# ERI US 6 Connectivity Corridor Including Sandusky Bay Pathway

RAISE Grant Application - April 2022





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# Section I: Project Description

The purpose of the ERI US 6 Connectivity Corridor including Sandusky Bay Pathway project is to enhance safety, increase efficiency, improve multi-modal transportation options, and increase community connectivity across Erie County, Ohio. Most of the corridor's intersections are currently listed on high priority safety location lists as published by the <u>State</u> and the Erie Regional Planning Commission (ERPC). The proposed improvements are derived from a 2019 US 6 Corridor study that was overseen by the region's metropolitan planning organization (MPO), the ERPC. A regional, collaborative approach that included the Ohio Department of Transportation (ODOT), Erie County, the City of Sandusky, the City of Huron, Perkins Township, and Huron Township was taken in both the development of the 2019 study as well as in the preparation of this application. Specific project improvements consist of converting three signalized and two unsignalized intersections into single lane modern roundabouts, installation of a continuous two-way left turn lane through a portion of the corridor, extension of the Sandusky Bay Pathway multi-use path, and installation of a new multi-use path along US 6 and Rye Beach Road to connect the Sandusky Bay Pathway to the City of Huron.

The main challenge to implementing the improvements has been funding. Although local agencies and surrounding private stakeholders support the project's planned



Figure 1: US 6 Connectivity Corridor Including Sandusky Bay Pathway Project

improvements, total costs are beyond what local budgets can accommodate. In 2019, a request for funding for the entire corridor was made through ODOT's major safety program. The project improvements that lie within the City of Sandusky were selected for funding in the amount of \$4,911,501 with a local City match of \$258,499. Improvements in this area include left turn lane lengthening at two intersections, dedicated right turn lanes at one intersection, signal removal, and installation of a roundabout at US 6 and Cedar Point Drive. The project is currently under design with construction to begin in State of Ohio Fiscal Year (SFY) 2024.

All improvements will be in conformance with applicable local, state, and federal guidelines and standards, including the AASHTO Green Book, State of Ohio Construction and Material Specifications, State of Ohio Location and Design Manual, the Americans with Disabilities Act Public Rights of Way Accessibility Guidelines (PROWAG), the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), and others. This project is currently in the planning phase. However, it will tie in with other projects that are in the detailed design and construction phases, particularly to the west end of the project. This includes the roundabout at the intersection of US 6 and Cedar Point Drive, the planned and currently under design Sandusky Bay Pathway, and other connectivity- and safety-type projects in the area.

# Section II: Project Location Located along Lake Erie between the Cities of

Sandusky and Huron in Erie County, Ohio, the project area consists of multiple road segments and jurisdictions (City of Sandusky, Perkins Township, City of Huron, and Huron Township). The Figure 2: Cedar Point entrance sign approximate 6.3-mile primary road segment of US 6 extends from Sycamore Line (US 250) to Rye Beach Road, and along Rye Beach Road to the SR 2 eastbound ramp intersection. The secondary road segment of Rye Beach Road continues from SR 2 to just south of the Norfolk Southern (NS) railroad. US 6 is a major arterial serving residential, commercial, institutional, and recreational sites. A very active NS railroad line, with 55 trains a day, runs immediately parallel to US 6 along the south side. The close proximity between US 6 and the rail line causes queuing problems along US 6 and its intersecting roadways whenever there is a train at the crossing. US 6 also experiences significant traffic demands as it serves as a main access point to one of the country's largest amusement parks, Cedar Point, and to Cedar Point's Sports Force Parks, a vear-round youth sports facility. The corridor supports an \$11 billion dollar tourism industry making the area one of Ohio's premier destinations.

The multi-modal portion of this project includes a 1.2-mile extension of the Sandusky Bay Pathway. The Pathway is a multi-use path that traverses across the City of Sandusky, with portions running along the scenic Sandusky Bay waterfront. Approximately 3.1 miles of the Pathway have already been completed in Sandusky. Also, an addition-



al 4.5 miles of new path would be installed along the north side of US 6 and along the east side of Rye Beach Road to connect to the Sandusky Bay Pathway. The US 6 corridor is currently designated as US Bike Route 230 with existing conditions consisting of a narrow shoulder for bicyclists to use for travel. The new separated

Figure 3: Cedar Point Sports Center & Sports Force Parks multi-use path will provide safer facilities for both bicyclists and pedestrians.

Existing public transit services are provided through the project area by the Sandusky Transit System (STS), a designated rural transit system. Three fixed routes with a multitude of stops operate along the US 6 corridor and Rye Beach. Service is provided along the corridor seven days a week and provides critical access to medical, employment, educational, recreational, commercial, and residential areas across the area. With the implementation of the proposed improvements, the safety, efficiency, and reliability for all those that currently use the public transit system will be greatly



Figure 4: US 6 Connectivity Corridor Including Sandusky Bay Pathway with Project Area Cenus Tracts

#### enhanced.

The project is classified as rural as it is not located within a Census-designated Urbanized Area. Erie County, Ohio Census Tracts 407, 408, 411, 412, and 413 are identified as Areas of Persistent Poverty in the US DOT RAISE Persistent Poverty Tool. Erie County, Ohio Census Tract 407 is also identified as a historically disadvantaged community in the US DOT Historically Disadvantaged Communities tool. The project also lies within a federally designated Opportunity Zone. The Opportunity Zone is located on the east side of the project in the City of Huron; its Zone ID is 39043040500.

