

**West Union Street Improvements Project Public Comment and Response Information,
August/September 2022**

The public comment period for the ATH-West Union Street project was extended between August 18, 2022 and September 17, 2022 to cover the following plan revisions:

- The project will include crosswalk and sidewalk improvements at the West Union Street/South Shafer Street intersection, but a roundabout at this intersection is no longer proposed as part of this project.
- The alignment of the Herrold Avenue extension to West State Street has been revised.
- Sanitary sewer improvements from Shafer Street to Depot Street are no longer proposed as part of this project.

Questions and comments submitted in the 2022 public comment period are below, along with the response from the Engineering and Public Works Department. For ease of review, the comments have been grouped into general categories.

Pedestrian and Cyclist

Comment: I am glad to see the sidewalk on the western end of the project is being retained as originally presented. We need to get pedestrians away from traffic where possible without extending their journey for the sake of the cars.

Response: Thank you for your comment.

Comment: Rapid Rectangular Flashing Beacon (RRFB) Push Button Position at Union St. Bikeway Crossing: The current locations for the RRFB push buttons are in positions that make it difficult for bicyclists to easily activate the signal. According to NACTO in their Urban Bikeway Design Guide (<https://nacto.org/publication/urban-street-design-guide>), it is required that "...push-button activation shall be located so bicyclists can activate the signal without dismounting." A preferred design at the bikeway crossing might be for a separate post for the button directly adjacent to the bikeway. It appears that this may be the new design configuration as detailed in figure 3 below, but it is not clear if the 5' pedestals (highlighted) are for the purpose of improving access to the buttons or not.

We request that if an RRFB is installed and button activated, that the buttons be positioned within arm's reach of bikeway users and will not require cyclists to dismount to activate the signal.

Response: Yes, the 5-foot pedestals that are called out in the plans are for new push buttons. The buttons will be installed so that they are functional and compliant with OMUTCD (Ohio Manual of Uniform Traffic Control Devices) requirements. The existing button placement will be reviewed to see if an adjustment can be made to allow cyclists to use it without dismounting.

Comment: Accessible sidewalks need to be continued from the proposed Herrold Avenue intersection with West State Street. Currently the West State Street sidewalk ends in front of the water treatment plant. I also think it would be appropriate to continue that sidewalk not only to the Herrold Avenue intersection, but all the way to the western terminus of West State St. With more thru-traffic along West State St., I feel there will be an even greater need for a sidewalk along this stretch.

Response: A sidewalk project on West State Street will be reviewed as a future project.

Comment: I am writing to provide comments on the project plans for the West State Street project. First of all, I am very happy with the effort that EPW has taken to incorporate a shared-use path on West Union Street. This is a significant improvement for the safety of less experienced bicyclists that account for the majority of bicycle users. Unprotected bicycle lanes on a 35 mph street would have felt unsafe for most bicyclists and would not have encouraged use of this street to get to important destinations such as the Athens City-County Health Department, County Fairgrounds, myriad medical services including primary care physicians, eye doctors, insurance agents, pharmacies, among others.

I applaud the installation of a 5' wide sidewalk on the north side of W. Union St. This will enable better access and along with the shared use path, make the street more accessible to those that do not have cars or opt to not drive to destinations in this corridor. Thank you for making efforts to make this a Complete Street in accordance with city council ordinance.

Minimize Car-Bicyclist-Pedestrian Conflicts on the South Side of Union St: I encourage EPW to review the current design plans with an eye on reducing and constricting the number of driveways that cross the new shared use path along the south side of the street, especially in the vicinity of Seaman's Grocery and the gas station. It sounds like EPW is considering creating a continuous path and possibly a different surface texture along the south side through this area, and I agree that is the best design, which will help alert drivers that they are crossing a place where they may encounter bicyclists and pedestrians. State law requires drivers to stop before crossing a sidewalk or path, and while few may do so in many contexts, creating a driveway/shared use path interface that alerts them to the presence of the shared use path is the best that can be expected here, in my opinion.

