

U.S. 23 CORRIDOR ACTION PLAN

JANUARY 2025

U.S. 23 Corridor Study, PID 112768



Prepared for ODOT District 6

Prepared by:



**Department of
Transportation**



MORPC



INTRODUCTION/PURPOSE

The 2024 *Preliminary Feasibility Study* analyzed the 23.5-mile portion of U.S. 23 between I-270 and Waldo to improve safety and congestion in the corridor. The 2024 *Preliminary Feasibility Study* identified high-performing improvements that should be advanced into the ODOT project development process.

The goal of this Action Plan document is to divide the improvements (shown in Figure 44 and Figure 45 of the Feasibility Study) into a series of buildable units for project development. This action plan will prioritize the buildable units so that a reasonable implementation and funding plan can be developed.

Thirty-three (33) buildable units are identified along the U.S. 23 corridor as improvements that would provide stand-alone benefits and would be constructable without

other improvements. Where practical, improvements are divided into the smallest possible buildable units, for ease in future funding. However, the buildable units still need to result in a fully connected network. This action plan denotes many locations where coordination between adjacent improvements is particularly important, as connections provided in an adjacent improvement may be needed to maintain access for all travel movements.

All of the buildable units discussed in this action plan are high-performing improvements that are expected to improve safety, traffic operations, and travel time reliability in the corridor. Even though some improvements may be shown as a lower priority than others, each improvement brings independent utility and should be developed as funding permits.

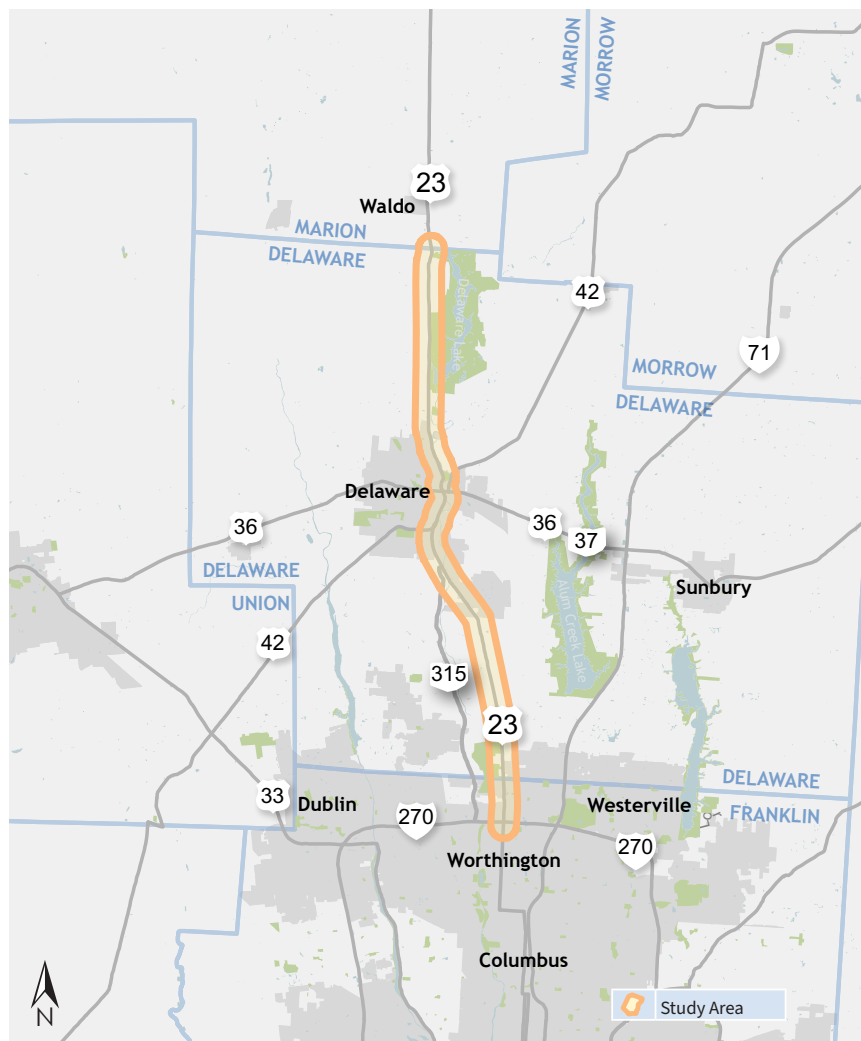


Figure 1: Study Area

METHODOLOGY

Each of the 33 buildable units is scored on a variety of factors to help in the development of a prioritization list (Table 1). The majority of these factors come from evaluation criteria in the *2024 Preliminary Feasibility Study*. The factors comprise three categories: benefits, costs, and other considerations. The factors are not assigned equal weights for this action plan. The factors are weighted so that the sum of the weighting factors for benefits and the sum of the weighting factors for costs are equal. The factors are summarized in the paragraphs below.

Based on the results of the evaluation, each improvement is designated onto one of four tiers. Tier 1 represents improvements with the greatest urgency to advance into the ODOT project development process. The segment summary sheets (Pages 5-37) show the tiers designated for each improvement and the scores are summarized in Table 2.

Benefits

The benefits are broken into two categories: safety and traffic operations. These benefits are calculated based only on their effects to U.S. 23 safety and traffic operations, and do not include benefits to the surrounding roadway network. As improvements on U.S. 23 enhance traffic flow, vehicles will likely divert from adjacent routes to U.S. 23, enhancing safety and operations on those other routes, though this benefit is not quantified in this analysis.

- **Safety:** Safety is a primary Purpose & Need element and is always a top priority for ODOT. Safety is evaluated via three metrics.
 - » *Overall Crash Reduction:* This metric is the expected reduction in crashes of all types, compared to No-Build.
 - » *Severe Crash Reduction:* This metric is the expected reduction in life-altering (serious injury and/or fatal) crashes, compared to No-Build.
 - » *Conflicting Movement Reduction:* This metric is the expected reduction in the number of conflicting movements for U.S. 23 through traffic, compared to No-Build.
- **Traffic Operations:** Traffic operations is a primary Purpose & Need element, and is evaluated via three metrics
 - » *Travel Time Savings:* This metric is the expected reduction in Design Year (2050) travel times, compared to No-Build.
 - » *Number of Signals Removed:* This metric is the reduction in the number of signals experienced by U.S. 23 through traffic, compared to No-Build.
 - » *Level-of-Service (LOS) Improvement:* This metric is the improvement in Design Year (2050) traffic operations, particularly for eliminating locations where demand is expected to exceed capacity. LOS is a qualitative measure of traffic operations, which for signalized intersections is based on intersection delay times.

A 1-to-7 scale is used to rank each improvement on the benefits criteria above, with 1 representing the lowest/worst score and 7 representing the highest/best score. For quantitative criteria like severe crash reduction and travel time reduction - a scale is developed to convert the numeric results into a 1-to-7 score.

Costs

For the purpose of this document, the term “costs” comprises all capital expenditures, potential effects on resources, or other challenges anticipated in constructing the improvements. The costs are broken down into five metrics:

- **Estimated Cost:** This metric is based on the estimated capital expenditure needed to design and construct an improvement. This includes engineering study and design, right-of-way, construction cost, and construction administration. All costs are shown in 2030 dollars and have a 30% contingency included.
- **Additional Right-of-Way:** This metric is based on the estimated expenditures for additional right-of-way needed to construct an improvement. This metric includes anticipated expenditures for land, buildings, and any relocations. This metric helps to indicate improvements that may directly affect nearby property owners prior to and during construction.
- **Natural/Cultural Resource Effects:** This is a qualitative assessment on estimated effects to public parks and recreational resources or historic/cultural resources.
- **Community Effects:** This is a qualitative assessment of how an improvement is likely to meet the goals of the community. This metric accounts for impacts to special land uses. This metric also accounts for improvements that make substantial changes to property access and/or traffic volumes on adjacent streets.
- **Complexity/Timeline:** This is a qualitative assessment of how challenging an improvement may be to implement, particularly in relation to schedule. Improvements that can be done within or mostly within right-of-way and have minimal engineering challenges receive higher scores. Improvements that are costly, require extensive additional right-of-way, have a likelihood for displacements, and/or are expected to involve complex engineering challenges receive lower scores.

A 1-to-7 scale is used to rank each improvement on the costs criteria above, with 1 representing the lowest/worst score and 7 representing the highest/best score. For quantitative criteria like estimated cost and additional right-of-way - a scale is developed to convert the numeric results into a 1-to-7 score.

Other Considerations

Additional criteria are identified for inclusion in prioritizing the buildable units:

- **Development Preparedness:** Improvements located in areas with substantial planned or ongoing development are given extra weight. These may be areas where additional right-of-way should be secured while the land is still undeveloped, but development is anticipated shortly. Expediting improvements in these locations will help ODOT and local officials to steer developers to construct infrastructure in a way that is consistent with long-term plans for the corridor. A maximum score of 30 is assigned for the Development Preparedness criteria.
- **Isolated Signals:** Improvements that eliminate isolated signals, creating longer distances of free-flow conditions for through traffic – especially trucks – are given extra weight. This metric accounts for the spacing of surrounding signals and how much delay the isolated signal creates. Locations in the northern part of the corridor with higher through traffic truck percentages have higher scores for this metric. A maximum score of 15 is assigned for the Isolated Signals criteria.

- **Highway Safety Improvement Program (HSIP) Rankings:** Improvements that address locations on ODOT's most-recent (2024) HSIP statewide rankings are given extra weight. In addition to improving current safety hotspots, these HSIP locations are good candidates for the District to leverage ODOT safety fundings toward project construction. Improvements addressing multiple HSIP locations and/or ranking higher on the HSIP list are given greater scores.

Improvements receive scores for HSIP Rankings as follows:

- Top 10 HSIP ranking: 20
- Top 25 HSIP ranking: 15
- Top 50 HSIP ranking: 10
- Top 75 HSIP ranking: 8
- Top 100 HSIP ranking: 7
- Top 200 HSIP ranking: 5
- Top 500 HSIP ranking: 2

Improvements addressing multiple HSIP locations are scored based on all HSIP locations addressed. Full scores are given for the highest-ranked HSIP location addressed by an improvement. Any additional lower-ranking HSIP locations addressed by an improvement are added at 50% of the score.

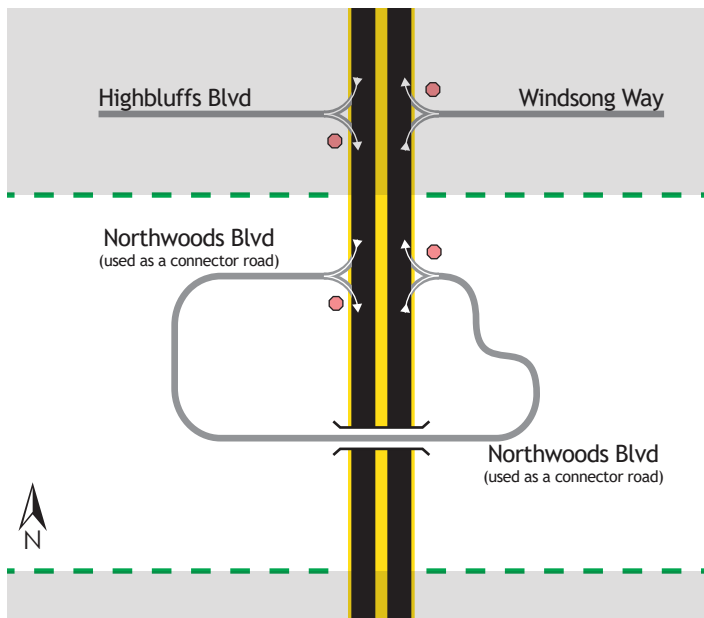
Table 1: Prioritization List

		Segment	Cost	PID
TIER 1	Home Road & Corduroy Road	3	\$115.8	
	Lewis Center Road to Orangewick Drive	3	\$53.9	
	Coover Road	6	\$43.6 *	119805
	Windbrush Avenue to Hidden Ravines Drive	2	\$40.5	
	Troutman Road to Weiser Road	7	\$25.6 *	119403
TIER 2	Merrick Boulevard/Panhandle Road	6	\$94.2 *	119403
	SR 750	2	\$85.1	
	Glenn Parkway & OhioHealth Boulevard	4	\$63.7	
	Green Meadows Drive	2	\$52.0	
	SR 229	7	\$50.4 *	119804
	Hills-Miller Road	6	\$48.4 *	119403
	Cheshire Road (existing & realigned)	4	\$45.5	
	Hawthorn Boulevard	5	\$25.3	
	Meadow Park Avenue	2	\$25.3	
	Hills-Miller Road to Coover Road (segment only)	6	\$5.2 *	119403
	Delaware State Park & Troutman Road	7	\$3.5 *	119403
	Pinecrest Drive	6	\$3.2 *	119403
TIER 3	Orange Road & Parkway Drive	2	\$97.9	
	Orangepoint Drive & Halfway Avenue	3	\$67.3	
	Delaware Plaza Drives & Hull Drive	5	\$47.6	
	Greif Parkway	4	\$22.2	
	Shroyer Homes to Retail Plaza	6	\$20.2 *	119403
	Main Road to Willey Road (intersection improvements)	7	\$8.2 *	119403
	Crystal Petal Drive to Pollock Road	4	\$2.5	
TIER 4	US 42	5	\$94.8	
	Lazelle Road & Dillmont Drive	1N	\$77.9	
	SR 315 to Meeker Blvd	5	\$74.1	
	Hyatts Road/Shanahan Road	3	\$71.3	
	Olentangy Meadows Drive	1N	\$63.1	
	Cottswold Drive	5	\$48.2	
	Northwoods Boulevard	1N	\$33.7	
	Pennsylvania Avenue/Sandusky Street Interchange	6	\$28.5 *	119403
	Highbluffs Boulevard/Windsong Way	1N	\$14.6	