Section III: Grant Funds, Sources & Uses of Project Funds The project includes five (5) components with independent utility. Each component is listed separately in the cost summary and benefit cost analysis. We have the ability to package all five components as one project, yet also have the flexibility to deliver each independently. Specifically, the project is made up of 5 components that each have independent utility.

- 1. Sandusky Bay Pathway
- 2. US 6 and Perkins Avenue Roundabout
- 3. US 6 and Camp Road Roundabout and addition of two-way left turn lane
- 4. US 6 Multi-Use Path
- 5. Rye Beach Road Roundabouts and Multi-Use Path



Figure 5: US 6 Connectvity Corridor Including Sandusky Pathway Project Components 5

All development phases of the project (Preliminary Engineering, Detail Design, Rightof-Way Acquisition) will be funded by ODOT and our very committed local funding partners. We have the following public and private funding partners: Ohio Rail Development Commission (ORDC), Erie County Commissioners, City of Sandusky, City of Huron, ERPC, Cedar Fair, and Lake Erie Shores and Islands Tourism. The following table provides a summary of the commitment from each funding partner.

| СҮ    | Total            | Description                             |    | I Description Component<br>Sandusky |    | mponent 1<br>andusky | Component 2<br>Perkins |           | Component 3<br>Camp |           | Component 4<br>ODOT MUP |            | Co<br>F | mponent 5<br>Iye Beach |
|-------|------------------|---|----|-------------------------------------|----|----------------------|------------------------|-----------|---------------------|-----------|-------------------------|------------|---------|------------------------|
| 2022  | \$<br>1,680,000  | Comp 1 - ROW, Comp 2-5 Survey/ROW Plans | \$ | 600,000                             | \$ | 211,034              | \$                     | 422,069   | \$                  | 72,000    | \$                      | 374,897    |         |                        |
| 2023  | \$<br>3,270,000  | Comp 2-5 Rest of PE-ENV                 | \$ | -                                   | \$ | 638,966              | \$                     | 1,277,931 | \$                  | 218,000   | \$                      | 1,135,103  |         |                        |
| 2024  | \$<br>11,508,930 | Comp 1 CO/CE, Comp 2-5 PE-DD and ROW    | \$ | 7,590,000                           | \$ | 540,000              | \$                     | 1,117,530 | \$                  | 319,000   | \$                      | 1,942,400  |         |                        |
| 2025  | \$<br>-          |   | \$ | 0                                   | \$ | -                    | \$                     | 1.71      | \$                  | 170       | \$                      | -          |         |                        |
| 2026  | \$<br>18,138,000 | Comp 2-5 CO/CE                          | \$ |                                     | \$ | 3,542,000            | \$                     | 5,361,500 | \$                  | 2,266,000 | \$                      | 6,968,500  |         |                        |
| Total | \$<br>34,596,930 |   | \$ | 8,190,000                           | \$ | 4,932,000            | \$                     | 8,179,030 | \$                  | 2,875,000 | \$                      | 10,420,900 |         |                        |

| Source           | Status    | Amount        | Fed      |         | State   | Local           |
|------------------|-----------|---------------|----------|---------|---------|-----------------|
| Safety           | Committed | \$ 5,000,000  | \$ 4,500 | ,000 \$ | 500,000 |                 |
| ORDC             | Committed | \$ 750,000    | \$ 600   | ,000 \$ | 150,000 |                 |
| Erie County      | Committed | \$ 1,000,000  |          |         |         | \$<br>1,000,000 |
| City of Sandusky | Committed | \$ 600,000    |          |         |         | \$<br>600,000   |
| City of Huron    | Committed | \$ 1,000,000  |          |         |         | \$<br>1,000,000 |
| ERPC (MPO STP)   | Pending   | \$ 500,000    | \$ 500   | ,000    |         |                 |
| TID              | Pending   | \$ 500,000    | \$ 500   | ,000    |         |                 |
| Cedar Fair       | Committed | \$ 300,000    |          |         |         | \$<br>300,000   |
| Lake Erie Shores | Committed | \$ 500,000    |          |         |         | \$<br>500,000   |
|                  | TOTAL:    | \$ 10,150,000 | \$ 6,100 | ,000 \$ | 650,000 | \$<br>3,400,000 |

| Turno         | Amount        | Сс | omponent 1 | Co | omponent 2 | Component 3 |           |  |
|---------------|---------------|----|------------|----|------------|-------------|-----------|--|
| туре          | Amount        |    | Sandusky   |    | Perkins    | Camp        |           |  |
| Raise Request | \$24,446,931  | \$ | 7,590,000  | \$ | 2,672,349  | \$          | 5,242,528 |  |
| Other Federal | \$6,099,999   | \$ | Ξ          | \$ | 1,510,787  | \$          | 1,860,543 |  |
| State         | \$650,000     | \$ | -          | \$ | 224,569    | \$          | 153,357   |  |
| Local         | \$3,400,000   | \$ | 600,000    | \$ | 524,296    | \$          | 922,602   |  |
| Total:        | \$ 34,596,930 | \$ | 8,190,000  | \$ | 4,932,000  | \$          | 8,179,030 |  |

In the Construction Phase we have a funding commitment from the ORDC for \$750,000. There are no funding conditions or limited time frames associated with the committed funding from our other funding sources and local partners. All local funding partners have provided commitment letters and are attached to the application in Appendix A.