Response: Access management was reviewed in accordance with business needs. "Reasonable access" must be provided to each property.

Comment: Lack of Pedestrian Crossings on W. Union St: There is an incredibly long distance between crosswalks from the Shafer St intersection to the next crossing at the Hockhocking Adena Bikeway, around 3/4 of a mile. This far exceeds any and all recommendations for city environments, and even areas with suburban development patterns. Not installing crosswalks in this long section will make it all the more likely that pedestrians will take their chance at any point along the road and play frogger with the cars. Putting in a marked crossing, probably a mid-block crossing in the area between the Health Dept, County Fairgrounds, and Seaman's would probably be the best place to create a crossing that would concentrate pedestrians most safely. The Athens Bike/Ped Master Plan specifically calls out adding 2 pedestrian crossings in this section of Union St., the most viable of which is listed as a crossing at the fairgrounds main entrance. Not creating a suitable crossing in this section of road would be communicating to people that they have to walk 1/2 mile or more out of their way to an existing crossing, treating them like 2nd class citizens. The lack of crossings jeopardizes the status of this street as a Complete Street, even with the other improvements, and I believe would need to waiver of the Complete Street policy in order to be built as designed.

Response: Pedestrian safety is a concern throughout the City, and there may be a suitable location for marked mid-block crosswalk on West Union Street, and the request is under review. The City uses the attached flowchart to evaluate the request for mid-block crossings, and follows the OMUTCD guidance that an engineering study should be performed before crosswalk markings are installed at locations away from traffic signals or stop signs. Per the MUTCD, if an engineering study is needed, it should "consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory

speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.”

Comment: I’m a long-time (and long-winded) West-Sider, and walking is my main way of getting around. The original draft of West Union Street improvements presented in early 2020 was exciting, but I see the revised plan as a major step backward that deletes most of the pedestrian benefits the original envisioned.

The following questions are directed to the EPW team and the consulting designers, and perhaps more so to supervising ODOT staff, who I’d like to see better support local design proposals. I still wonder what the East State interchange would have looked like with a diverging diamond.

To lead off, a positive: the refuge islands in front of the Seaman’s Grocery parking lot are a welcome addition. Thank you for including them!

Response: Thank you for your comment.

Comment Controlling the number and width of curb cuts is an important part of pedestrian-friendly street design. Considering that there is already a three-lane main east entrance, by what logic is the Fairgrounds being granted a new curb cut that appears to be double the width of their current two-lane auxiliary entrance at the west end of the complex?

Response: The new drive entrance was considered as part of design to replace the entrance at West Union/Jefferson, and improve traffic flow during event periods, reducing conflicts with pedestrian and vehicular traffic.

Comment: The original plan cross sections appeared to show new sidewalk with protective tree lawns on both sides of West Union. The revised plan appears to omit these along the Fairgrounds and Union Cemetery on the north side, a long stretch of sidewalk that is exposed to fast-moving cars. Why are protected sidewalk improvements now removed in that stretch?

Response: The plan has been to preserve the existing sidewalk in this section since it is in good condition. A quantity has been included in the plans for select spot repairs, if needed.

Comment: Why not reallocate the planned sidewalk yardage leading up the cul-de-sac to ACVN/OhioHealth Home Care to the east side of the Herrold Connector, giving that higher-traffic corridor more sidewalk access? The cul-de-sac is low traffic and has worked well for years as a shared street, while the current west-side-only sidewalk design for the Connector forces people walking to cross a row of back-out parking and 12 curb cuts, including two high-traffic businesses. The cul-de-sac and the east side of Herrold to the railroad embankment look like roughly equivalent distance and cost.

Response: Pedestrians will be using the sidewalk to access businesses, residences, and the park. Installing the sidewalk on the east side of the street will create conflict points as pedestrians cross Herrold Avenue to access these businesses, residences, and the park.