*Project for which ODOT Transportation Advisory Council (TRAC) has allocated funding towards design

NORTHWOODS BOULEVARD

TIER 4 CONCEPT



ESTIMATED COST: \$33.7 M

BASELINE CONCEPT

- Convert northern Northwoods Boulevard intersection to right-in/right-out only operation, replacing existing traffic signal
- Construct an overpass/underpass at southern Northwoods Boulevard intersection

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Removes a full-movement intersection and numerous conflicting movements from U.S. 23
- Creates opportunity for grade separated bicycle/pedestrian connection across U.S. 23
- Provides U-turn movements for adjacent intersections

CHALLENGES

- Businesses adjacent to U.S. 23 and Northwoods Drive
- Potential for arterial weave conditions between intersections

FUTURE CONSIDERATIONS

- This improvement would need to precede adjacent improvements at Highbluffs Boulevard/Windsong Way. Planning for adjacent improvements should be included as part of this concept.
- Possible connection(s) to Windsong Way and/or Highbluffs Boulevard via frontage roads to improve circuitry to/from those neighborhoods

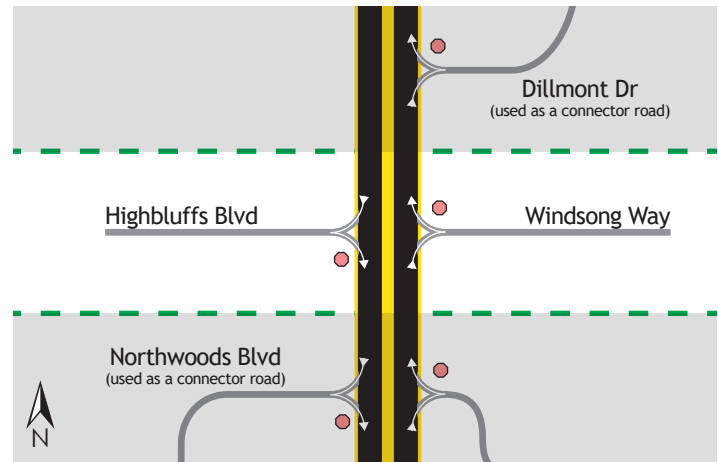
HIGHBLUFFS BOULEVARD/WINDSONG WAY

TIER 4 CONCEPT

ESTIMATED COST: \$14.6 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert Highbluffs Boulevard/Windsong Way intersection to right-in/right-out only operation, replacing existing traffic signal



BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Removes numerous conflicting movements from U.S. 23

CHALLENGES

- Indirect left turn movements (making a right turn, then U-turn instead of left turn)
- Emergency response times for Highbluffs Boulevard and Windsong Way
- Highbluffs Park adjacent to U.S. 23
- Potential for arterial weave conditions between intersections

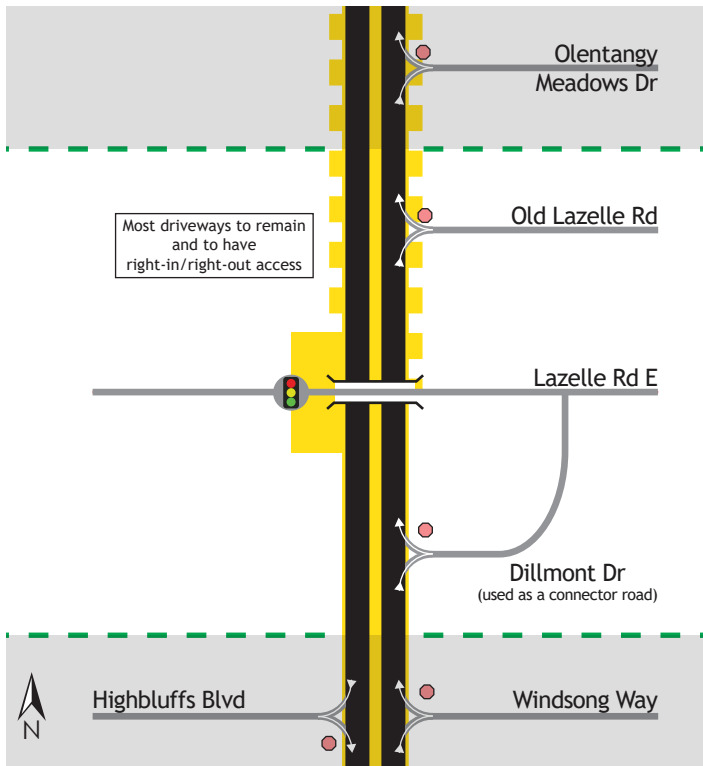
FUTURE CONSIDERATIONS

- Signal should not be removed until adjacent interchanges at Northwood Boulevard and Lazelle Road are constructed to provide the U-turn movements needed
- Consider mountable median for emergency access
- Possible frontage road connection(s) to either Dillmont Drive or Northwoods Boulevard
- Possible connection from Windsong Way to Flint Road

LAZELLE ROAD & DILLMONT DRIVE

TIER 4 CONCEPT

ESTIMATED COST: \$77.9 M



BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for additional through lane in each direction north of Lazelle Road
- Construct a connector road interchange at Lazelle Road, using Dillmont Drive as the connector road for the U.S. 23 northbound movements, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS E operations
- Addresses location ranked #150 on HSIP list (2024)
- Addresses location with fatal crash in 2023
- Creates opportunity for grade separation for bike/pedestrians to cross U.S. 23

CHALLENGES

- Adjacent residential land uses
- Adjacent commercial land uses
- High voltage towers and overhead lines cross U.S. 23 north of intersection

FUTURE CONSIDERATIONS

- City of Columbus plans include future trail connection across Lazelle to west side of U.S. 23 to Highbanks Metro Park
- This improvement would need to precede adjacent improvements at Highbluffs Boulevard/Windsong Way and at Olentangy Meadows Drive. Planning for adjacent improvements should be included as part of this concept.

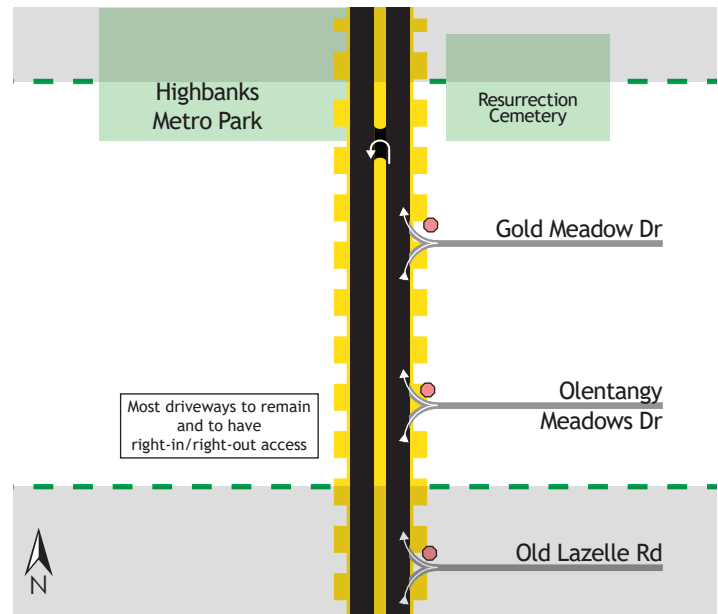
OLENTANGY MEADOWS DRIVE

TIER 4 CONCEPT

ESTIMATED COST: \$63.1 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for additional through lane in each direction
- Construct a signalized location for northbound U-turns north of Gold Meadow Drive
- Convert the Olentangy Meadows Drive intersection to right-in/right-out only operation, replacing existing traffic signal



BENEFITS

- Eliminates a signal in northbound direction, creating free-flowing operation for northbound U.S. 23 through traffic
- Addresses a location with predicted LOS E operations
- Addresses location ranked #149 on HSIP list (2024)
- Addresses location with fatal crashes in 2021 and 2023

CHALLENGES

- Adjacent commercial and multi-family uses to U.S. 23
- Access changes to multiple businesses/car dealerships
- Highbanks Metro Park adjacent to U.S. 23
- Resurrection Cemetery adjacent to U.S. 23
- Potential for increased cut-through traffic in subdivisions east of U.S. 23

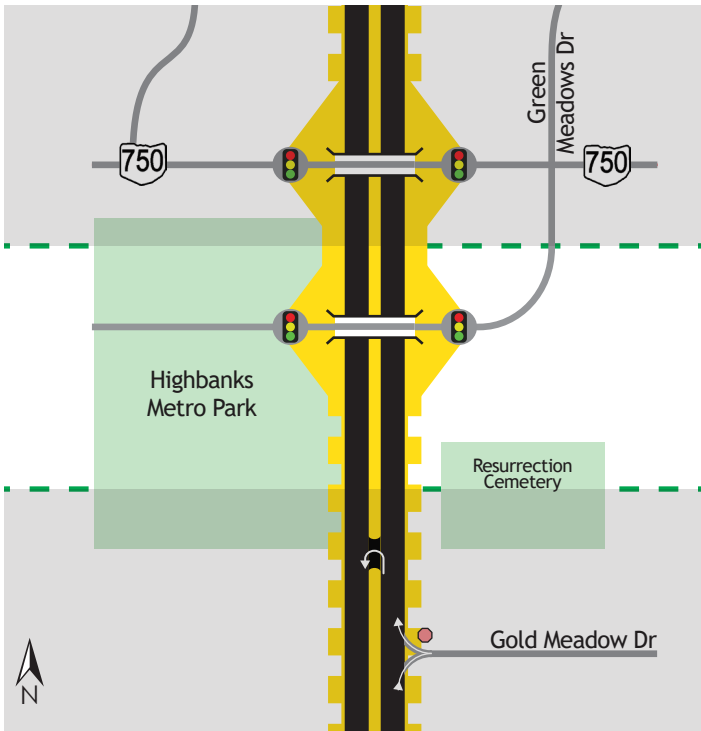
FUTURE CONSIDERATIONS

- Potential for future trail connection on west side of U.S. 23 to Highbanks Metro Park
- Existing signal should not be removed until adjacent interchange at Lazelle Road is constructed to provide the U-turn movement needed

GREEN MEADOWS DRIVE

TIER 2 CONCEPT

ESTIMATED COST: \$52.0 M



BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for an additional through lane in each direction
- Improvements to Green Meadows Drive, including at the SR 750/Green Meadows Drive intersection
- Construct an overpass/underpass and interchange ramp connections at Green Meadows Drive, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS E operations
- Addresses locations ranked #66 and #128 on HSIP list (2024)
- Eliminates all left turns to/from U.S. 23 at this location
- Provides opportunity for grade separated pedestrian/bicycle access across U.S. 23