With all development funds fully committed for all components of the project and partial funding for the Construction Phase, ODOT is requesting RAISE funding for the remaining Construction Phase of the project. A project estimate was based on planning level design and was prepared by a licensed Professional Engineer and is included as an attachment to this application in <u>Appendix C</u>.

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#### US 6 Connectivity Corridor Including Sandusky Bay Pathway Project Cost



RAISE Request: \$24,450,000 (71%)

# Section IV: Merit Criteria 🗬 🖶 🗬 🗬 🗬 🗬 Safety

Safety concerns have been documented in various studies, reports, and lists over the years. The following pages contain snapshots of sections of the corridor and the Sandusky Bay Pathway that document specific safety issues, provide current crash statistics, describe proposed improvements, and document the expected outcome the improvements will have on enhancing safety and mitigating system safety issues.

US 6 and Perkins Avenue Intersection (Component 2)

From 2015-2020, there were 43 crashes at the US 6 and Perkins Avenue intersection: 11 injury (26%) and 32 PDO (74%). Major crash types include: 20 rear end, 8 fixed object, and 7 angle crashes. Traffic frequently backs up to and past the railroad tracks as there is only approximately 70'-75' of storage between US 6 and the tracks. During peak times it is very difficult to find a gap in US 6 traffic to make a left or right turn



Figure 6: Traffic backups at the US 6 and Perkins Ave. interection during morning peak.





Figure 7: Perkins Ave. approach to US 6 has a steep grade due to the closer proximity of the railroad crossing.

from Perkins Avenue and is also difficult for vehicles on US 6 to find a gap to make a left turn onto Perkins Avenue. Also, when there is a train, vehicles westbound on US 6 often queue up due to other traffic waiting to make a left turn. This intersection was ranked on the Ohio Highway Safety Improvement Program's (HSIP) Suburban Intersection priority list as #182 in 2017 and #248 in 2018. As described in the Benefit-Cost Analysis, the improvements at this

intersection and projected to provide \$5,141,210 in benefits at a 7% discount rate over the life of the project.



#### Figure 8: Proposed US 6 and Perkins Avenue roundabout

Using the Federal Railroad Administration's Web-Based Accident Prediction System (WBAPS), the Norfolk Southern (NS) Perkins Avenue at-grade crossing (DOT# 524062W) is ranked as the third most hazardous crossing in the State of Ohio as of March 21, 2022. This crossing is on the busy NS Chicago mainline with Amtrak service that sees 55 trains per day with an average speed of 45-60 mph. The crossing is equipped with active

warning devices with constant warning time circuitry. Given the history of grade crossing incidents at this location, NS approached the Ohio Rail Development Commission to review the location to determine if there were any additional engineering solutions that could be applied to the crossing to improve safety. A diagnostic review was conducted on September 8, 2021, where it was determined that there were no additional railroad warning devices or signage that could be added to the crossing to improve safety. Relocating US 6 farther away from the crossing and adding a roundabout is the only viable improvement to address the safety risks at the intersection and railroad crossing.

US 6 and Camp Road Intersection (Component 3) From 2014-2018, there were 90 crashes along US 6 between Camp Road and the fourlane section just west of Rye Beach Road: 22 injury (24%) and 68 PDO (76%). Major crash types include: 45 rear end, 17 animal, 8 fixed object, 5 left turn, and 4 sideswipe-passing crashes. The intersection of US 6 and Camp Road had 16 crashes during the 5-year analysis period. As described in the Benefit-Cost Analysis, the improvements associated with component 3 are projected to provide \$6,875,414 in benefits at a 7% discount rate over the life of the project.

The US 6 and Camp Road intersection was ranked on the Ohio HSIP Suburban Intersection priority list as #470 in 2017 and #235 in 2018. To address the safety risks, a roundabout is proposed at the Camp Road intersection and the addition of a two-way left turn lane is proposed between Camp Road and Rye Beach Road. Rye Beach Road (Component 5)

From 2015-2018, there were 40 crashes along Rye Beach Road between US 6 and the State Route (SR) 2 ramp terminal intersections: 12 injury (30%) and 28 PDO (70%). There were 19 rear-end, 10 angle, 7 sideswipe-passing, 2 left turn, and 2 fixed object crashes. A breakdown of crashes by location are as follows:

- US 6 and Rye Beach Road: 11 crashes
- Between US 6 and SR 2 WB Ramps: 3 crashes
- SR 2 WB Ramps & Rye Beach Road: 20 crashes
- SR 2 EB Ramps & Rye Beach Road: 6 crashes



Figure 9: Proposed US 6 & Camp Rd. roundabout with US 6 widening for center two-way left turn to the east



The SR 2 WB Ramps and Rye Beach Road intersection was ranked on the Ohio Highway Safety Improvement Program's Suburban Intersection priority list #394 in 2018. As described in the Benefit-Cost Analysis,

the improvements associated with component 5 are projected to provide \$4,574,441 in benefits at a 7% discount rate over the life of the project.

The SR 2 and Rye Beach Road interchange was included on ODOT's list of potential ramp clear



Figure 10: US 6 & Rye Beach Rd. intersection looking south towards SR 2

projects. Traffic frequently backs up on the westbound

exit ramp during the Cedar Point season. To address safety risks and operational issues for this area, roundabouts are proposed at the Rye Beach Road intersections with US 6 and the SR 2 ramps. Roundabouts are needed at all three intersections to function properly and enhance the safety and operational issues.