Comment: On the map it looks like portions of sidewalk on the north side of Union between the bikeway and Blick Ave are no longer included for improvement. The City improved these sections in the mid-2010s and they were in the best condition of any in the project area, but they have been heavily

damaged by this year's Columbia Gas main excavation. If they won't be restored during this project, what is the plan for them?

Response: Columbia Gas fully restored the sidewalk sections they crossed as part of the permit for the gas line replacement.

Comment: The proposed bike spur that meanders out into the field on the south side of Union between ReStore and the bikeway degrades pedestrian access to businesses on the north side of the street and leaves two City bus stops without improved sidewalk facilities. The location where it leaves the street, in the middle of the dogleg between Herrold and Jefferson, is also the single most hazardous place to cross W Union from a visibility standpoint should someone unfamiliar with the route need to adjust their path. Given these drawbacks, what was the compelling reason to substitute a bike path spur away from the street in place of a sidewalk?

Pointed questions aside, I appreciate the hard work the team has already put into the project, and I know that there are many ways in which it shines - the access to West State Park and the water, sewer and stormwater improvements on Union will be incredible. On future projects I'd hope to see a similar level of commitment and funding applied to pedestrian infrastructure.

Response: A sidewalk is provided on the north side of the street, and there is a crossing at the Hockhocking Adena Bikeway.

There is considerable concern about damaging the trees across from Herrold Avenue, and adding a sidewalk on the south-side would have impacted the tree roots. The path was designed to provide continuity through this section of West Union while preserving the trees.

Lane Width

Comment: Safety Improvements for Hockhocking Adena Bikeway Shared Use Path Crossing at W. Union St.: The Hockhocking Adena Bikeway crossing at W. Union St. has both a high volume of bicycle and pedestrian users, and it is one of the highest traffic volume streets in Athens with >10,000 average daily traffic (ADT). The traffic volumes are compounded by a historically high rate of speeding on W. Union Street, as demonstrated in a 2010 ODOT speed study that calculated an 85th percentile speed of 58 MPH. Due to the inherent danger that the combination of conditions outlined above presents, the Athens Bicycle and Pedestrian Master Plan made a recommendation to improve the safety of the crossing of the Hockhocking Adena Bikeway at West Union Street. Since the master plan was adopted in 2010, the city added a rapid rectangular flashing beacon (RRFB) to the crossing, replacing overhead flashing yellow signals. Unfortunately, the efficacy of the RRFB is dubious at best. Based on anecdotal accounts, many bikeway users, both cyclists and pedestrians, feel that the existing RRFB beacon provides no observable safety improvement to the crossing, and consequently many do not bother to activate it, instead waiting for a break in traffic to cross. While some studies suggest that RRFB activation may have some positive effect on motorist yielding rates, the AASHTO Guide further confirms that "...flashing beacons have shown little or no effectiveness in many crosswalk or crossing situations." (AASHTO Guide for the Development of Bicycle Facilities, 5.4.3 Signalized and Active Warning Crossings, page 5-55). The main complaint about the RRFB is that even when it is activated, it requires no action to be taken by motorists, and thus has little impact on driver behavior.

In 2019, the City of Athens Engineering and Public Works Department (EPW) installed flexi-posts at the bikeway crossing at W. Union Street, which resulted in narrowing the roadway from 13' wide vehicle lanes to approximately 11' lanes. In contrast to the perceived minimal improvement on safety that the RRFB installation provided, it is the observation of Hockhocking Adena Bikeway Advisory Committee members that bikeway users felt significantly safer at the crossing, as a direct result of the EPW flexi-post treatment. It appeared to greatly reduce vehicle speeds at the crossing and increased driver yield rates. Unfortunately, this treatment didn't coincide with a bikeway user survey or empirical data to document the positive impacts on safety that were observed by bikeway users at the crossing while the treatment was in place, leaving us again to rely on anecdotal accounts from users.