CHALLENGES

- Highbanks Metro Park, including historic/cultural sites, adjacent to U.S. 23
- Potential traffic pattern/wayfinding changes to Highbanks Metro Park
- Resurrection Cemetery adjacent to U.S. 23
- Adjacent commercial properties east of U.S. 23
- Potential diversion of some SR-to-SR movements to use Green Meadows Drive

FUTURE CONSIDERATIONS

- Coordination with adjacent SR 750 improvements to create a complete interchange concept to replace existing signals

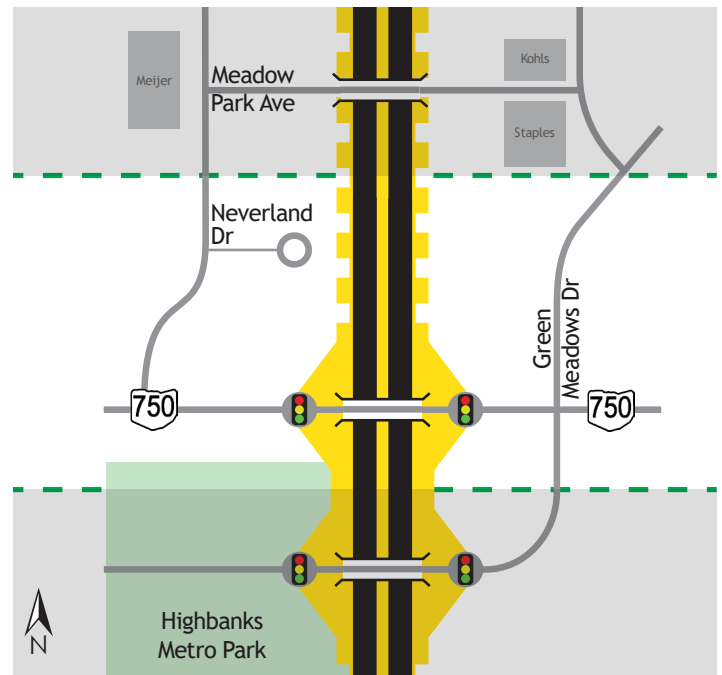
SR 750

TIER 2 CONCEPT

ESTIMATED COST: \$85.1 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for an additional through lane in each direction
- Construct an overpass/underpass and interchange ramp connections at SR 750, replacing existing traffic signal
- Improve some local roadways/intersections to accommodate diverted traffic volumes



BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS F operations
- Addresses location ranked #1 on HSIP list (2024)
- Provides opportunity for grade separated pedestrian/bicycle access across U.S. 23

CHALLENGES

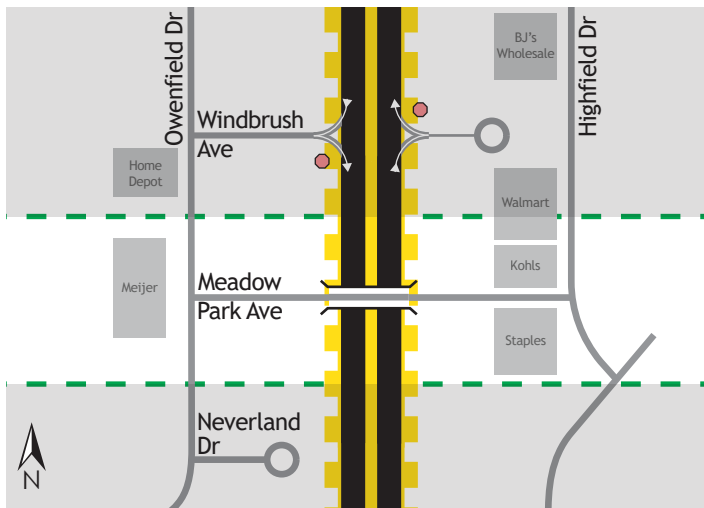
- Highbanks Metro Park, including historic/cultural sites, adjacent to U.S. 23
- Adjacent commercial properties along U.S. 23 and SR 750
- Access/circulation patterns to/from local businesses
- Potential diversion of some SR-to-SR movements to use Green Meadows Drive

FUTURE CONSIDERATIONS

- Project likely must follow Meadow Park Avenue improvements, in order to avoid creating undesirable weave condition on U.S. 23
- Coordination with adjacent Green Meadows Drive and Meadow Park Avenue improvements
- May necessitate improvements to several local adjacent roadways to accommodate diverted traffic

MEADOW PARK AVENUE

TIER 2 CONCEPT



ESTIMATED COST: \$25.3 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for additional through lane in each direction
- Construct an overpass/underpass at Meadow Park Avenue, replacing existing traffic signal
- Improve some local roadways/intersections to accommodate diverted traffic volumes

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS F operations
- Addresses location ranked #67 in HSIP list (2024)
- Provides opportunity for grade separated pedestrian/bicycle access across U.S. 23

CHALLENGES

- Adjacent businesses along U.S. 23 and Meadow Park Avenue
- Changes to circulation to/from many businesses in area

FUTURE CONSIDERATIONS

- Coordination with adjacent SR 750 interchange improvements
- May necessitate improvements to several local adjacent roadways to accommodate diverted traffic
- This improvement would likely need to precede adjacent improvements from Windbrush Avenue to Hidden Ravines Drive. Planning for adjacent improvements should be included as part of this concept.

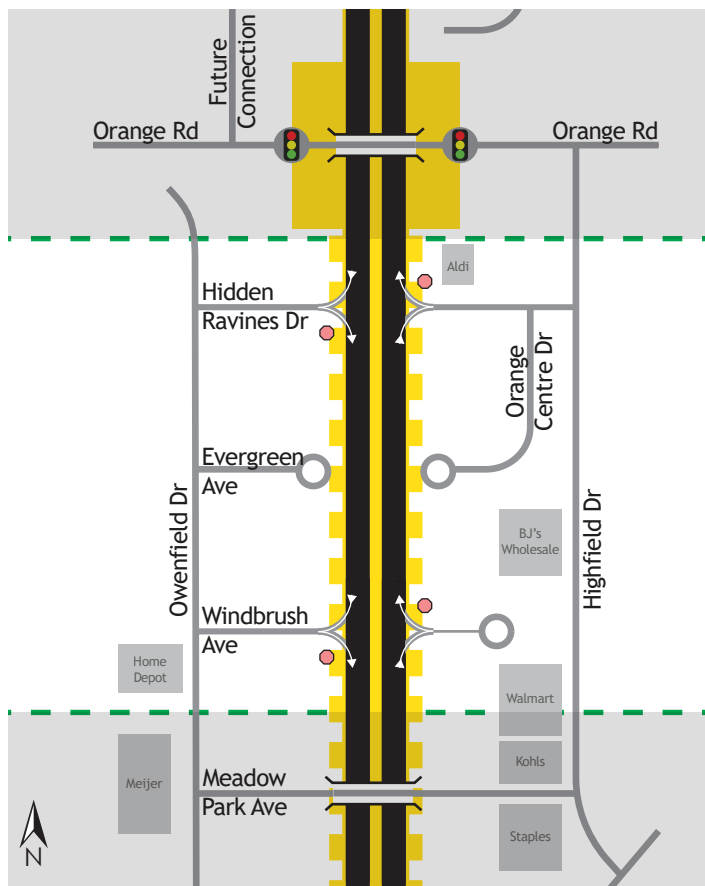
WINDBRUSH AVENUE TO HIDDEN RAVINES DRIVE

TIER 1 CONCEPT

ESTIMATED COST: \$40.5 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for additional through lane in each direction
- Convert the Hidden Ravines Drive intersection to right-in/right-out only operation, replacing existing traffic signal
- Close intersection at Evergreen Avenue/Orange Center Drive
- Convert the Windbrush Avenue intersection to right-in/right-out only operation, replacing existing traffic signal
- Improve some local roadways/intersections to accommodate diverted traffic volumes



BENEFITS

- Eliminates 2 signals, creating free-flowing operation on U.S. 23
- Addresses 2 locations with predicted LOS E operations
- Addresses locations ranked #105 and #135 on HSIP list (2024)

CHALLENGES

- Adjacent businesses along U.S. 23
- Access/circulation changes for many area businesses
- Potential for arterial weave conditions between intersections

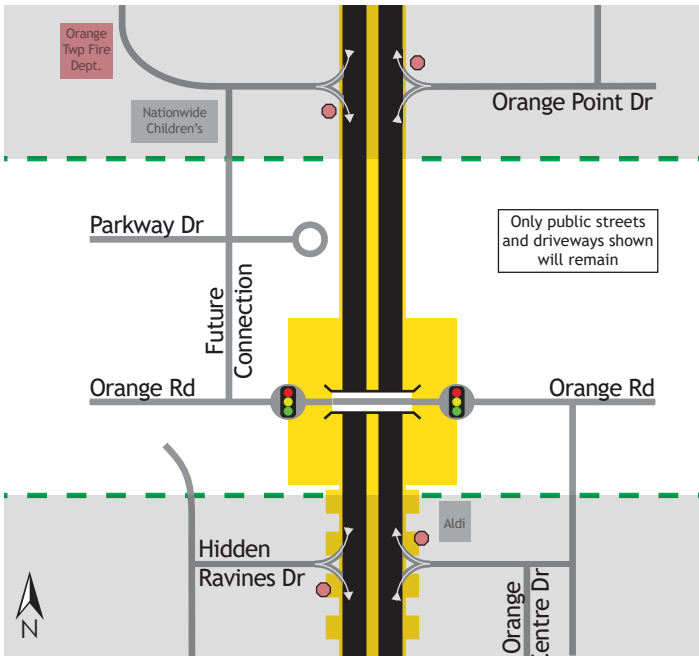
FUTURE CONSIDERATIONS

- Traffic signals likely should not be removed until the overpass at Meadow Park Avenue is constructed as this overpass allows for the U-turn movements needed to access both directions of U.S. 23.

ORANGE ROAD & PARKWAY DRIVE

TIER 3 CONCEPT

ESTIMATED COST: \$97.9 M



BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Widen U.S. 23 for additional through lane in each direction south of Orange Road
- Close intersection at Parkway Drive and construct future connection to Orange Road to allow access to U.S. 23
- Construct a connector road interchange at Orange Road, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS F operations
- Addresses locations ranked #51 and #92 on HSIP list (2024)
- Addresses location with a fatal crash in 2024
- Provides opportunity for grade separated pedestrian/bicycle connectivity across U.S. 23

CHALLENGES

- Adjacent businesses along U.S. 23 and Orange Road
- Access/circulation changes for many area businesses
- Potential access/circulation impacts for adjacent businesses on Orange Road and Parkway Drive

FUTURE CONSIDERATIONS

- If development moves forward on Parkway Drive, future access at Orange Road may need to be identified
- Future study could investigate if a connection between Parkway Drive north to Pacer Way would be desirable

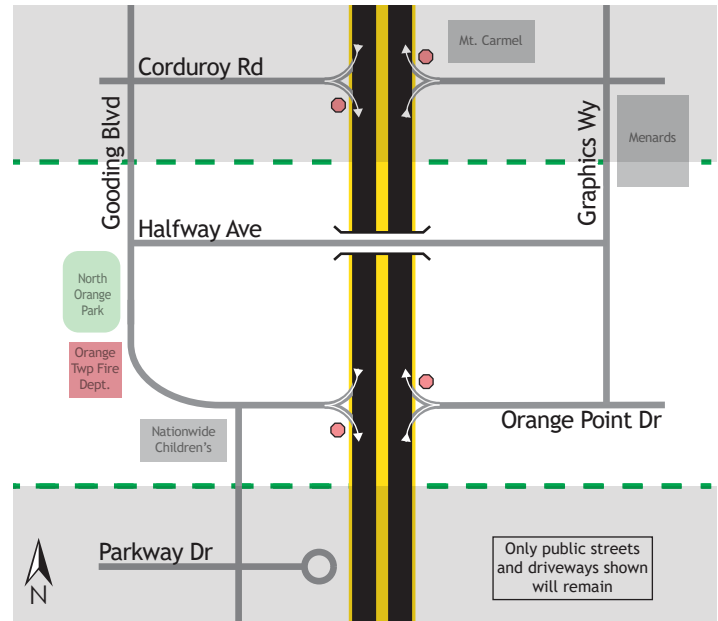
ORANGEPOINT DRIVE & HALFWAY AVENUE

TIER 3 CONCEPT

ESTIMATED COST: \$67.3 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct an overpass/underpass at/near Halfway Avenue, replacing existing right-in/right-out access point
- Convert Orange Point Drive intersection to right-in/right-out only operation, replacing existing traffic signal
- Improve local road intersections to accommodate new traffic patterns



BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS E operations
- Addresses location ranked #314 on HSIP list (2024)
- Provides opportunity for grade separated pedestrian/bicycle connection across U.S. 23, connecting to North Orange Park

CHALLENGES

- High-voltage towers and overhead lines crossing U.S. 23
- Historic site located on west side of U.S. 23 (7630 Columbus Pike)
- Access to/from Nationwide Children's Hospital emergency medical facility & OhioHealth
- Access to/from Orange Township Fire/EMS station

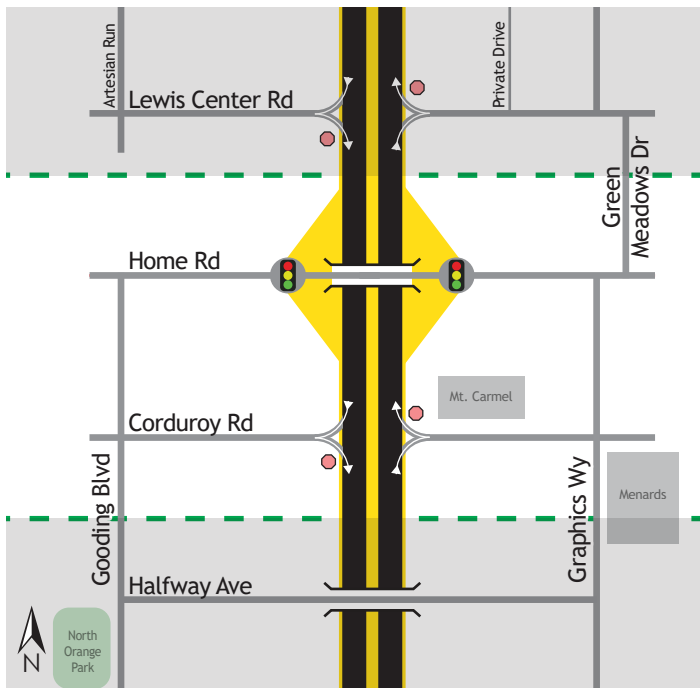
FUTURE CONSIDERATIONS

- Future study could investigate if a connection south from Pacer Way to Parkway Lane would be desirable

HOME ROAD & CORDUROY ROAD

TIER 1 CONCEPT

ESTIMATED COST: \$115.8 M



BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct an overpass/underpass and interchange ramp connections at Home Road, replacing existing traffic signal
- Convert the Corduroy Road intersection to right-in/right-out only operation, replacing existing traffic signal
- Improve local road intersections to accommodate new traffic patterns

BENEFITS

- Eliminates 2 signals, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS F operations
- Addresses locations ranked #91 and #313 on HSIP list (2024)
- Creates full interchange at Home Road, which is identified by Delaware County as the primary east-west arterial for southern Delaware County

CHALLENGES

- Adjacent developments along Home Road
- Waterway crossing under U.S. 23 just north of Home Road
- Access to/from Mount Carmel emergency medical facility
- Access for single-family residences on U.S. 23 north of Home Road

FUTURE CONSIDERATIONS

- If traditional freeway interchange at Home Road becomes infeasible due to costs/impacts, a connector road interchange could be considered for this location.
- Due to multiple adjacent access points, traffic signal at Corduroy Road could be studied for removal prior to building the Home Road interchange
- The eventual configuration of this interchange may affect the potential improvement possibilities for the adjacent Lewis Center Road to Orangewick Drive section

LEWIS CENTER ROAD TO ORANGEWICK DRIVE

TIER 1 CONCEPT

ESTIMATED COST: \$53.9 M

BASELINE CONCEPT

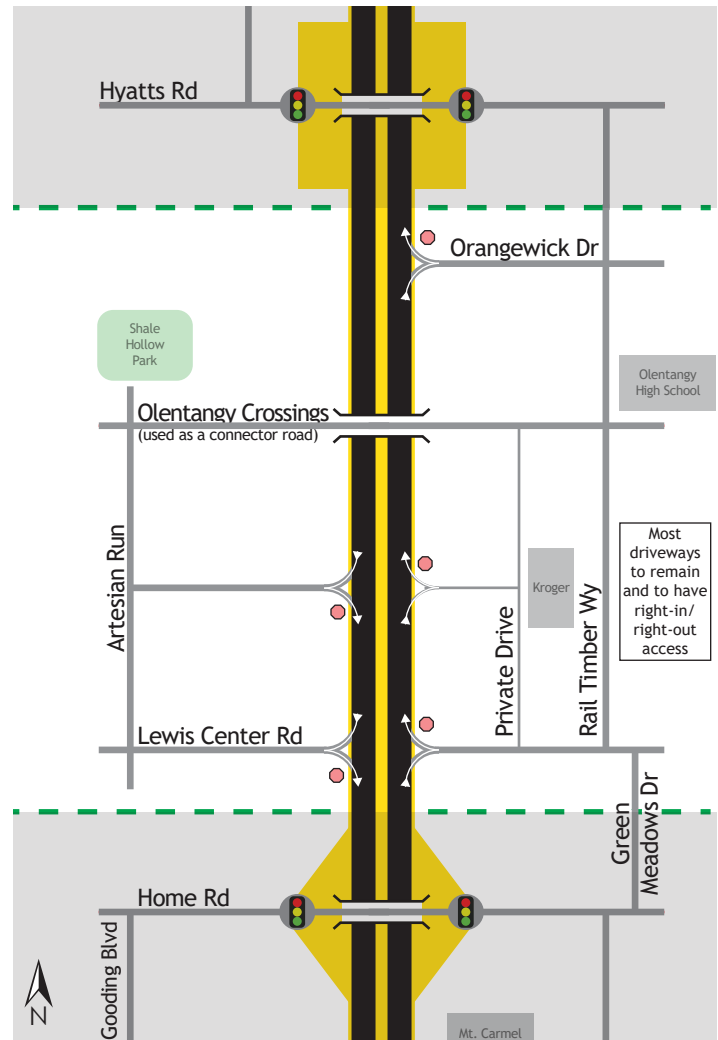
- Construct an overpass/underpass at Olentangy Crossings, replacing existing traffic signal
- Convert Lewis Center Road intersection to right-in/right-out only operation, replacing existing traffic signal
- Improve local road intersections to accommodate new traffic patterns

BENEFITS

- Eliminates 2 signals, creating free-flowing operation on U.S. 23
- Addresses 2 locations with predicted LOS E operations
- Addresses locations ranked #161, #200, and #266 on HSIP list (2024)
- Addresses location with fatal crash in 2021
- Provides opportunity for grade separated pedestrian/bicycle connection across U.S. 23, connecting to Shale Hollow Park and Olentangy Schools

CHALLENGES

- Circulation pattern changes for 3 Olentangy Local School buildings east of U.S. 23
- Shale Hollow Park located adjacent to U.S. 23



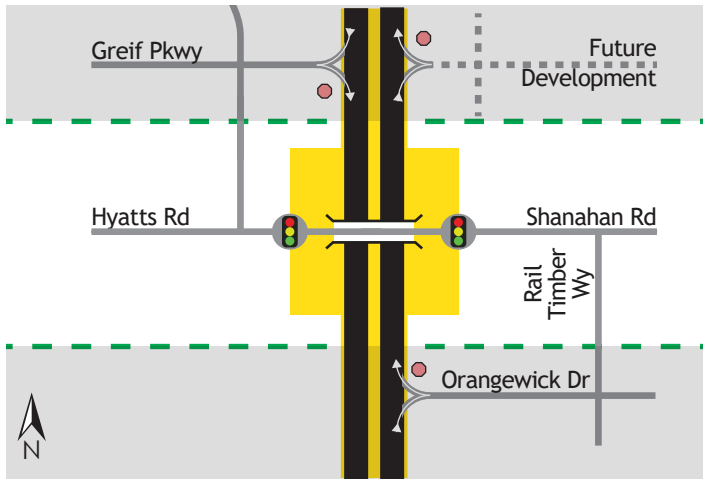
FUTURE CONSIDERATIONS

- Depending on the eventual configuration of the Home Road interchange, a grade separation may be necessary at Lewis Center Road to avoid creating a short weaving section. If a grade separation

at Lewis Center Road is needed, then Olentangy Crossings should be converted to a right-in/right-out only operation.

HYATTS ROAD/SHANAHAN ROAD

TIER 4 CONCEPT



ESTIMATED COST: \$71.3 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct a connector road interchange at Hyatts Road/Shanahan Road, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS E operations
- Addresses location ranked #361 on HSIP list (2024)
- Creates opportunity for grade separated pedestrian/bicycle connectivity across U.S. 23, connecting to Shale Hollow Park and Olentangy Schools

CHALLENGES

- High-voltage towers and overhead lines pass through this intersection
- Waterway passing under U.S. 23 and Hyatts Road
- Adjacent residential and commercial properties

FUTURE CONSIDERATIONS

- Future right-of-way for a frontage/backage road on west side of U.S. 23 between Hyatts Road and Greif Parkway should be identified and protected
- This improvement would likely need to precede adjacent improvements at Greif Parkway. Planning for adjacent improvements should be included as part of this concept.

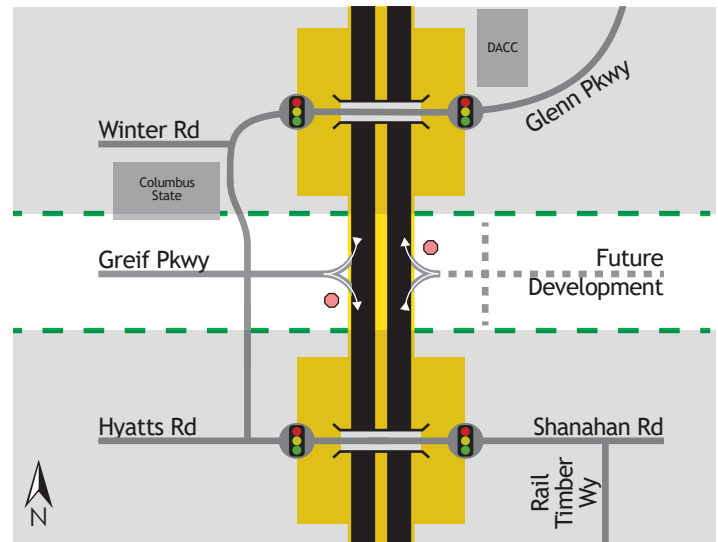
GREIF PARKWAY

TIER 3 CONCEPT

ESTIMATED COST: \$22.2 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert Greif Parkway intersection to right-in/right-out only operation, replacing existing traffic signal
- Construct frontage/backage roads on west side of U.S. 23 to connect with Hyatts Road and Glenn Parkway



BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Eliminates numerous conflicting movements from U.S. 23

CHALLENGES

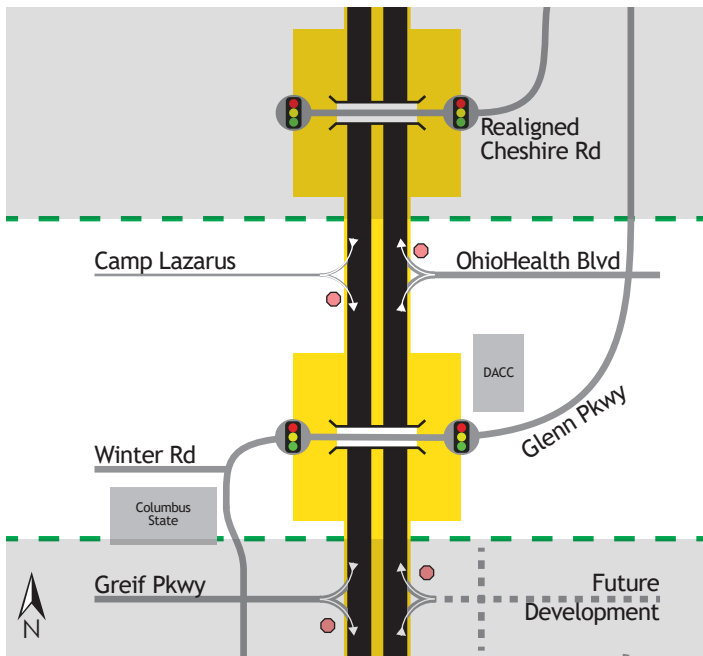
- Access to/from Worthington Arms manufactured home community