Figure 11: Proposed Rye Beach Road roundabouts

Sandusky Bay Pathway, US 6 and Rye Beach Road Multi-Use Path (Components 1, 4 & 5)

The inclusion of a shared use path within the US 6 corridor will provide people walking and biking with a safe, separated facility for travel and addresses the need to significantly improve bicycle and pedestrian accommodations along arterial roadways in the state. This project will help to address the top fatal crash-types impacting nonmotorized users and address systemic safety challenges along this corridor due to the lack of bicycle or pedestrian accommodations combined with high traffic volumes, speeds, and land use conditions. The implementation of a separated facility directly addresses this crash type by proving bicyclists a separate and comfortable facility outside the travel path of a motor vehicle.

Including this new bike and pedestrian facility will support the safe mobility of all



Figures 12 & 13: Bicyclist travelling along US 6.

# Environmental Sustainability



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A variety of tools were used to evaluate the project's impact on environmental sustainability. These included the review of census data, U.S. Department of Transportation's (U.S. DOT) online Areas of Persistent Poverty and Historically Disadvantage Communities tool, the Environmental Protection Agency's (EPA) EJSCREEN, and the Federal Highway Administration's (FHWA) Vulnerability Asset Tool (VAST).



Figure 14: Multiple parks, wildlife, and sceneic view areas are located along US 6.

users along this corridor, including residents, visitors, and workers. In 2022 alone, Cedar Point will look to hire 6,500 seasonal workers and likely attract around 3 million visitors, many who may travel this corridor every day. It is also notable that in Ohio, severe bicycle crashes are more common during the summer months, with 67% of these crashes occurring between May and September. This indicates how critical it is for infrastructure to be available to those who are riding along this corridor.



With the project's close proximity to Lake Erie, it is of utmost importance to ensure the preservation of the natural surroundings. The region places emphasis on preservation over expansion of the transportation network which is evident from the area's Metropolitan Planning Organization (MPO), Erie Regional Planning Commission's (ERPC) SFY 2021-2024 Transportation Improvement Program (TIP). The percent of preservation projects in the TIP are 89% while expansion projects represent only 11%.

The corridor is nationally significant as it is a part of the federally designated Lake Erie Coastal Ohio Trail Scenic Byway. The Lake Erie Coastal Ohio Trail is a 293-mile America's Byway that travels along the coast of Lake Erie from Toledo to Conneaut in Ohio. This project supports sustaining the byway's intrinsic resources while preserving scenic viewsheds. Protecting the various parks, wildlife, and scenic views that enrich this area is supported through the project improvements that include drainage and stormwater management applications to control flooding and prevent entry of pollutants into Lake Erie and its tributaries. The project will be designed to protect, and if necessary, mitigate impacts to wetlands and wildlife with construction adhering to federal Flood Risk Management Standards. Ensuring run-off is reduced will also improve resilience for the network as two at-risk structures (Ohio Structural File Numbers 2201674 and 2201739) were identified along the project corridor.

By installing five roundabouts with this project, vehicle idling times will be reduced leading to a decrease in vehicle emissions. Specifically, the combined project is expected to reduce 10.83 metric tons of NOx, .68 metric tons of PM, 1.81 metric tons of SOx, and 15,890 metric tons of CO2 over the 20-year life of the project. Additionally, the new multi-use path will provide a lower-carbon mode of travel that supports a decrease in greenhouse gas emissions as analysis has determined that values for Ozone and Diesel Particulate Matter in the project area currently exceed Federal, State, and EPA Regional averages. The project will also promote energy efficiency as the round-abouts will eliminate the need for power at existing traffic signals. Roundabouts will also improve resiliency of the existing infrastructure by improving traffic flow when weather events result in traffic surges due to mass departure from destinations like Cedar Point.

Portions of the project area are identified as Historically Disadvantaged Communities. There are low-income populations ranging from 46% - 60% within the project area. Minority populations are concentrated on the western portion of the project area with populations ranging from 47% - 71% along US 6.

Accommodating all modes of transportation along the US 6 corridor makes walking and biking a safe option for those travelling. Reductions in vehicle-miles traveled due

to replacing motor vehicle trips with biking or walking trips can have a positive impact on air quality. Construction of new active transportation infrastructure is project to shift some travel to active transportation modes. The projected daily mode shift is shown below and more details on the analysis methodology can be found in the Benefit-Cost Analysis.



Figure 15: Existing disconnected sidewalk at Rye Beach Rd. railroad crossing.

| Component  | New Daily Walk Trips | New Daily Bike Trips |
|--|----------------------|----------------------|
| Sandusky Bay Pathway (1)                           | 110                  | 21                   |
| US 6 Multi-Use Path (4)                            | 105                  | 21                   |
| Rye Beach Rd. Round-<br>about & Multi-Use Path (5) | 146                  | 20                   |

Walk.Bike.Ohio Existing Conditions Summary Report 2020

### **Quality of Life**

Improving conditions for people who walk and bike is critical to the health, safety, and overall mobility of communities, leading to improved quality of life for Ohioans. Replacing motor vehicle trips with bicycle and walk trips can help reduce household transportation costs, traffic congestion costs, roadway maintenance costs, and safety costs. According to an analysis from Walk.Bike.Ohio, for every vehicle mile reduced as a result of increased bicycling and walking, Ohio can expect to generate \$0.81 in transportation benefits.

Access to free recreation options, by way of the multi-use path, will benefit the health and fitness of all its users for many years to come. For new users specifically, the project expected to provide \$5,227,451 in mortality reduction benefits at a 7% discount rate over the life of the project. More details on the methodology can be found in the Benefit-Cost Analysis.