From the experience to date at this important car/ped/bike conflict point in Athens, it is clear to the HAB Advisory Committee that safety measures should be implemented at this crossing to reduce vehicle speeds and improve yield rates. We believe that to improve safety, permanent physical traffic calming features similar to the temporary EPW flexi-post treatment should be implemented in addition to warning signals (RRFB), signage, and pavement markings.

The following is quoted from the AASHTO Guide for the Development of Bicycle Facilities, 5.3.6 Additional Bicycle Crossing Considerations, page 5-49. Traffic Calming for Intersections: "At crossing locations where the speed of approaching roadway traffic is a concern, traffic calming measures may be helpful... Slower motorist approach speeds can improve the ability of path users to judge gaps, improve motorists' preparedness to yield to path users at the crossing, and reduce the severity of injuries in the event of a collision.

Traffic calming measures that may be appropriate include a raised intersection or raised crosswalk, chicanes, curb extensions, speed cushions, crossing islands, and curb radius reduction at corners."

According to NACTO, in their Urban Street Design Guide, "Curb extensions visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians." Such roadway treatments are useful in mid-block crossings to calm traffic and shorten the crossing distance for pedestrians and bicyclists.

We request that Union Street vehicle travel lanes at the bikeway crossing be narrowed to 11' wide lanes from the proposed 13' wide vehicle lanes (also the current vehicle lane width). Our preferred method to do this is to incorporate permanent concrete curb extensions that create a gradual narrowing of the lanes in similar fashion to the EPW flexi-post temporary treatment in 2019. An acceptable alternative to narrowing the lanes at the crossing would be to narrow the vehicle travel lanes on W. State St. through the entire project area to 11' lanes.

We provide further justification in the next section for reducing the proposed vehicle lane widths on W. Union Street from the proposed 13' wide lanes.

West Union Street Roadway Design and Lane Width: The National Association of City Transportation Officials (NACTO) Urban Street Design Guide recommends 11' wide vehicle lanes in urban environments for designated truck or transit routes such as West Union Street. (<https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>). "Lanes greater than 11 feet should not be used as they may cause unintended speeding..." The width of travel lanes is highly correlated with vehicle speed. A 13' wide lane is associated with a statistical regression line that denotes an 85th percentile speed over 49 mph. An 11' wide lane is associated with a regression estimated 85th

percentile speed of 43.5 mph (see Figure 4. Lane width and 85th percentile speed correlation chart, from figure 4). NACTO Urban Design Guide.

During the February 2020 public comment session, EPW proposed “Typical Sections” for the W. Union Street project with lane widths of 11’ (see Figure 5 below). It is important to note that these initial street design cross sections included 5’ bike lanes that have since been replaced with a shared use path along the roadway, a positive safety improvement over the initial on-road, unprotected bike lane design. It is unclear why the subsequent road design now has 13’ vehicle travel lanes in the vicinity of the bikeway crossing, and 12’ to 13’ lanes throughout the project area, which are a road safety concern, given that, as outlined above, wide lane widths encourage drivers to speed.

Response: The typical section shows the “travel lane” measured from the face of curb. Using the ODOT’s Location and Design Manual, the minimum lane width is 11 feet, with an additional 1-2 feet for a curbed shoulder width. Including the curbed shoulder width, the lane (measured from the face of the curb) would be 13 feet. The City will review the placement of an edge line to delineate the curbed shoulder width from the lane width.

Regarding the reference to the 2010 ODOT speed study, the 2010 information gathered by ODOT was for a traffic count and not a speed study. After reviewing the traffic count information with ODOT District 10 staff, they were not able to provide additional information about the speed information reported, but believed it to be reported in error. During the 2010 traffic count, the EMS station was located on West Union, and if a high speed was reported, it could be contributed to an emergency response vehicle.