FUTURE CONSIDERATIONS

- The traffic signal should not be removed until either the connection from Glenn Parkway to Greif Parkway or the connection from Greif Parkway to Hyatts Road is completed, in order to allow Greif Parkway vehicles to continue to have access to both directions of U.S. 23
- Future right-of-way for a potential frontage/backage road on west side of U.S. 23 between Hyatts Road and Greif Parkway should be identified and protected
- Future developments east of U.S. 23 should provide access for the Worthington Arms community to the future public street network east of U.S. 23

GLENN PARKWAY & OHIOHEALTH BOULEVARD

TIER 2 CONCEPT



ESTIMATED COST: \$63.7 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert the OhioHealth Boulevard intersection to right-in/right-out only operation, replacing existing traffic signal
- Construct a connector road interchange at Glenn Parkway, replacing existing traffic signal

BENEFITS

- Eliminates 2 signals, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS E operations
- Provides improved access to/from U.S. 23 for Glenn Parkway, the primary arterial for southeast portions of Delaware

CHALLENGES

- Adjacent Delaware Area Career Center, Columbus State campus, and other developments to intersection
- Adjacent land in northwest quadrant of Glenn Road intersection owned by Preservation Parks of Delaware County for future park
- Access changes to/from Camp Lazarus (Scouting America)

FUTURE CONSIDERATIONS

- This improvement would likely need to precede adjacent improvements at Greif Parkway. Planning for adjacent improvements should be included as part of this concept.

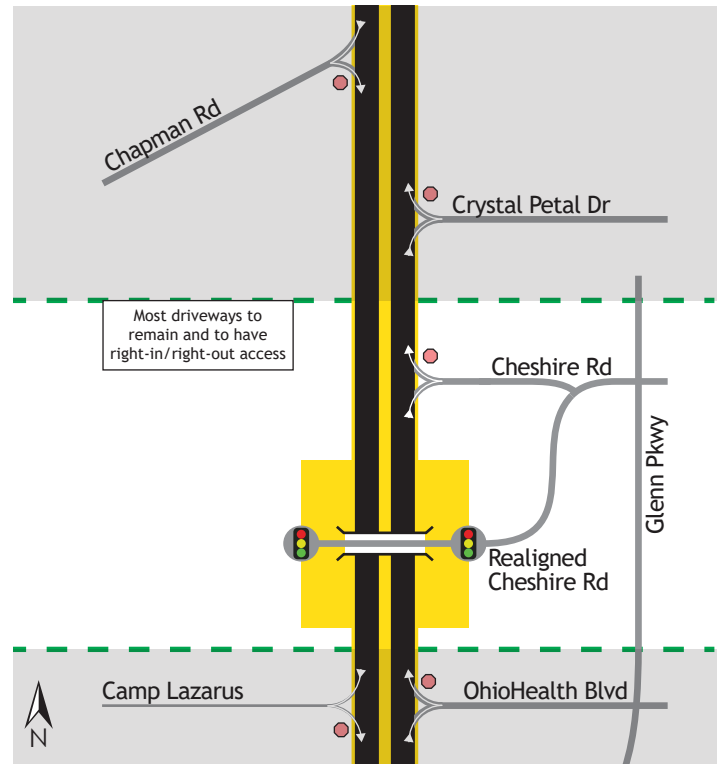
CHESHIRE ROAD (EXISTING & REALIGNED)

TIER 2 CONCEPT

ESTIMATED COST: \$45.5 M

BASELINE CONCEPT

- Convert existing Cheshire Road intersection to right-in/right-out operation
- Construct a connector road interchange at realigned Cheshire Road, replacing existing traffic signal



BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Creates opportunity for grade separated pedestrian/bicycle connectivity across U.S. 23, linking residential areas to future Preservation Park

CHALLENGES

- Ongoing Cheshire Road realignment project in design by Delaware County
- Adjacent land on west side of U.S. 23 owned by Preservation Parks of Delaware County for future park

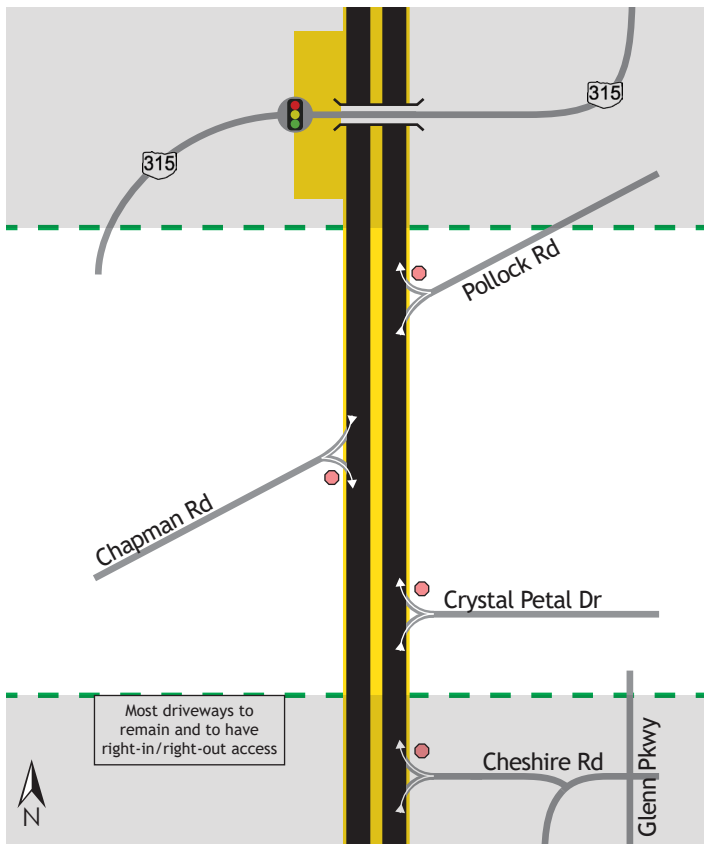
FUTURE CONSIDERATIONS

- Continued coordination needed with City of Delaware and Delaware County regarding the Cheshire Road realignment project and any associated development activity

CRYSTAL PETAL DRIVE TO POLLOCK ROAD

TIER 3 CONCEPT

ESTIMATED COST: \$2.5 M



BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert Pollock Road intersection to right-in/right-out only operation

BENEFITS

- Addresses location ranked #422 on HSIP list (2024)
- Eliminates numerous conflicting movements from U.S. 23

CHALLENGES

- Access to Perkins Observatory (Ohio Wesleyan University)
- Access to Delaware Golf Club
- Access to Methodist Theological School

FUTURE CONSIDERATIONS

- This improvement should not be implemented until the improvements at Cheshire Road are constructed in order to allow for U-turn movements for existing southbound left turning traffic.

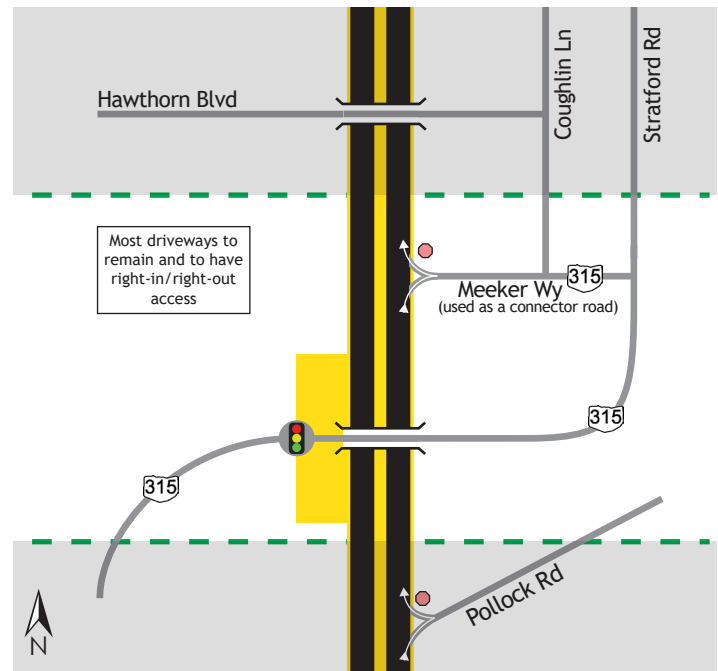
SR 315 TO MEEKER WAY

TIER 4 CONCEPT

ESTIMATED COST: \$74.1 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct a connector road interchange at SR 315, using Meeker Way as the connector road to/from U.S. 23 northbound, replacing existing signalized intersections



BENEFITS

- Eliminates 2 signals, creating free-flowing operation on U.S. 23
- Addresses location ranked #312 on HSIP list (2024)

CHALLENGES

- Olentangy State Scenic River adjacent to SR 315
- Multiple historic and cultural resources, including Delaware County Historical Society located in area
- Stratford Ecological Center adjacent to U.S. 23
- Access for existing properties on SR 315 and Stratford Road

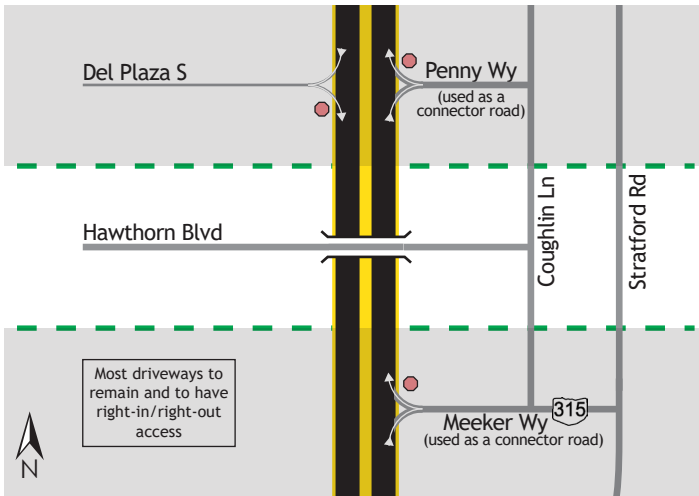
FUTURE CONSIDERATIONS

- Evaluate potential grade separation alternatives that could reduce impacts to historical properties along SR 315 and Stratford Road, including an alternative that does not include impacts to Stratford Road. Additionally, alternatives that reduce impacts to the existing bridge over Olentangy River will be considered.