Investments of all kinds in bicycle-related and other human powered travel modes, tourism, and recreation will pay dividends in increased health and safety of the general public, increased tourism and general economic benefit, mobility and community connectivity, reduced environmental impact, easier access to jobs and recreation, and an increased healthy workforce.

# Mobility and Community Connectivity

Not everyone has equal access to convenient, safe, and affordable transportation. The result is that those communities and residents without access carry a disproportionate burden of the negative consequences. These burdens and increased negative consequences include but are not limited to: higher rates of chronic disease; lower access to good paying jobs, training, and higher education; and a higher percentage of household income spent on housing and transportation.

There is a large population of overburdened and underserved residents in the City of Sandusky. According to the 2020 Census, the City of Sandusky has a 21.1% poverty rate and a 32.7% non-white population. This project will provide an active transpor-

Walk.Bike.Ohio Estimated Economic Benefits of Bicycling & Walking 2020 tation alternative to places of employment, healthcare, education, and recreation along the corridor. By incorporating Universal Design, this project will serve many potential users including those with special needs.

The proposed path ends at Cedar Point Drive where it will tie into an existing multiuse path along Cedar Point Drive that was previously constructed by the City of Sandusky. The city also has plans to continue this pathway along the Cedar Point Causeway, which will provide a direct link to Cedar Point. The City of Sandusky has also applied for safety funds through ODOT's highway safety program to construct sidewalk along the north side of US 6 from Cedar Point Drive to East Shoreway Drive, where it will then tie into the Sandusky Bay Pathway. The sidewalk has been recommended for funding by the Safety Funding Committee and will provide a safe, alternative mode of transportation for that portion of the city to gain access to the Cedar Point and other nearby destinations. The City of Sandusky also has plans to continue the Sandusky Bay Pathway west of Cedar Point Drive to the western city limits, with the portion of the pathway along Meigs Street being constructed this calendar year. With the addition of the US 6 and Rye Beach Road Multi-Use Path, the pathway will also provide access to the many area destinations highlighted in Figure 16.

The project will enhance community connectivity between the Cities of Sandusky and

Huron and provide equitable benefits to those currently underserved and historically disadvantaged communities. Through the improved roadway and new multi-use path, access to employment, health, educational, and recreational opportunities will be available to all regardless of their race, income status, age, ability, or vehicle ownership status. The multi-use path will provide



Figure 16: Key destinations served by the proposed multi-use path.

access to the Cedar Point Sports Center along US 6 that houses a public indoor walking track that is free to use. Various parks are also located along the US 6 corridor that provide countless opportunities to enjoy nature from hiking, kayaking, canoeing, birdwatching, and more. Approximately 10,000 jobs exist within a half mile of the study area with major employers including Cedar Fair, Mucci Farms, Huron Industrial and Corporate Parks, and Bowling Green State University (BGSU) Firelands. Aside from being a major employer, BGSU Firelands also provides 10 bachelor's and 20 associate degree academic programs and is able to expand educational opportunities for City of Huron, City of Sandusky and other area residents.

This multi-modal shared use infrastructure will be designed to meet all ADA requirements and will allow those with disabilities a safer, more readily accessible, and user-friendly option for transportation where such options were not viable in the past.



Figures 17 & 18: Cedar Point Sports Center and Sports Force Parks

## Economic Competitivness and Opportunity

Access Ohio 2045, ODOT's statewide long-range plan, developed a White Paper on Travel & Tourism, which specifically highlighted the support of bicycle related tourism through designation and implementation of the Ohio's State & US Bike Route System. This project will construct improvements to State Bike Route 230, taking bicycle traffic to a separate facility. The current facility has a level of traffic stress of 3 for most of US 6 in the project area. In addition, the Access Ohio Travel & Tourism Report identified several areas where Tourism Ohio believes improved transportation infrastructure would most impact tourism growth - noting the Sandusky region. Sandusky is home to Cedar Point which attracts over 3.5 million visitors annually and is a 16-time winner of the Golden Ticket Award by Amusement Today.

There is a lot of investment to unlock in supporting bicycle travel of all kinds along one of the state's US Bike Routes as bicycling is one of the fastest growing types of outdoor recreation and tourism nationwide. The COVID-19 pandemic has drastically impacted travel and tourism across Ohio. Reductions in vehicle miles traveled has impacted the funding mechanisms that communities rely on for many projects and reflects the loss in sales and travel across the state. According to TourismOhio, the state saw a 20% reduction in tourism in 2020 as a result of the COVID-19 pandemic. However, <u>outdoor recreation</u> - biking in particular saw exponential increases.

Strategically investing in bicycle accommodations puts Ohio "on the map" for bicycle-related travel and tourism. This investment is a unique opportunity to rebound from the loss of tourism during the COVID-19 pandemic and attract visitors to the state for years to come.

The project area jurisdictions have also been active in supporting and fostering economic growth through the use of a variety of economic development tools that include Tax Increment Financing, Community Reinvestment Areas, Opportunity Zones, and Enterprise Zones. Within a half mile radius of the project there are approximately 10,000 employees; major employers in the project area include Cedar Fair, Bowling Green State University Firelands Campus, Mucci Farms, and the Huron Industrial Park. This project will increase safety, efficiency, and reliability for those accessing their workplaces every day. The Huron Industrial Park is located directly off Rye Beach Road and is Erie County's largest industrial park. The park continues to expand with its most recent tenant, Ardagh Metal Beverage. The company produces recyclable beverage cans and will create more than 200 new jobs. Mucci Farms is an agricultural company that recently completed a massive greenhouse expansion. This expansion increased production from 30 to 50 million pounds of tomatoes that are sold at major retailers nationwide. With these examples, it's evident that the area is poised for additional growth and job creation with approximately 1,650 acres of vacant land located that is located within a half mile radius of the corridor.