Comment: Reduce Vehicle Travel Lanes from Proposed 12-13’ Lane Widths: The proposed design of the roadway seems to include 12 to 13’ wide vehicle travel lanes in the project area. The ODOT speed study from 2010 demonstrated that wide vehicle lanes on this road only encourage excessive speeding. 93% of vehicles were traveling over 40 miles per hour, and the 85th percentile speed was 58 mph! Has the city conducted a speed study on this street since the 2010 study? While my observation is that the current speeds on W. Union do not seem to be quite as high as those recorded by ODOT in 2010, many drivers are still traveling well over the speed limit. It seems that an updated speed study should have been conducted in order to have data to help determine how this road should be configured.

My question about the width of the travel lanes is, what is the city trying to accomplish here? Safety is not the first thing that comes to mind. Speed is the single biggest factor in frequency and severity of vehicle crashes. In order to make this street safe for all road users, and even those inside cars and trucks, the travel lanes should be narrowed to no more than 11’. Lanes wider than 11’ are not suitable for city streets (according to many authoritative sources). 12’ wide lanes are standard design for highways with speeds of 55 mph or higher, why are they being used on a street in Athens with a posted 35 mph speed limit? Please design this road with suitably sized, 11’ wide travel lanes for the safety of road users in our city.

Response: Please see response above. A speed study was not required as part of the design for this project.

Herrold Avenue/Railroad Grade Flood Elevation

Comment: I have a concern about Herrold Avenue crossing the old railroad bed. I hope that the elevation of the bed will be left high enough to prevent a 500 year flood at least.

Response: The elevation at the railroad bed crossing was carefully reviewed and has been designed similarly to the floodgate elevation at the West State Street Park and Hockhocking-Adena Bikeway intersection.

Comment: Addressing bumps and humps, lowering the Railroad Berm at Herrold Street would make that area susceptible to flooding. I know there exist plans for placing a barrier at the Railroad/ Bike path juncture, but can that be done on a road? Considering how in 2022 we are seeing five inches of rain fall to become more common. Is this an effort to build resiliency?

Response: The elevation at the railroad bed crossing was carefully reviewed and has been designed similarly to the floodgate elevation at the West State Street Park and Hockhocking-Adena Bikeway intersection.

Comment: You could consider the Hocking River realignment as an architectural resource. You could always place a placard by the water plant commemorating our 1990 well contamination and signage showing past flood level experienced.

Response: Thank you for your comment.

Comment: Flood Control: As noted in the Decision Matrix, cutting deeply into the abandoned railroad berm (which will be needed to prevent creating "blind" driveways, see above) will cause significant changes to the flood risk in this area. This risk comes from two sources:

1. Changes in the Floodplain.
 2. Significant storm water run-off along the connector, especially just south of the railroad berm.
- The project contains mention of improvements to the storm water drains in the area. The project design must take into account, and mitigate, the increased flood risk.

Response: The elevation at the railroad bed crossing was carefully reviewed and has been designed similarly to the floodgate elevation at the West State Street Park and Hockhocking-Adena Bikeway intersection.

All surface drainage on the Herrold Avenue extension will be controlled through curb and gutter and the storm water system.

Traffic

Comment: I am not for the linking of W. State and W. Union; I see an increase in traffic and congestion at Central & Shafer Streets as well as at W. Union and Herrold st.

I use it for all of the above Walking bicycling (W. State) and commuting and Shopping.

Response: The intersections will be evaluated after the Herrold Avenue extension has been opened,

and any adjustments to the existing intersections will be provided. Please consider that school-related traffic on Central Avenue is no longer a factor.

Comment: It (*Herrold Avenue Extension*) would increase traffic speed to and from the park area for those who are intent on avoiding the Union/Shafer Street traffic light. Will we need to place more speed bumps there? Why are we designing a western beltway through a park and wellfield?

Response: Speeds will be reviewed before and after the opening of the extension. Additional 25 mph speed limit signs can be installed on West State Street.