HAWTHORN BOULEVARD

TIER 2 CONCEPT

ESTIMATED COST: \$25.3 M



BASELINE CONCEPT

- Construct an overpass/underpass Hawthorn Boulevard, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Eliminates a location with predicted LOS E operations
- Eliminates an intersection, removing numerous conflicting movements

CHALLENGES

- Proximity of residential neighborhood on west side of U.S. 23
- Proximity of commercial properties on east side of U.S. 23

FUTURE CONSIDERATIONS

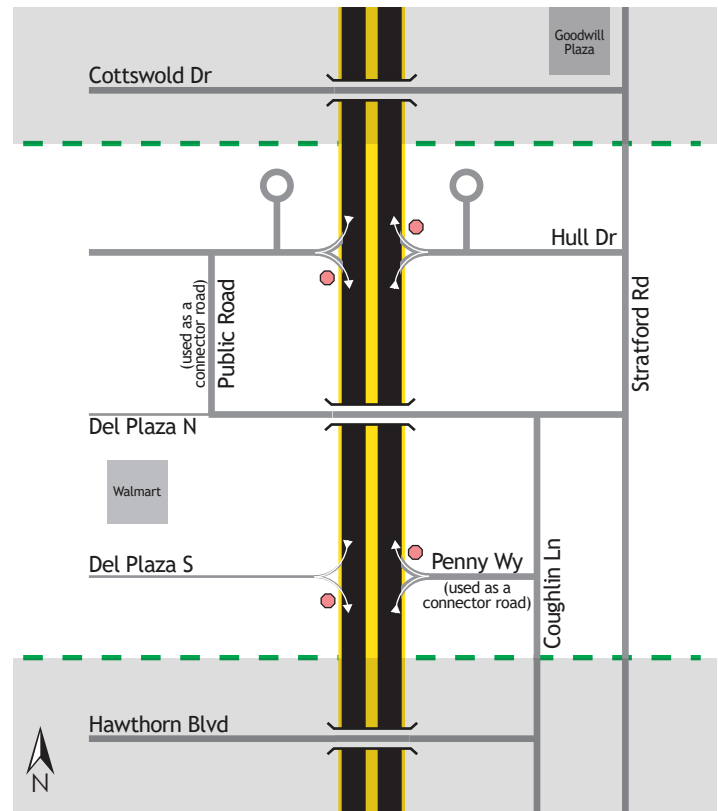
DELAWARE PLAZA DRIVES & HULL DRIVE

TIER 3 CONCEPT

ESTIMATED COST: \$47.6 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct driveways north from Hull Drive to allow access to car dealerships
- Revise private driveway on west side of U.S. 23 to create a public street connection to Hull Drive
- Convert Hull Drive intersection to right-in/right-out only operation
- Construct an overpass/underpass at Delaware Plaza North drive, replacing existing traffic signal
- Extend Delaware Plaza North drive east to Stratford Road as a public road
- Convert Delaware Plaza South intersection to right-in/right-out only operation, replacing existing traffic signal



BENEFITS

- Eliminates 2 signals, creating free-flowing operation for U.S. 23
- Creates opportunity for grade separated pedestrian/bicycle connection between Delaware Plaza and residential areas on east side of U.S. 23, as well as future Stratford Road bicycle path

CHALLENGES

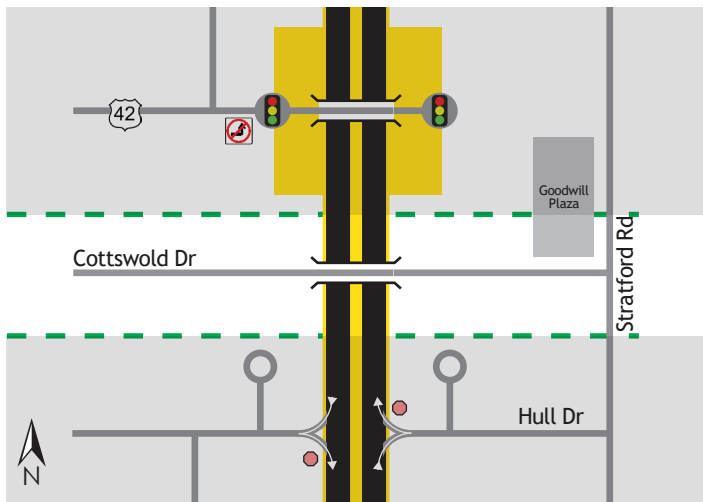
- Adjacent businesses on both sides of U.S. 23
- Conversion of some private driveways to public right-of-way
- Access to/from Ohio State Highway Patrol post

FUTURE CONSIDERATIONS

- Identifying and protecting potential right-of-way for future connections
- The City of Delaware desires to explore the feasibility of connector roads at additional locations to enhance connectivity and access to/from U.S. 23

COTTSWOLD DRIVE

TIER 4 CONCEPT



ESTIMATED COST: \$48.2 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct an overpass/underpass at Cottswold Drive, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Eliminates an intersection, removing numerous conflicting movements from U.S. 23
- Creates opportunity for grade separated pedestrian/bicycle connection between Cottswold Drive/Willow Brook and Wesleyan Woods subdivisions and Goodwill Plaza on east side of U.S. 23, as well as future Stratford Road bicycle path

CHALLENGES

- High-voltage towers/overhead lines running along Cottswold Drive/potential extension
- Adjacent Goodwill plaza shopping center
- Adjacent Willow Brook and Wesleyan Woods subdivision (Cottswold Drive)
- Shared-use path along west side of U.S. 23
- Ohio State Highway Patrol post on U.S. 23

FUTURE CONSIDERATIONS

- Committed project of extending Cottswold Drive east to Stratford Road will need to be in place prior to the grade separation or become part of this project
- The City of Delaware desires to explore the feasibility of additional right-in/right-out access on both sides of U.S. 23 between Cottswold Drive and U.S. 42

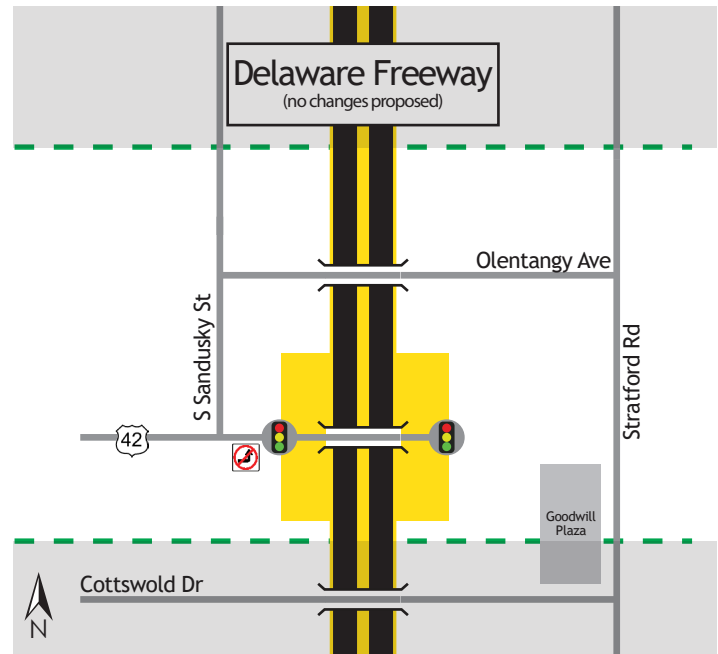
U.S. 42

TIER 4 CONCEPT

ESTIMATED COST: \$94.8 M

BASELINE CONCEPT

- Construct a connector road interchange at U.S. 42, replacing existing signalized intersections



BENEFITS

- Eliminates 2 signals, creating free-flowing operation on U.S. 23
- Creates more free-flow movements between U.S. 23 and U.S. 42
- Addresses location with a fatal crash in 2023

CHALLENGES

- S. Sandusky Street connectivity to U.S. 42 and both directions of U.S. 23
- Shared-use path on west side of U.S. 23/S. Sandusky Street
- Adjacent commercial properties east of U.S. 23
- Adjacent residential properties west of U.S. 23
- High truck volumes and uphill grade going west on U.S. 42

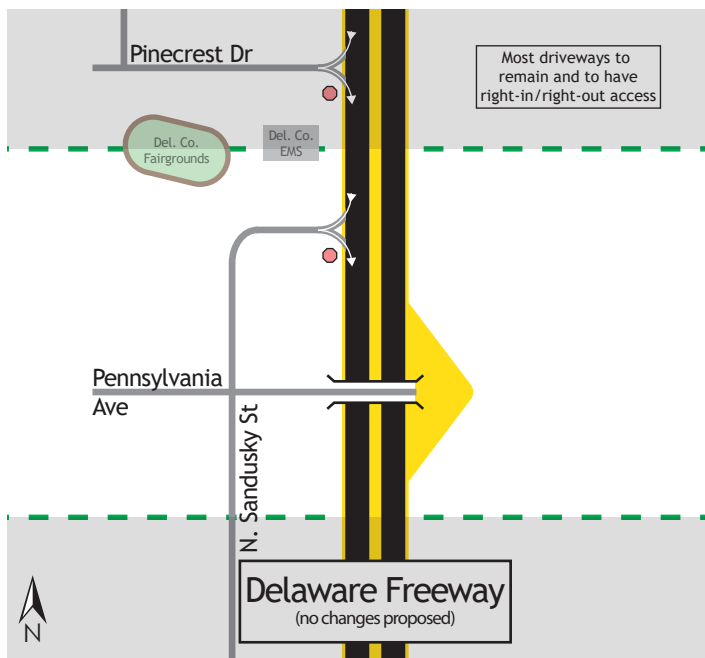
FUTURE CONSIDERATIONS

- Coordination with City regarding potential extension of U.S. 42 east to U.S. 36/SR 37, which is shown on current City Thoroughfare Plan
- Potential for future connection east to link U.S. 42 and/or U.S. 23 to Stratford Road
- Coordination with the City to maintaining all existing movements between U.S. 23, U.S. 42, and S. Sandusky Street

PENNSYLVANIA AVENUE/SANDUSKY STREET INTERCHANGE

TIER 4 CONCEPT

ESTIMATED COST: \$28.5 M



BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert Pennsylvania Avenue/Sandusky Street southbound exit and entrance to right-in/right-out only operation, replacing existing traffic signal
- Reconstruct/realign Pennsylvania Avenue bridge and northbound entrance ramp
- Construct northbound exit ramp at Pennsylvania Avenue

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Provides opportunity for grade-separated pedestrian/bicycle crossing of U.S. 23, connecting Pennsylvania Avenue neighborhood to Mingo Park

CHALLENGES

- Proximity to Olentangy State Scenic River
- Adjacent Delaware Northwest Historic District and residential neighborhood
- Planned City of Delaware sewer main project (Northeast Olentangy Interceptor) to be constructed in this area

FUTURE CONSIDERATIONS

- City of Delaware Thoroughfare Plan shows a potential future eastward extension of Pennsylvania Avenue east to U.S. 42

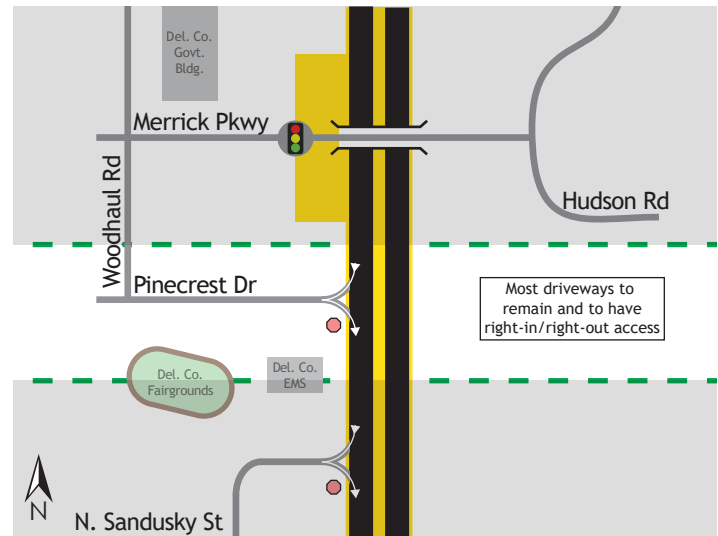
PINECREST DRIVE

TIER 2 CONCEPT

ESTIMATED COST: \$3.2 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert Pinecrest Drive intersection to right-in/right-out only operation



BENEFITS

- Eliminates unsignalized left turn movements on U.S. 23
- Reduces potential future cut-through traffic on Pinecrest Drive

CHALLENGES

- Effects on circulation and emergency response times to Pinecrest Drive and neighborhood
- Proximity to Olentangy State Scenic River

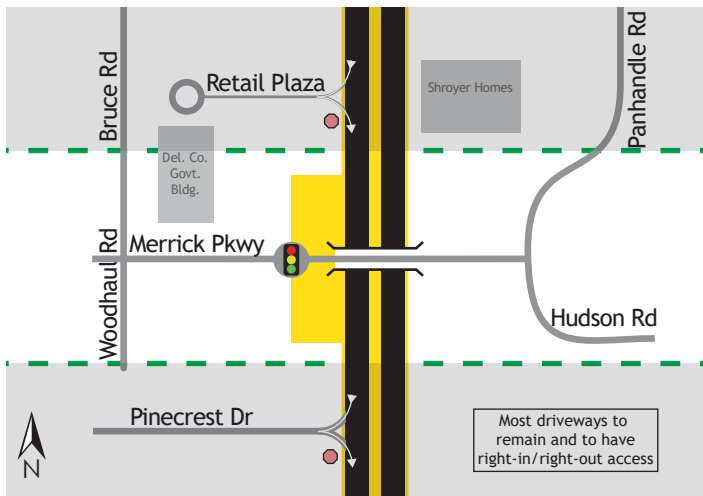
FUTURE CONSIDERATIONS

- If desired by community, Pinecrest Drive intersection could be eliminated, resulting in a cul-de-sac
- The City of Delaware desires that full-movement access be provided at Merrick Parkway prior to any reduction of access to/from Pinecrest Drive

MERRICK BOULEVARD/PANHANDLE ROAD

TIER 2 CONCEPT

ESTIMATED COST: \$94.2 M



BASELINE CONCEPT

- Construct a connector road interchange for U.S. 23 southbound at Merrick Boulevard/Panhandle Road, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Addresses a location with predicted LOS F operations
- Provides connection to major new arterial for northwest portion of Delaware

CHALLENGES

- Proximity to Olen tangy State Scenic River
- Recently-reconstructed bridge on Panhandle Road over Olen tangy River
- Adjacent ongoing development of Addison Farms property
- Adjacent Shroyer Homes manufactured home community
- Historic site on Hudson Road east of Olen tangy River
- Desire to not increase traffic on residential streets such as Bruce Road and Heritage Boulevard

FUTURE CONSIDERATIONS

- Connector roads for U.S. 23 northbound could be included in interchange if a feasible solution can be identified, so that full movements to/from Merrick Parkway/Panhandle Road are maintained
- This improvement would likely need to precede improvements in the adjacent section to the north (Shroyer Homes to Delaware County Board of Elections). Planning for adjacent improvements should be included as part of this concept.

