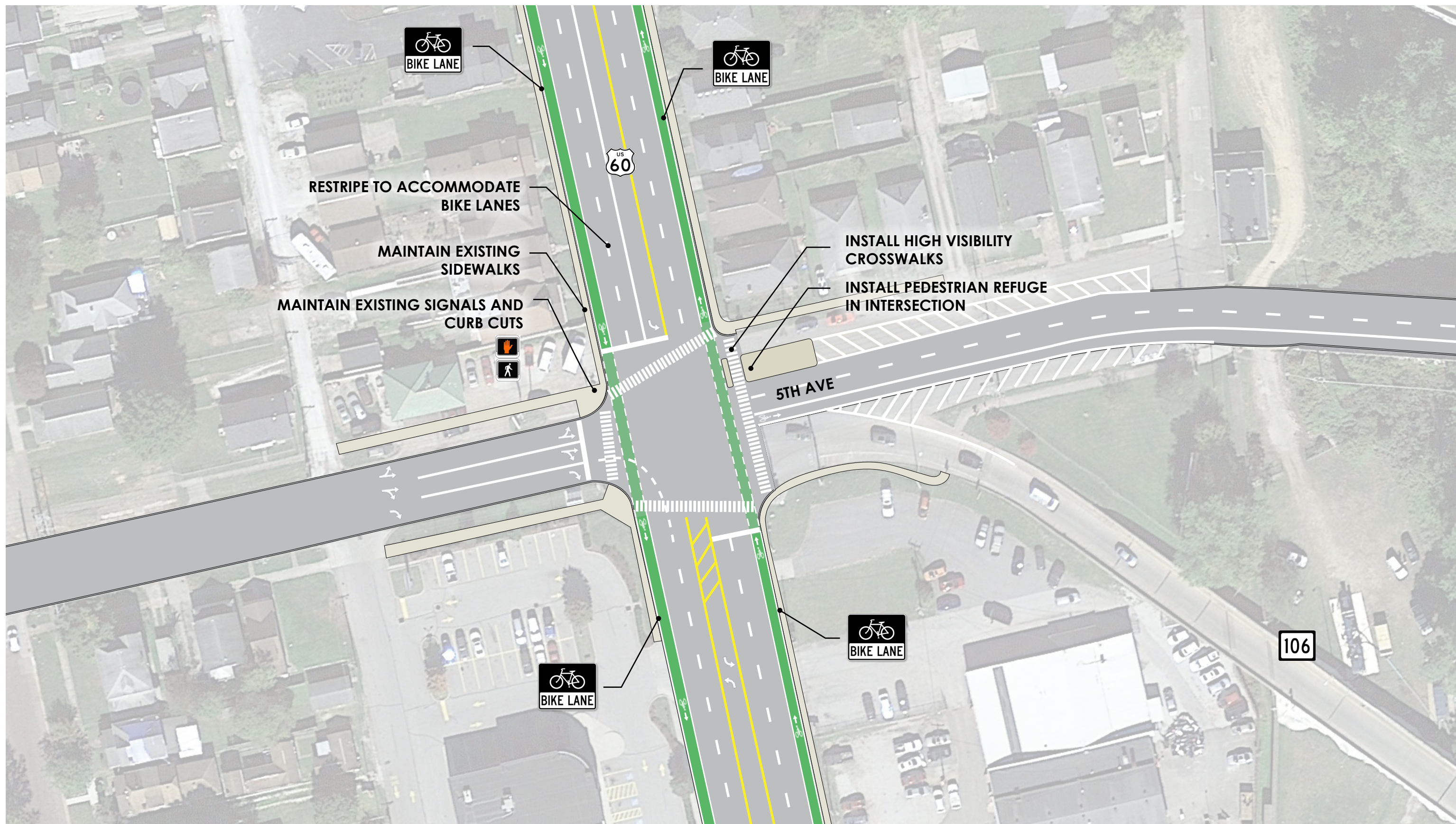
CSX has donated a bridge south of the study segment to PATH. The improvements included in this concept improve safety and travel conditions for non-motorists in the near future while also reserving the ability to tie into a future crossing at this bridge in the future.

PLANNING COST ESTIMATE

A planning-level estimate for this concept includes striping of the bicycle lanes, installation of nine crosswalks, and construction of two pedestrian islands, for a total of \$45,000. Funding may be sought through TAP/STP funds.