In 2021, the park received \$2 million in CARES Act recovery assistance to support manufacturing growth through the U.S. Department of Commerce's Economic Development Administrative. The funding was used to reconstruct Sawmill Parkway, a critical roadway that serves the park.

Bottlenecks occur along the US 6 Corridor and Rye Beach Road, particularly during warmer weather months when traffic volumes increase by nearly 30%. The traffic demands are significant but with the implementation of the proposed improvements, the necessary infrastructure will be in place to support existing needs as well as accommodate future growth. The project's roundabouts will ease congestion by improving traffic flow. With the reduction in congestion, an increase in travel time reliability will occur. The overall project is projected to reduce passenger and truck delay by over \$15 million and operating costs by more than \$2 million at a 7% discount rate over the life of the project.

With the addition of the multiuse path, the US 6 Connectivity Corridor will truly be a multi-modal corridor with rail traffic on the south side. a roadway with safe and modern roundabouts in the middle and a multiuse path on the north, not to mention Lake Erie's maritime traffic a short distance away.



Figure 19: Existing Congestion Index for US 6 and Rye Beach Road.

#### State of Good Repair

This project will replace the old infrastructure of signalized intersections with modern roundabouts which provide a safer and continuous flow of traffic through intersections that are flush with out-of-town tourists on vacation and commuters traveling to work and school. Roundabouts offer a long-term solution to congestion and safety concerns, with a more positive cost/benefit evaluation as compared to continuing to replace current infrastructure, including signalized intersections, in kind at the end of its useful life. Current signal replacement costs are approximately \$200,000. The project will realize a \$600,000 saving for the life cycle of the project with the conversion of signal-controlled intersections to roundabouts. Additionally, savings will be realized with the elimination of signal maintenance. This is an additional annual savings of \$9,000 and \$180,000 over the 20-year life cycle.

The existing assets that will remain along the corridor which are the existing pavement and structures are in a state of good repair. This is documented by ODOT's Pavement Condition Rating (PCR) System and Bridge Management System. The roadway is reviewed and assigned a new PCR rating annually. The roadway will be maintained in accordance with ODOT's Pavement Management System and is scheduled for resurfacing within the next six years. This will be coordinated with the Construction of the Connectivity Corridor construction phase. All structures within the project limits are inspected on an annual basis and any needed repairs to maintain their integrity and reliability will be addressed.

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As part of the <u>2019 US 6 Corridor Study</u>, multiple stakeholder and public meetings were held to present findings and gather feedback to develop and refine the feasible alternatives.

Based upon the information provided and evaluations, specific alternatives were proposed, and recommendations will be advanced through the preliminary and final design phases of project development, based on the project schedule.

A public involvement plan was prepared to engage a diverse group of stakeholders and communities by collaborating with various public and private sectors along the corridor. Underserved, overburdened, and disadvantaged communities were engaged with meaningful presentations and handouts showing the planning, development, and implementation of the transportation investments and provided opportunities for these communities to be part of the decision-making process.

Comments received were generally supportive of the proposed recommendations. Suggestions were collected for how to improve the current US 6 corridor. Among the suggestions received were the addition of pedestrian crossings and bike paths and additional lanes along US 6, including center turn lanes.

ODOT is committed to additional robust public involvement outreach as the project is further development using the ODOT Project Development Process.

ODOT requires DBE goals during the construction of projects and a DBE goal will also be incorporated into the construction of this project.

ODOT will follow all Code of Federal Regulations (CFR Title 23 Chapter 1 Subchapter H) and our own Policies and Procedures to acquire the needed property to deliver this project. If necessary, we will use Eminent Domain procedures to move project forward to deliver by our committed schedule. The majority of land acquisition will be adjacent to the US 6 corridor and will not dis-connect communities. We do not anticipate any negative community impacts.

ODOT received letters of support from political representatives along with local agencies and business. All support letters received can be found in <u>Appendix B</u>.

### 

#### Innovative Technologies

Most of the innovative technology will be involved in the planning and design phases of this project, if possible, it will extend into construction. The project will be planned and designed using the most current technology available to the State of Ohio including ProjectWise, Bentley Open Roads Designer, and others as currently available. In cooperation with the surveyors, designers, and construction staff on this project, if applicable, geometric modeling will be available to the contractor. This technology will allow the contractor to utilize machine control, if equipped. This technology has been shown to reduce cost overruns, increase the efficiency of construction staff, increase the accuracy of project estimates, and overall reduce the time needed for construction, thereby limiting the negative effects of actual construction activities on current and future roadway and multi-modal shared use path users.

#### Innovative Project Delivery

This project, as currently planned, will be delivered using the traditional design-bidbuild approach. Though completing the whole project is the overall goal, contingency planning has resulted in the ability to divide the overall corridor improvement into five prioritizable sub-components that are able to become stand-alone projects if needed. As an example, one component is the western portion of the proposed project within the City Limits of Sandusky. Prioritizing this section would impact this disadvantaged region first by completing construction of this portion sooner than other sections of the overall project.