Comment: The City of Athens has been talking about a proposed cut through between West State Street Park and Union Street for at least a decade. Always, there is some objection thrown up, delays or controversy. Now we have yet another plan.

Frankly, I don't care if it cuts through by Larry's Dog House, or by the Water Plant.... I just want the city to commit and build the damn connector.

I will relieve the pressure on Second Street as there are always people racing up and down the hill, trying to cut across Central and get to a ball game.

The brief period of time when there will be some traffic on that connector, is a small price to pay for the additional access out of the west side neighborhood.

I say BUILD IT! Take the land by eminent domain if you have to, but let's get this moving before any more congestion in the west state street park occurs from Over-development of ball diamonds!

Response: Thank you for your comment.

Comment: I feel that the speed limit of 35 mph on West Union St. between OH 682 and Shafer St. should be lowered to 25 mph. A majority of the city's streets and roads have 25 mph speed limits, which encourages safer driving and is a safer and more pleasant experience for pedestrians and cyclists. West Union St includes curves and grades that make visibility for both vehicles and pedestrians to see oncoming traffic.

Response: The City Administration will review the posted speed limit with the Police Department. The review can occur outside of the general project.

Comment: How does the design for the W Union/Herrold intersection deal with the increasing tendency of vehicles lining up for the Larry's Dawg House drive-through to spill out into the westbound lane of W Union St during peak dining hours, blocking both sidewalk and street? The positioning of the turn lane proposed on the drawing looks like it allows only a single car to queue on-street. Would it be possible to extend the turn lane at least to the west end of the Larry's Dawg House front parking area?

Response: There is an internal traffic flow issue with this site. The restaurant has two parking areas for use and drivers are obligated to follow the law and not queue on the street.

Comment: Need for the connector: I am pretty neutral on the overall utility of the connector, but can see some benefits to traffic flow and the convenience for those utilizing the park, frequenting

businesses along West State, and residents along West State who may need an alternative ingress/egress option. The overall improvements along Herrold Ave will be welcome. These benefits need to be balanced against the negative impact the connector may bring, especially since some of these negatives have been increased relative to the originally proposed route. (See the decision matrix <https://www.ci.athens.oh.us/DocumentCenter/View/5688/Herrold-Avenue-Alternative-Decision-Matrix>). The city will need to explicitly detail mitigations of these negatives before proceeding. In the remainder of this document I will use the labels from the Decision Matrix: Alternative 1 was recommended, but the City failed to acquire the needed right-of-way. Alternative 2 is the currently proposed alignment.

Traffic Issue – Speed: Alternative 2 carries the risk that traffic will travel at excessive speeds along the almost straight connector. This carries two types of risk:

1. Risk to pedestrians near the West State Park where the connector meets West State.
2. Risk to Herrold Ave residents south of the railroad berm. Lots and driveways are shaped such that we have to either back onto Herrold, or stop on Herrold and back into our properties. Depending on the site distance across the railroad berm (how deeply will the road be cut in?), our driveways may well be "blind" and pose considerable risk if southbound traffic travels at a high rate of speed.

The City must directly and adequately address this safety issue. I strongly suggest the connector include a "traffic calming" measure roughly at the location of the current railroad berm. Ideally this would take the form of a center island that forces traffic in both directions to swerve slightly to the right (and slow down) in both directions.

Response: The connector was designed as a 25 mph street, and contains a reverse curve with the appropriate radii. If it is observed that drivers are not following the speed limit, additional measures will be reviewed to control speed.

A sidewalk has been included in the plans to provide a connection between Herrold Avenue and the park.

Driveways on Herrold Avenue were carefully considered during the design process, and the proposed improvements shift the street gradually to the east.