31st and 4th
Intersection Improvements

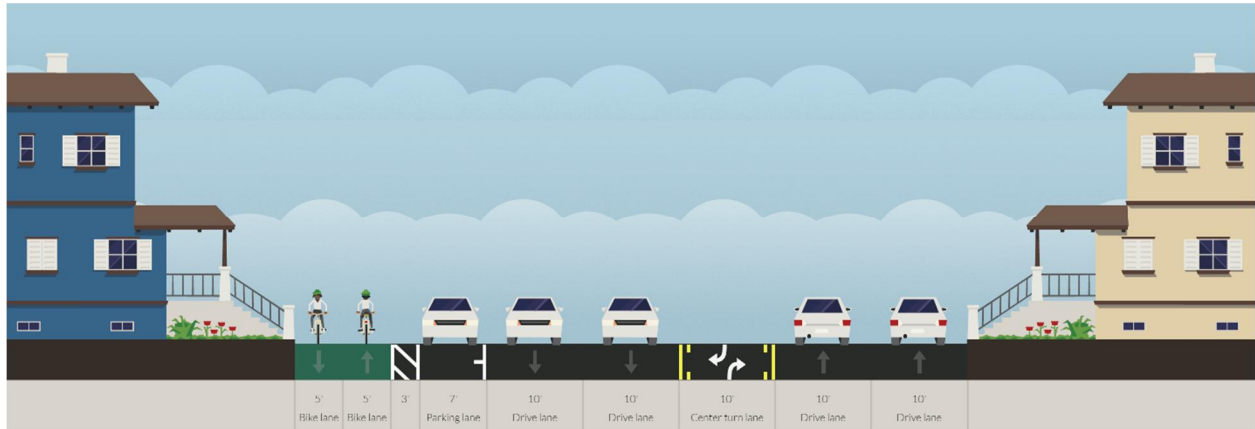


31st and 5th
Intersection Improvements

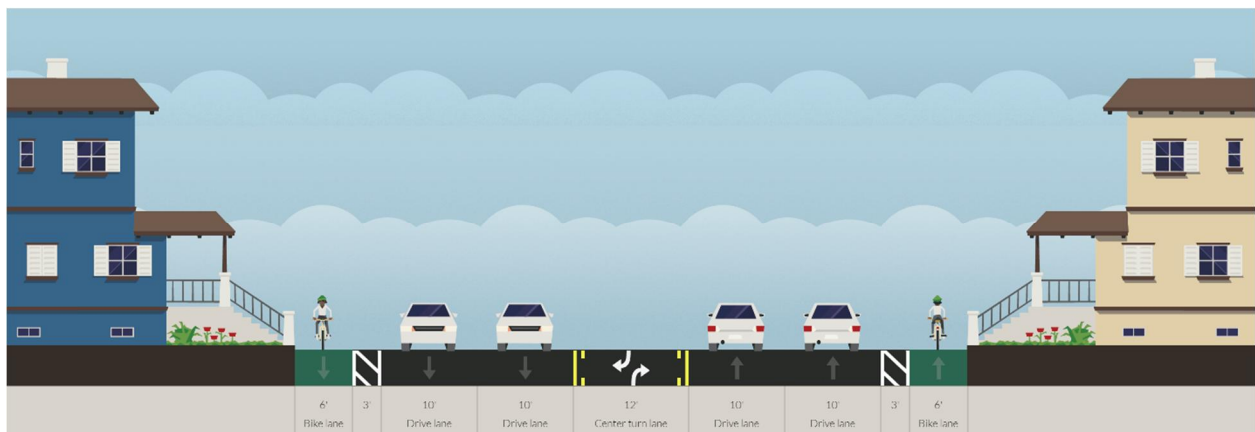


POTENTIAL ALTERNATIVE CROSS-SECTIONS

31ST STREET, CROSS-SECTION ALTERNATIVE WITH PARKING ON ONE SIDE AND CYCLE TRACK



31ST STREET, CROSS-SECTION ALTERNATIVE WITH BUFFERED BIKE LANES



PATH Connection | St. Cloud Commons to Memorial Park

BACKGROUND

St. Cloud Commons is a park in West Huntington bound by Jackson Avenue to the north and by W 17th Street to the east. Memorial Park is located east of St. Cloud Commons, bound by Memorial Boulevard to the north, Memorial Park Drive to the east, Arthur Street to the south, and Harvey Road to the west. Segments of the PATH trail network traverse both parks; however, the trails are not connected. The parks are separated by two significant physical barriers: the US 52 limited access facility, which traverses north-south to separate the two parks, and the CSX rail line, which traverses east-west to separate the parks.

Stakeholders place a lot of importance on the need to connect the two parks and PATH trails because of community input and the desire to connect east and west non-motorist networks.