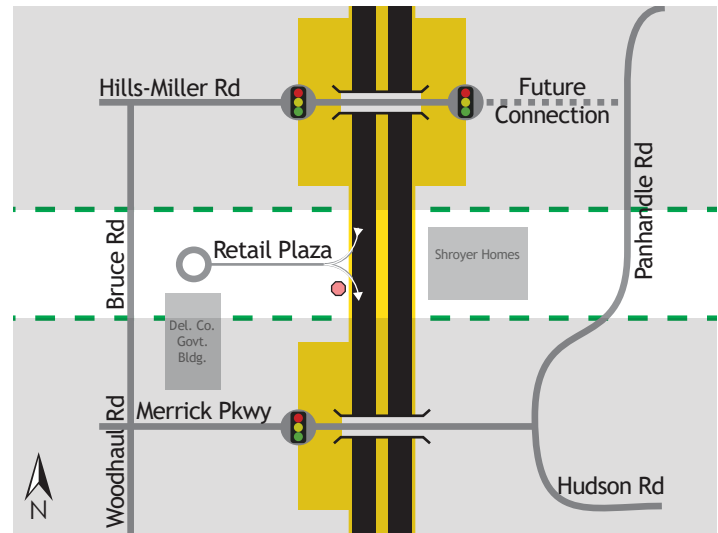
SHROYER HOMES TO RETAIL PLAZA

TIER 3 CONCEPT

ESTIMATED COST: \$20.2 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Convert Retail Plaza intersection to right-in/right-out only movements, replacing existing traffic signal



BENEFITS

- Eliminates a signal, creating free-flowing operations on U.S. 23
- Addresses a location with predicted LOS E operations

CHALLENGES

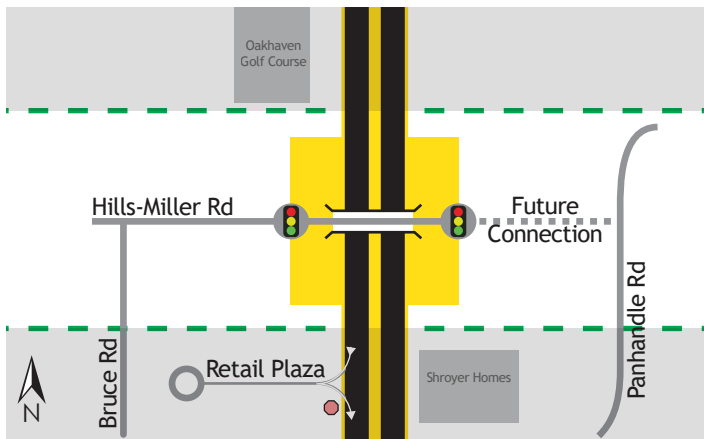
- Traffic pattern changes/increased circuitry for businesses and residents in this area
- Desire to not increase traffic on residential streets such as Bruce Road and Heritage Boulevard

FUTURE CONSIDERATIONS

- This improvement relies on U-turn movements via adjacent interchanges and should not be constructed until both adjacent interchanges (Merrick Parkway/Panhandle Road and Hills-Miller Road) are constructed
- Potential for future backage road connecting Merrick Parkway and Hills-Miller Road to limit pass-through traffic on Bruce Road, a residential neighborhood street.

HILLS-MILLER ROAD

TIER 2 CONCEPT



ESTIMATED COST: \$48.4 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct a connector road interchange at Hills-Miller Road on U.S. 23, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operations on U.S. 23
- Addresses a location with predicted LOS F operations
- Addresses location ranked #306 on HSIP list (2024)

CHALLENGES

- Adjacent businesses and homes
- Accommodation for potential future arterial heading east from this location across Olentangy River

FUTURE CONSIDERATIONS

- Accommodation for potential future backage road connection on west side of U.S. 23 south of Hills-Miller Road
- Potential realignment of Hills-Miller Road to the north can be explored
- This improvement would likely need to precede improvements in adjacent sections (Shroyer Homes to Delaware County Board of Elections, Hills-Miller Road to Coover Road). Planning for adjacent improvements should be included as part of this concept.
- The City of Delaware and Delaware County are exploring a potential future connection east of Hills-Miller Road.

HILLS-MILLER ROAD TO COOVER ROAD (SEGMENT ONLY)

TIER 2 CONCEPT

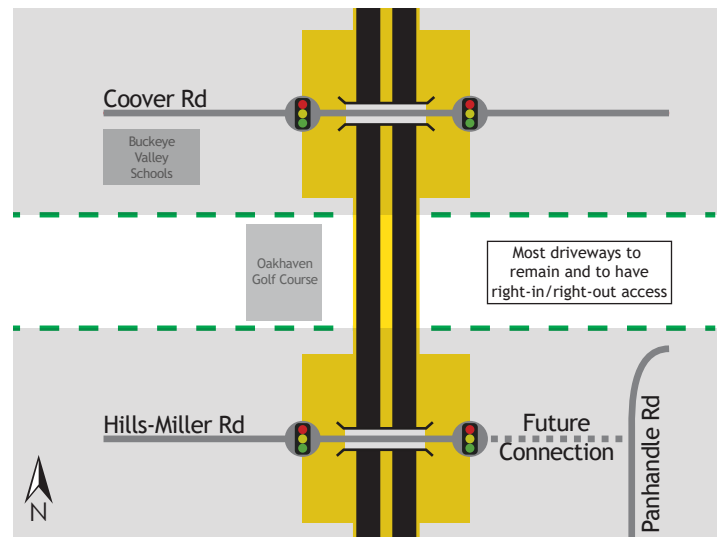
BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements

BENEFITS

- Improves safety by eliminating most left turn conflict locations over a 1-mile stretch of U.S. 23

ESTIMATED COST: \$5.2 M



CHALLENGES

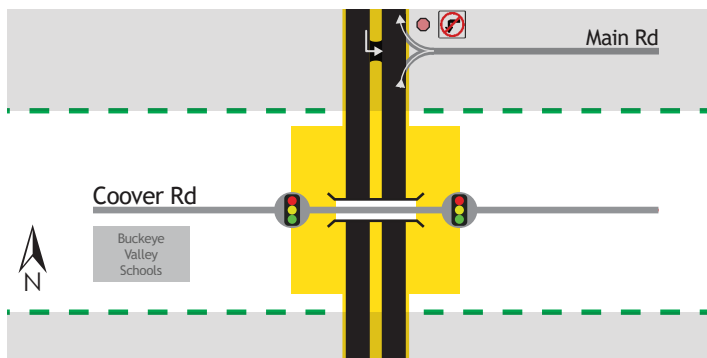
- Inside shoulder width and drainage design for installing raised median
- Increased circuitry and travel time for many movements
- Emergency response times for properties along U.S. 23
- Access to Riverview Park, City of Delaware Water Treatment Plant

FUTURE CONSIDERATIONS

- This improvement relies on U-turn movements at the adjacent interchanges (Coover Road and Hills-Miller Road). Therefore, the raised median should not be installed until adjacent interchanges are constructed.

COOVER ROAD

TIER 1 CONCEPT



ESTIMATED COST: \$43.6 M

BASELINE CONCEPT

- Install median and/or barrier to eliminate all left turning movements
- Construct a connector road interchange at Coover Road, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing conditions on U.S. 23
- Addresses a location with predicted LOS F operations
- Addresses location ranked #44 on HSIP list (2024)
- Addresses location with fatal crash in 2024
- Serves traffic to/from Buckeye Valley Local Schools

CHALLENGES

- Adjacent businesses east of U.S. 23
- Potential for new commercial development in area

FUTURE CONSIDERATIONS

- Coordination with ongoing potential developments
- Sight distance for traffic turning onto U.S. 23 southbound from connector road
- This improvement would likely need to precede improvements in the adjacent section to the south (Hills-Miller Road to Coover Road). Planning for adjacent improvements should be included as part of this concept.

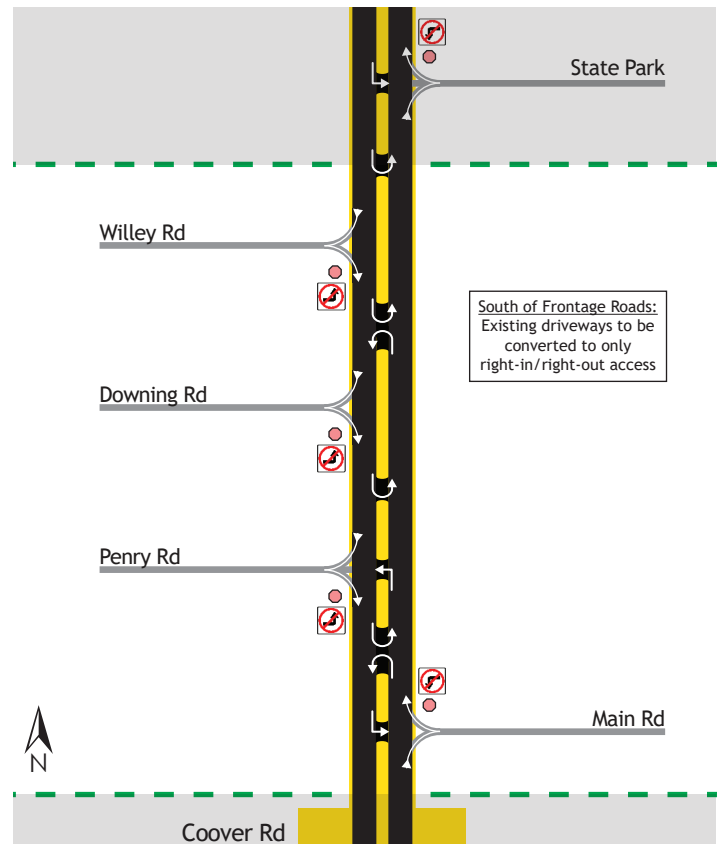
MAIN ROAD TO WILLEY ROAD (INTERSECTION IMPROVEMENTS)

TIER 3 CONCEPT

ESTIMATED COST: \$8.2 M

BASELINE CONCEPT

- Convert all intersections (Main Road, Delaware Dam access, Penry Road, Downing Road, Willey Road) to RCUT operation



BENEFITS

- Eliminates unsignalized left turns entering U.S. 23 from minor streets

CHALLENGES

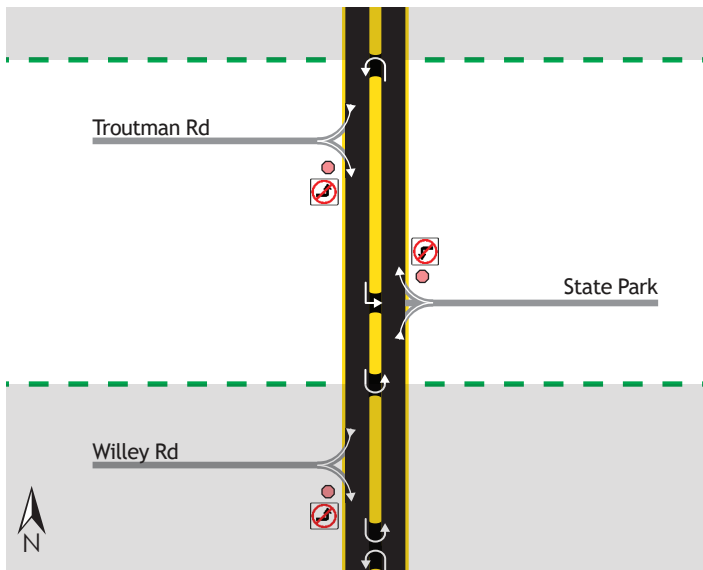
- Delaware State Park located adjacent to U.S. 23