Comment: Traffic Issue - Intersection of Herrold Ave and West Union This issue would need to be addressed under any alignment of the connector. Larry's Dawg House is located at the intersection, and even moderate activity at the drive-through causes cars to wait on West Union (both westbound and eastbound), causing significant congestion and visibility issues for cars leaving Herrold Ave. Mitigating this issue cannot be the sole responsibility of the business owner, nor should this project proceed with a vague promise to "talk with the business owner". The City must work with the business to design mitigation issues, e.g. preventing cars from stopping on West Union, preventing a left turn into the drive-through, and/or assisting the business to better route and service the drive-through traffic. This must be done before the project proceeds!

Response: There were extensive conversations with the owner and operator of Larry's Dawg House about how to redesign their access. Internal traffic flow is business decision, and the City cannot compel a change to their drive-through window location. The restaurant has two parking areas for use and drivers are obligated to follow the law and not queue on the street.

Comment: My concern is the traffic hazard that I feel exists in front of Larry's Dawg House. It seems they should not have been allowed to put a drive up window so close to the main road of traffic. Is the city widening the road there to accommodate for this business? Just wondering why the business isn't able to move their drive up window - to the back of their building or to the other side of the building. Making this change would surely make the roadway so much safer. Perhaps the city could be in conversation with the business regarding the safety of this situation.

Response: There were several meetings with the owner and operator of Larry's Dawg House about the location of the drive-thru window and the internal circulation through their parking lot.

The plan includes an east-bound left turn lane to Herrold Avenue and reduces the drive-thru access to one point. There are also improvements for pedestrians included with the plan.

Comment: Glad that there continues to be a Herald Street extension.

Response: Thank you for your comment.

Well Field

Comment: I am concerned about the increased traffic flow through our second largest water well area. We as a city have spent a great deal of money for remediation of the previous contamination there. So why would we run traffic through it?

Response: All surface drainage on the Herrold Avenue extension will be controlled through curb and gutter and a stormwater system.

Signage and Pavement Markings

Comment: Is that a center turning lane on Union between Hospital Drive and Seamans? Also a turning lane on Union for Herrold ?

Response: Yes, there are turn lanes proposed on West Union Street in these sections.

Comment: The Hockhocking Adena Bikeway (HAB) Advisory Committee has reviewed the updated plans for the West Union Street Improvement project (#322), and we are submitting the following as our official comments and requests for changes to the roadway signage and pavement markings, beacon actuation, and bikeway crossing configuration, as depicted in the West Union Sign and Pavement Marking Sheets (dated 8/18/2022), and the West Union and Herrold Plan and Profile Sheets (dated 8/18/2022).

We open our comments on the W. Union Street Improvement project by endorsing this statement from the Ohio Department of Transportation (ODOT) Multimodal Design Guide, as published July 15, 2022: "FHWA supports a flexible approach to bicycle and pedestrian facility design, including the use of multiple national guides and resources, such as those published by AASHTO, the National Association of City Transportation Officials (NACTO), and Institute of Transportation Engineers (ITE), to inform bicycle and pedestrian facility designs. FHWA explicitly encourages agencies to appropriately use these guides

and other resources to... go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate.” – ODOT Multimodal Design Guide, 3.1 Design Flexibility and Engineering Judgement

Warning Signage on West Union Street Roadway at the Approaches to the Bikeway Crossing : The pavement marking sheets depict bike route crossing signs (D11-1-30) on each side of the approach (see figure 1) when the American Association of State Highway and Transportation Officials (AASHTO) Guide (see figure 2) requires a sign configuration including "bike/ped icon" (W11-15) and "Trail X-ING" (W11-15P), and optional "AHEAD" (W16-9p) signs. The AASHTO signage is more visible and appropriate in this situation, as a bike route sign may convey to drivers that they are on a bike route rather than approaching a bike route crossing.

We request that the signage used reflect at a minimum the AASHTO required W11 series signs.

Response: The sign can be updated with the project.