RECOMMENDED IMPROVEMENTS

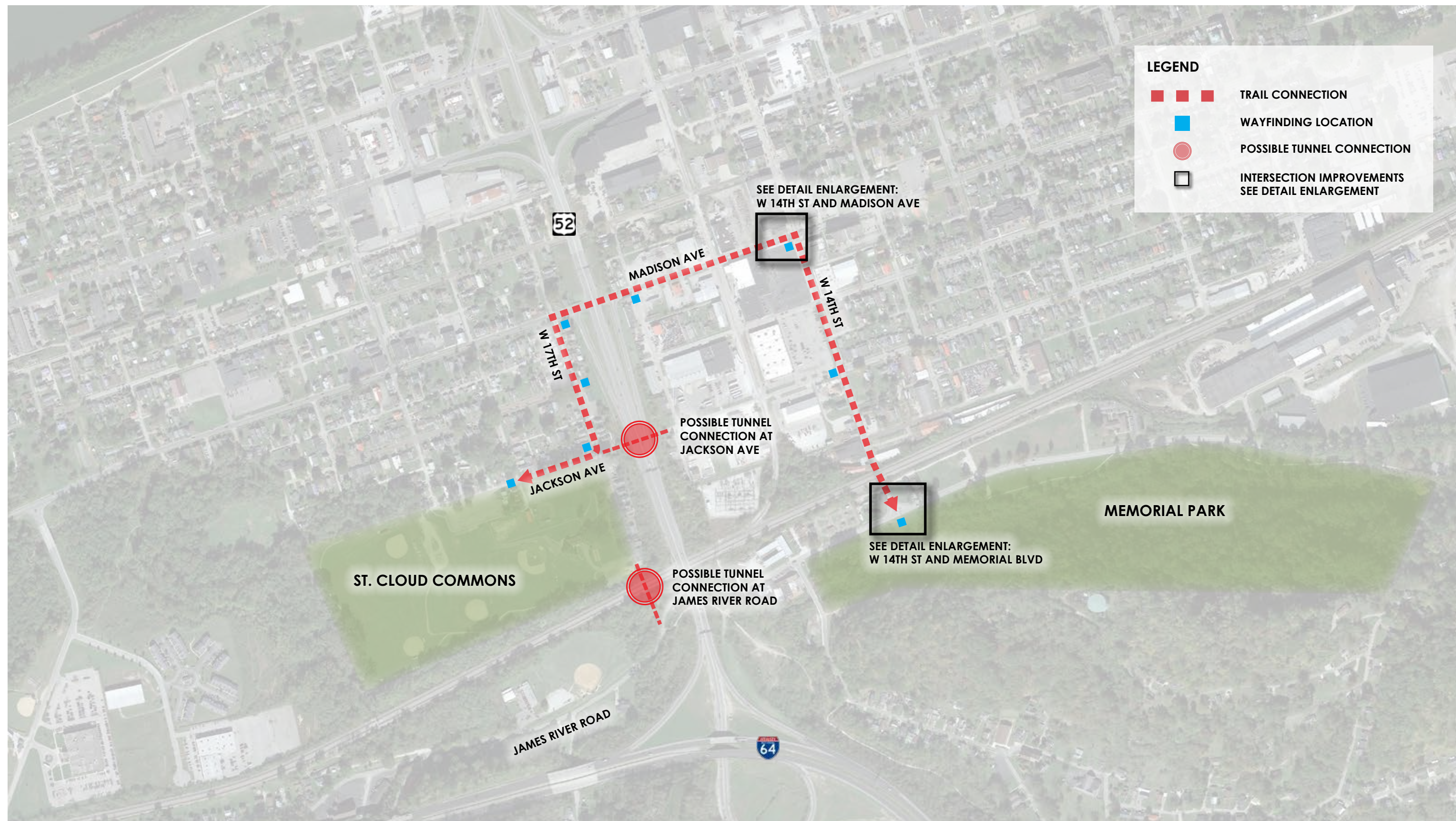
To connect the two parks, the conceptual design includes routing an active transportation path from the Jackson Avenue entrance of St. Cloud Commons east to W 17th Street, north to Madison Avenue, east to W 14th Street, and south to Memorial Boulevard. This routing takes advantage of existing underpasses at Madison Avenue and at W 14th Street. The concept also includes the installation of wayfinding signs along the path to direct non-motorists from one park to the other, improving accessibility of the non-motorist network.

Additionally, the concept includes intersection improvements at the intersection of Madison Avenue at W 14th Street, as well as the aforementioned intersection improvements at the intersection of Memorial Boulevard at W 14th Street. Improvements at the Madison Avenue intersection include the installation of four crosswalks across all legs of the intersection, which would promote pedestrian safety while connecting the proposed path to the existing sidewalk network. Wayfinding and intersection improvements make the trail more comfortable, which improves the existing user experience while also attracting new users.