FUTURE CONSIDERATIONS

DELAWARE STATE PARK & TROUTMAN ROAD

TIER 2 CONCEPT

ESTIMATED COST: \$3.5 M



BASELINE CONCEPT

- Construct an RCUT intersection at Troutman Road, replacing existing unsignalized intersection
- Construct an RCUT intersection at Delaware State Park entrance, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation on U.S. 23
- Removes only signal in a 6-mile stretch of U.S. 23
- Removes substandard northbound left turn lane

CHALLENGES

- Delaware State Park located adjacent to U.S. 23
- Recreational vehicle and boat trailer access to/ from Delaware State Park
- Located within flowage easement

FUTURE CONSIDERATIONS

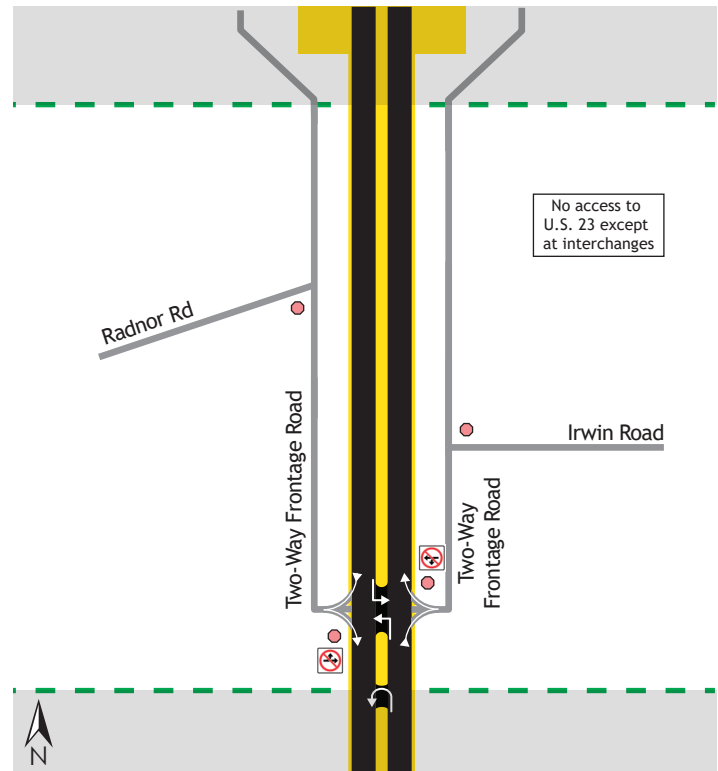
TROUTMAN ROAD TO WEISER ROAD

TIER 1 CONCEPT

ESTIMATED COST: \$25.6 M

BASELINE CONCEPT

- Eliminate direct access from U.S. 23 mainline lanes, except at south end of frontage roads
- Convert frontage roads from one-way operation to two-way operation



BENEFITS

- Addresses locations ranked #9, #31, and #52 on HSIP list (2024)
- Addresses location with fatal crash in 2023
- Removes multiple intersections, crossover locations, and conflict points from U.S. 23
- Provides improved circulation/travel times for many local movements
- Removes frontage roads from ODOT maintenance responsibility

CHALLENGES

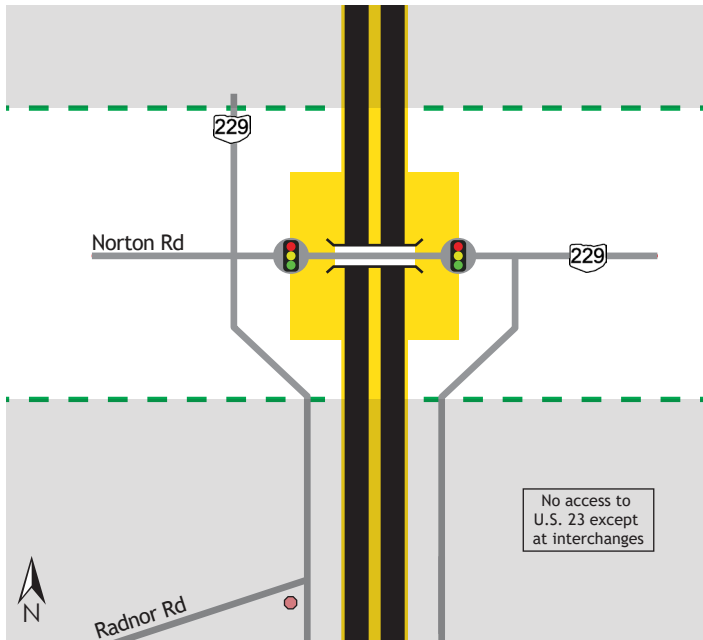
- Increased circuitry for local residents making some movements
- Potential effects on emergency response times for locations east of U.S. 23
- Frontage roads would likely be turned over to County maintenance

FUTURE CONSIDERATIONS

- Coordination with adjacent SR 229 improvements, particularly for future northbound connector road

SR 229

TIER 2 CONCEPT



ESTIMATED COST: \$50.4 M

BASELINE CONCEPT

- Construct a connector road interchange at SR 229, replacing existing traffic signal

BENEFITS

- Eliminates a signal, creating free-flowing operation for U.S. 23
- Extends signal-free corridor south of Toledo by nearly 4 miles

CHALLENGES

- Cemetery located along south side of SR 229, east of U.S. 23
- Homes/structures in hamlet of Norton, just west of U.S. 23
- Recurring flooding on SR 229 east of U.S. 23

FUTURE CONSIDERATIONS

- Coordination with adjacent frontage road conversion to two-way operation, particularly for northbound connector road

Table 2: Baseline Concept Scoring

	BENEFITS						COSTS					OTHER CONSIDERATIONS			
	OVERALL CRASH REDUCTION	SEVERE CRASH REDUCTION	CONFLICTING MOVEMENT REDUCTION	TRAVEL TIME SAVINGS	NUMBER OF SIGNALS REMOVED	LEVEL- OF- SERVICE	ESTIMATED COST	ADDITIONAL RIGHT-OF- WAY	NATURAL/ CULTURAL RESOURCE EFFECTS	COMMUNITY EFFECTS	COMPLEXITY/ TIMELINE	DEVELOPMENT PREPAREDNESS	ISOLATED SIGNALS	HSIP RANKINGS	
Northwoods Boulevard	1	2	4	2	5	4	5	2	7	5	5	0	0	0	Northwoods Boulevard
Highbluffs Boulevard/ Windsong Way	2	2	3	2	5	4	6	3	5	3	6	0	0	0	Highbluffs Boulevard/ Windsong Way
Lazelle Road & Dillmont Drive	7	5	5	5	5	5	2	1	6	6	2	0	0	5	Lazelle Road & Dillmont Drive
Olentangy Meadows Drive	1	2	1	4	4	4	3	1	6	4	6	0	0	5	Olentangy Meadows Drive
Green Meadows Drive	6	6	4	4	5	5	3	2	2	4	3	0	0	12.5	Green Meadows Drive
SR 750	7	7	4	5	5	7	2	1	3	4	1	0	0	30	SR 750
Meadow Park Avenue	5	5	4	4	5	5	5	2	7	5	3	0	0	10	Meadow Park Avenue
Windbrush Avenue to Hidden Ravines Drive	7	6	7	7	7	6	4	3	6	5	4	0	0	7.5	Windbrush Avenue to Hidden Ravines Drive
Orange Road & Parkway Drive	6	5	5	6	5	7	2	1	7	3	2	15	0	13.5	Orange Road & Parkway Drive
Orangepoint Drive & Halfway Avenue	4	3	4	5	5	5	3	5	6	3	3	0	0	2	Orangepoint Drive & Halfway Avenue
Home Road & Corduroy Road	7	6	6	7	7	6	1	2	5	4	2	30	0	8	Home Road & Corduroy Road
Lewis Center Road to Orangewick Drive	7	6	7	6	7	5	4	5	6	5	4	0	0	8.5	Lewis Center Road to Orangewick Drive
Hyatts Road/Shanahan Road	6	5	3	4	5	5	3	2	3	3	1	0	0	2	Hyatts Road/Shanahan Road
Greif Parkway	3	2	3	2	5	2	5	4	6	4	5	15	0	0	Greif Parkway
Glenn Parkway & OhioHealth Boulevard	6	5	6	3	7	5	3	3	5	5	2	7.5	0	0	Glenn Parkway & OhioHealth Boulevard
Cheshire Road (existing & realigned)	3	5	3	1	5	3	4	5	5	6	3	30	4.5	0	Cheshire Road (existing & realigned)
Crystal Petal Drive to Pollock Road	1	3	1	1	3	1	7	7	3	3	7	0	0	2	Crystal Petal Drive to Pollock Road

Table 2 cont.: Baseline Concept Scoring

	BENEFITS						COSTS					OTHER CONSIDERATIONS			
	OVERALL CRASH REDUCTION	SEVERE CRASH REDUCTION	CONFLICTING MOVEMENT REDUCTION	TRAVEL TIME SAVINGS	NUMBER OF SIGNALS REMOVED	LEVEL- OF- SERVICE	ESTIMATED COST	ADDITIONAL RIGHT-OF- WAY	NATURAL/ CULTURAL RESOURCE EFFECTS	COMMUNITY EFFECTS	COMPLEXITY/ TIMELINE	DEVELOPMENT PREPAREDNESS	ISOLATED SIGNALS	HSIP RANKINGS	
SR 315 to Meeker Blvd	5	5	3	3	7	4	3	3	2	2	2	0	0	2	SR 315 to Meeker Blvd
Hawthorn Boulevard	3	4	4	3	5	5	5	4	6	4	4	7.5	0	0	Hawthorn Boulevard
Delaware Plaza Drives & Hull Drive	6	5	2	2	7	3	4	3	6	4	3	15	0	0	Delaware Plaza Drives & Hull Drive
Cottswold Drive	4	4	4	3	5	4	4	3	6	2	2	7.5	0	0	Cottswold Drive
US 42	6	5	1	2	6	2	2	2	7	1	1	0	1.5	0	US 42
Pennsylvania Avenue/ Sandusky Street Interchange	1	3	1	2	4	2	5	5	3	3	3	0	4.5	0	Pennsylvania Avenue/ Sandusky Street Interchange
Pinecrest Drive	2	3	1	2	3	1	7	7	7	4	7	0	0	0	Pinecrest Drive
Merrick Boulevard/ Panhandle Road	3	2	4	6	5	6	2	4	2	5	2	30	6	0	Merrick Boulevard/ Panhandle Road
Shroyer Homes to Delaware County Board of Elections	4	4	1	4	5	5	5	4	6	2	2	0	6	0	Shroyer Homes to Delaware County Board of Elections
Hills-Miller Road	3	2	3	4	5	5	4	3	5	3	3	30	9	2	Hills-Miller Road
Hills-Miller Road to Coover Road (segment only)	1	4	1	2	3	1	7	7	5	6	7	0	0	0	Hills-Miller Road to Coover Road (segment only)
Coover Road	3	5	3	5	5	6	4	5	6	5	5	15	12	15	Coover Road
Main Road to Willey Road (intersection improvements)	2	2	1	1	3	1	7	7	5	7	7	0	0	0	Main Road to Willey Road (intersection improvements)
Delaware State Park & Troutman Road	2	2	1	2	5	2	7	7	4	6	3	15	7.5	0	Delaware State Park & Troutman Road
Troutman Road to Weiser Road	3	3	2	1	3	1	5	7	7	7	5	0	0	37.5	Troutman Road to Weiser Road
SR 229	5	5	4	2	5	4	4	7	6	4	3	0	15	0	SR 229