All documentation, communication, and deliverables for this project will be maintained electronically, within the legal and procedural guidelines as allowable. This will allow communication, decision making, public involvement, and all other aspects of this project to be more available to all pertinent stakeholders and project staff, thereby reducing development delays and other issues that plague older methods of project delivery.

#### Innovative Financing

This project's planning and anticipated funding has been the result of a great deal of regional planning and collaboration, which has been present from the kickoff of the planning phase. Six funding partners have joined with ODOT in order to complete the project development phase, including the City of Sandusky, City of Huron, Erie County Commissioners, Lake Erie Shores and Islands, ORDC and Cedar Fair. As a tax-based entity, ODOT strives to deliver programs with an eye to fiscal responsibility, while maintaining adherence to applicable standards and local, state, and federal requirements. ODOT will use internal staff as project managers through each phase of the project, including a planning manager, design project manager, and construction area and project engineers. Additionally, ODOT will use the Value Engineering Standards, looking for innovative solutions to ensure this project is built in an efficient and fiscally responsible manner throughout planning, design, and construction.

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# Section V: Demonstrated Project Readiness Environmental Risk

Given the project's location along Lake Erie, there is environmental due diligence, agency coordination, and permitting associated with all components of the project. Specifically, the Sandusky Bay Pathway will require due diligence and agency coordination with USACE, OEPA, SHPO, ODNR and USFWS. If Individual waterway permits are required for the project, the environmental regulatory permitting process could take up to thirteen months, which is reflected and accommodated in the project schedule below. The City of Sandusky plans to start construction of Component 1 in the fall of 2024 along with path components of the City's Landing project. While this may seem significant, Sandusky Administration, specifically the Division of Public Works and Engineering Department, are seasoned professionals when it comes to successful environmental permitting and are used to having this extensive permitting as part of their projects. The staff has excellent relationships with the permitting agencies, and a stellar track record of successfully and smoothly obtaining the appropriate waterway permits needed for projects constructed within the community for infrastructure projects.

For the remaining components outside the City of Sandusky, ODOT staff has an excellent relationship with all Federal and State resource and regulatory agencies and is successful in environmental resource coordination and at obtaining the appropriate waterway permits needed for projects constructed across the State of Ohio. In addition to the professional ability of the staff, ODOT requires that all consultants selected to work on federally funded projects be ODOT pre-gualified to perform the necessary environmental due diligence and permitting for the specific project's needs. For more detailed information on components 2-5, please see the Environmental Risk file at this link.

## **Project Schedule**

The project's schedule has been developed to aggressively and assertively ensure project readiness to meet the obligation requirement of June 30, 2026. As currently depicted and detailed below, the target to award a contractor the project was held to May 18, 2026, in the development of the project schedule. This allows for some float in the project schedule. Working backwards to today, appropriate timeframes for the acquisition of additional needed right of way was accounted for, standard staged design submissions were scheduled, and the environmental and NEPA processes were input to the schedule. As a result of this schedule, moving forward with the project became an evident need. The State of Ohio has secured safety funding to begin survey and right of way plan development on the project, allowing for more design time, and more right of way acquisition time further in the project's timeline. All appropriate internal and external stakeholders have reviewed and approved the anticipated project schedule and are working to a common goal of project award as detailed above. Awarding in May of 2026 allows for the maximum amount of construction time, as well

occur March 2026.

It should be noted further that the schedule detailed below, and as discussed above, depicts the portion of the project with the most distant timeframe. Other portions of the project, including the sections under the management of the City of Sandusky, are further in the design and development process. These sections are currently under design, will have right of way procurement in advance of that as shown below, and will be ready for construction in advance of the remainder of the project.







Figure 21: Project Schedule - Components 2-5 21

#### as a prescribed amount of schedule float. Additionally, obligation of the funds will

| US 6 Project Schedule (Components 2-5) |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|--|----|----|--------|----|----|----|----|------------|-----|-----|-------|------|------|------|------|----|--------|
|  |    |    | 20     | 23 |    |    | 20 | 24         |     |     | 20    | 25   |      |      | 20   | 26 |        |
| 3                                      | Q4 | Q1 | Q2     | Q3 | Q4 | Q1 | Q2 | Q3         | Q4  | Q1  | Q2    | Q3   | Q4   | Q1   | Q2   | Q3 | Q4     |
|  |    |    |        |    |    |    |    | <i>8</i> 3 |     |     |       |      |      |      | . S. |    | 6 - 66 |
|  |    |    | a 8    |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    | 24 - J |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    | - 1    |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    |    |            |     |     |       |      |      |      |      |    |        |
|  |    |    |        |    |    |    | E  | xpec       | ted | com | oleti | on C | ctob | er 2 | 027  |    |        |

### **Required Approvals**

ODOT is prepared to follow all federal, state and local processes associated with the RAISE funding.

Various environmental studies and a Categorical Exclusion (CE) level NEPA document are required for this project. These efforts are accommodated in the schedule shown above and will be funded with 100 percent local and state funds during the Planning, Preliminary Engineering and Environmental Engineering phases of the project, starting in the fall of 2022.