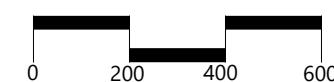
Two tunnel alternatives, one at Jackson Avenue and one at James River Road, were also conceptually included to provide more direct connections; however, both would incur significantly higher construction costs and require extensive additional study.

PLANNING COST ESTIMATE

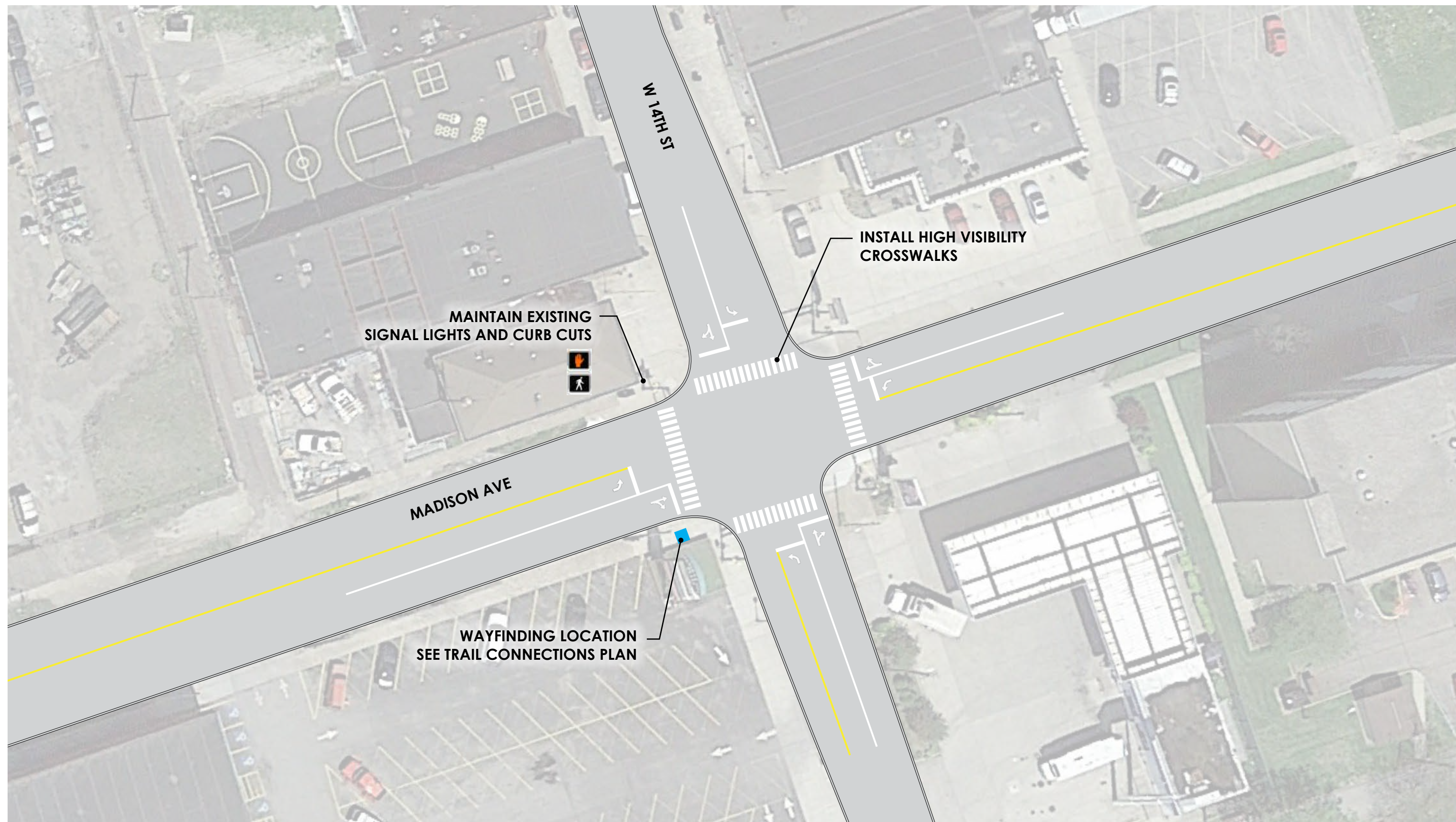
A planning-level cost estimate for this concept includes construction of the path, installation of four crosswalks at the intersection of Madison Avenue at W14th Street, and installation of seven wayfinding signs along the path, for a total of \$428,000. Cost estimates for tunnels at Jackson Avenue and at James River Road have not been determined but are estimated to significantly increase costs associated with this project. Funding may be sought through the City's Department of Public Works or through partnership with KYOVA leveraging TAP or STP funding.



St. Cloud Commons to Memorial Park
Possible Trail Connections Map



Kimley»Horn



14th and Madison
Intersection Improvements