Comment: Pavement Markings on West Union Street Roadway at the Approaches to the Bikeway Crossing From our reading of the first page of the West Union Sign and Pavement Marking Sheets (see Figure 1), we do not see any pavement markings warning motorists of their approach to the Hockhocking Adena Bikeway mid-block crossing. According to the AASHTO Guide for the Development of Bicycle Facilities, 4th Edition, 2012, there is an optional bicycle icon marking and "XING" marking that can be applied 130 and 100 feet (respectively) on each lane on the approach to the crossing (see figure 2). While these pavement markings are listed as optional by AASHTO, pavement markings are in the driver's direct vision while signs are more peripheral, thus the former provides a more effective warning of their approach to the high-volume bicycle and pedestrian crossing ahead. Pavement markings also add a visual queue to drivers that may encourage them to slow their speed as they approach the crossing.

We request that the pavement markings as suggested in the AASHTO guide be added to the project plans.

Response: This request is under review. There is a concern that "XING" markings that are tattooed are hazardous when the roadway is wet.

West Union Street and Shafer Street Intersection

Comment: I saw some commentary on another roundabout on W Union? But don't see one in the project area. So I'm assuming there is none

Response: That is correct; the signalized intersection at West Union and Shafer Street will remain.

Comment: It is my understanding that the intersection of Shafer St and Union St will remain a 4-way with a stoplight, rather than a roundabout. I believe that the stoplight is a better option because it is more friendly to pedestrians. I would like to see this intersection include marked and signaled crosswalks across all 4 directions of the intersection, rather than the current 2. I also believe that these

signals should automatically register walk signals, rather than requiring the user to push buttons like they currently do. The buttons present accessibility issues, as well as being a general hindrance of getting a signal in a timely manner. The current positions of the buttons require many users to travel opposite of their intended trajectory in order to activate them.

Response: The proposed project includes a standard crosswalk at each leg of the intersection. The push button locations will be reviewed to ensure they are accessible.

Comment: Can you explain the reasoning behind the decision to remove a roundabout at W Union and Shafer from the project design?

Response: The proposed roundabout was too small in size, and there was a concern about the functionality. The roundabout size could not be increased without major right-of-way impacts and an increased project cost.

Comment: At the Union/Shafer intersection, people on foot crossing north in the Union crosswalk are in danger of being hooked by a driver turning right on green from Shafer northbound to Union eastbound. This is due to the house close to the southeast corner blocking visibility, and drivers coming from the 35-40 mph (as commonly driven, not posted) stretch of Shafer by the river and taking the turn quickly. A roundabout would have effectively removed this hazard by reducing approach speeds. How might the intersection design that replaces it in the plan do so?

Response: The roundabout would not have “effectively removed this hazard”, as the sight distance at the roundabout created an issue. The City will review shifting the crosswalk further to the east to increase visibility.

Right-of-Way

Comment: Would it be less expensive and intrusive to purchase the houses (and business) at the Union/Shafer Street junction and create turning lanes?

Response: No.

Cost

Comment: How much will these modifications/changes reduce the cost of the project?

Response: It is difficult to know exactly how much the modifications have reduced the cost of the project since some other plan modifications were completed (milling/paving limits, for example), and inflation and material availability have varied throughout the design of the project. The redesign of Herrold Avenue also needs to be considered. In general, the designer believed that the roadway portion of the estimate decreased by over \$1,000,000 with the removal of the roundabout and other plan changes.

Construction Timing

Comment: Could you tell me if an estimated completion date has been established for the West Union Street Improvements Project including road paving & sidewalks?

Response: The project still needs to be bid this year, and it is likely that all construction will be completed in 2023. A completion date hasn't been set yet, but it will likely be fall, 2023.

The environmental review, consultation, and other actions required by applicable federal environmental laws for these projects are being, or have been, carried out by ODOT pursuant to 23 U.S.C. 327 and a memorandum of understanding dated December 14, 2020, and executed by FHWA and ODOT.