Please see the Environmental Risk section for an explanation of the needed environmental due diligence and agency coordination. Depending on the results of the ODOTs due diligence and agency comments, the following table provides the Federal and State coordination and permits that may be required for the project:

|   | Components |   |   | s |   |
|---|------------|---|---|---|---|
| Federal, State and Local Coordination/Permits               | 1          | 2 | 3 | 4 | 5 |
| USACE Secton 408 Coordination                               | х          |   |   |   |   |
| USACE Section 404 Nationwide Permit/Regional General Permit | х          | х | Х | х |   |
| USACE Section 10 Permit Application                         | х          |   |   |   |   |
| USACE Jurisdictional Determination Request                  | х          | х | х | х |   |
| OEPA Section 401 Water Quality Certification Application    | х          |   |   |   |   |
| OEPA Isloated Wetland Permit                                | х          |   |   |   |   |
| USCG Bridge Permit Application                              | х          |   |   |   |   |
| USGS Navigational Lighting Coordination                     | х          |   |   |   |   |
| ODNR Shore Structure Permit                                 | х          |   |   |   |   |
| ODNR Federal Consistency Certification Request              | х          |   |   |   |   |
| ODNR Coastal Zone Management Coordination                   | х          | х |   | х |   |
| ODOT Regulated Materials Review                             | х          | х | Х | х | Х |
| SHPO Section 106 Review and Coordination                    | х          | х | Х | х | Х |
| Tribal Consultation   | х          | х | Х | х | Х |
| ODNR/USFWS State & Federal T/E Species Coordination         | х          | х | Х | х | Х |
| Section 4(f) Coordination                                   | х          | х |   | х |   |
| Local FEMA Floodplain Coordination                          | х          | х |   | х |   |

was prepared to engage stakeholders and the public. The plan defined a stakeholder group and outlined an approach to updating this group through a series of three stakeholder meetings. The plan also proposed holding two open-house public meetings to gather input from the public. The project team used stakeholder and public comments received from early meetings to help generate the preliminary alternatives; these alternatives were presented at the later meetings and further refined from comments received from those meetings.

# Assessment of Project Risks and Mitigation Strategies

Based on our demonstrated understanding of potential project risks, the project team does not expect any delays during the completion of this RAISE project. Based on the project schedule, any unforeseen issues with project aspects that can be difficult to predict such as procurement delays and right-of-way cost increases, the project team is confident all components of the project can be completed by the required date of September 30, 2031. Considering the extensive public involvement that has already taken place as part of the 2019 US 6 Corridor Study and our understanding of the environmental risks associated with this project, ODOT and the project team are capable of handling any project risks and challenges that are encountered.

Figure 22: Potential Federal and State Coordination Permits

The ERI US 6 Connectivity Corridor including Sandusky Bay Pathway is included in the ERPC MPO's current FY 2021-2024 Transportation Improvement Plan (TIP) and ODOT's FY 2021-2024 State Transportation Improvement Plan (STIP). Currently reflected are development funds to be used for Preliminary Engineering, Detail Design and Right of Way Acquisition. The project is also included in the ERPC Long Range Plan. The Construction phase is reflected in the plan since it is outside the current TIP/STIP timing window. The TIP, STIP and Plan inclusion demonstrates project relevance to Ohio and the MPO region.

As outlined in the Partnership and Collaboration Section, a public involvement plan

# Section VI: Benefit Cost Analysis

The ERI US 6 Connectivity Corridor including Sandusky Bay Pathway project is comprised of five components with individual utility. For the Benefit Cost Analysis, each component was analyzed separately as a benefit-cost ratio of greater than 1. The benefits and costs of the project as a whole are shown below.

| Type of Impacts                                   | Benefits (7%<br>Discount Rate) | Costs (7%<br>Discount Rate) |
|---|--------------------------------|-----------------------------|
| Reduced Car & Truck Delay                         | \$15,130,294                   |                             |
| Reduced Bicycle and Pedestrian Delay              | \$5,010,103                    |                             |
| Reduced crashes                                   | \$16,591,065                   |                             |
| Reduced car and truck emissions (Non-CO2)         | \$300,522                      |                             |
| Reduced car and truck emissions (CO2) 3% Discount | \$676,588                      |                             |
| Reduced car and truck operating cost              | \$2,164,808                    |                             |
| Pedestrian Facility Improvement                   | \$1,453,311                    |                             |
| Cycling Facility Improvement                      | \$235,521                      |                             |
| Mortality Reduction                               | \$5,227,451                    |                             |
| Operations and Maintenance                        | -\$842,610                     |                             |
| Project Cost                                      |                                | \$22,292,319                |
| TOTAL   | \$45,947,054                   | \$22,292,319                |
| Benefit-Cost Ratio                                | 2                              | .06                         |

#### **Overall Project Benefits and Costs**

Additionally, the summary results for each project component can be seen below.

| Component  | Project<br>Benefits | Project<br>Cost | Net Present<br>Value | Benefit-Cost<br>Ratio |
|--|---------------------|-----------------|----------------------|-----------------------|
| Sandusky Bay Pathway (1)                         | \$7,611,278         | \$6,489,457     | \$1,121,821          | 1.17                  |
| US 6/Perkins Ave. Roundabout (2)                 | \$7,553,129         | \$2,941,029     | \$4,612,100          | 2.57                  |
| US 6/Camp Rd. Roundabout &<br>Widening (3)       | \$9,580,566         | \$4,935,717     | \$4,644,848          | 1.94                  |
| US 6 Multi-Use Path (4)                          | \$2,131,541         | \$1,686,231     | \$445,310            | 1.26                  |
| Rye Beach Rd. Roundabout &<br>Multi-Use Path (5) | \$19,070,541        | \$6,239,886     | \$12,830,655         | 3.06                  |

The full analysis by component, including a memo summarizing methodology and results, can be found <u>online</u>.