

9. Recommended Transportation Plan

This chapter summarizes the LRTP recommended transportation plan. The LRTP addresses all modes of transportation and is fiscally constrained.

For the purpose of the LRTP analysis, projects were grouped into one of the following four categories:

<u>Project Categories</u>	<u>Length Of Construction Period</u>	<u>Time Period</u>
1) Short-Term Projects	Within 10 years	Between 2015 & 2025
2) Mid-Term Projects	10-15 Years	Between 2025 & 2030
3) Mid-Long Term Projects	15-25 Years	Between 2030 & 2040
4) Long-Term Projects	25 Years or Greater	2040 & Beyond

It should be noted that the categories were used merely for analyzing the various transportation improvements and does not guarantee that a specific roadway improvement will be constructed or that it will be constructed during the identified timeframe. It should be further noted the design, engineering, and construction of the specific roadway improvements identified in this LRTP depend heavily on the availability of transportation funds.

The improvements and policies are described in the following sections.

9.1 Roadway Improvements

The overall roadway policy guidelines consist of the following:

- Encourage the widening of all roads to recommended widths based on ODOT design guidelines.
- Encourage the preservation of the transportation network by expansion and adaptation of existing facilities to meet transportation needs, as opposed to the creation of wholly new facilities.
- Support the recommendations from the SR 4 Conceptual Improvement Study
- Encourage the creation and implementation of access management regulations for municipalities and villages.

Improvements to Roadways include preservation and expansion projects.

Typical expansion projects include the addition of a center lane. **Figure 9-1** and **Figure 9-2** depict the recommended roadway preservation and expansion projects.

9.2 Operational/Congestion Management Strategies

The overall operation congestion management strategies consist of the following:

- Encourage the widening of all roads to recommended widths based on ODOT design guidelines.
- Encourage the preservation of the transportation network by expansion and adaptation of existing facilities to meet transportation needs, as opposed to the creation of wholly new facilities.
- Support the recommendations from the SR 4 Conceptual Improvement Study
- Encourage the implementation of access management regulations for municipalities and villages.

- Deployment of ITS technology and implementation of access management techniques along major corridors in the MPO, including US 250 and SR 4.
- Promoting transit use to tourist attractions and offering employee incentives to use transit for everyday travel.

Improvements to Roadways include preservation and expansion projects. Typical expansion projects included the addition of a center lane. **Figure 9-1** and **Figure 9-2** depict the recommended roadway preservation and expansion projects.

Also important to note is that project sponsors are responsible for obtaining any environmental type permits as required for proposed projects. For example, an USACE permit according to Section 401 of the Clean Water Act if applicable to the project (as outlined in Section 5.10 of this document).

9.3 Transit Improvements

Public Transportation provides mobility to older adults, disabled persons and disadvantaged persons as well as basic access to employment opportunities, health care facilities, shopping activities and community services for the population as a whole.

Overall transit policy guidelines consist of the following:

- Support transit funding initiatives to sustain and expand service countywide.
- Support Northern Ohio Rail Alliance study for commuter rail from Chicago to Cleveland.
- Continue updates of the Coordinated Transit Plan.
- Support the hiring of a transit mobility manager.

Improvements:

Service Expansion

Service expansion involves the curb-to-curb service as currently exists in the City of Sandusky and portions of Perkins Township, the city of Huron, and City of Vermilion as provided by the Sandusky Transit System (STS). As a means of focusing in on the overall transit policy guidelines, it is assumed as new services are implemented; the level of service associated with these newer services will be improved as funding permits. This would include expanding the hours of service that transit is available and also improving the flexibility of scheduling demand response trips. This would allow a minimum level of service to more areas of the entire County while continually striving to improve the existing services. A key transit project under expansion of service includes the following project:

- Within the next 10 years, develop corridor level fixed-route transit service in the US6 corridor between downtown Sandusky, the City of Huron and the City of Vermilion.

The effort has also been identified in the Erie County Coordinated Transportation Plan Update which was completed in Fall 2012.

Intermodal Connections

Key to facilitating transportation in the region is the development of an intermodal transfer point in the area of the US 250 and I-80/90 interchange. A possible location for the facility would be near the Lake Erie Outlet Mall at US250 and Mason Road. This intermodal facility could serve as a stop for the MegaBus service and could include other amenities such as a park-and-ride lot that could serve commuters traveling to regional destinations like Toledo, Akron or Cleveland via carpools or vanpools. It could also serve as a transfer point for coordinated human service agency transportation.

Another intermodal connection would be the addition of intercity rail. Currently, a study is being conducted to determine the feasibility of intercity rail service between Cleveland and Sandusky using existing tracks. If intercity rail were to be initiated, local bus service would need to be configured to connect with a passenger rail station or terminal as a means of distributing passengers locally once they arrived in Sandusky.

A third intermodal connection is service to the regional airports. The primary regional airport facilities are those in Cleveland, Toledo and Akron. Given that these are all outside of Erie County none of the expansion plans address these connections and it is most likely best left to the private sector. A host of private sector shuttle services exist and one of those operations could be encouraged to provide service between Erie County and the regional airports. Also, if a MegaBus stop were to locate in the county this could help facilitate a link between Erie County and the existing MegaBus stops in Cleveland and Toledo.

Fixed Route Corridors

The Sandusky Transit System (STS) has been operating three fixed routes funded by the Job Action and Reverse Commute program. The Sandusky Perkins Area Ride Connection (SPARC) travels along the Milan Road/US250 corridor from downtown Sandusky to Kalahari near the US250 and SR2 interchange, along the SR 4 corridor and along other local collector streets that are located across the City of Sandusky and Perkins Township. The routes offer transportation to work as well as a shopping and medical circulator service for those in the Sandusky and Perkins areas.

In addition to the current fixed route in place, the 2040 LRTP Update calls for the development of a corridor fixed-route transit service in the US6 Corridor between Downtown Sandusky, the City of Huron, and the City of Vermilion.

Transportation Coordination

Work with the local transportation/transit stakeholders to secure funding for a transit mobility manager. The hiring of a mobility manager could be an important step towards creating a coordinated transportation system and also assist in providing countywide transit service. Funding for the position could be obtained through a state program specifically created to provide funding for a mobility manager.

The mobility manager was a recommendation listed in the 2013 Human Services Coordinated Transportation Plan. The manager would work with the various providers of transportation in Erie County to take action on all of the recommendations listed in the plan. Those recommendations included joint use of vehicles, centralized dispatching, sharing of maintenance and an outreach program to inform citizens of the transportation system in Erie County. Other forms of transportation such as ride-matching, carpooling and the creation of van pools could also be explored as suitable alternatives for work-related transportation

in lower density areas such as Erie County. In addition, coordination of services may facilitate more flexible scheduling of trips and also the efficiencies needed to provide extended hours of service.

If coordination progressed and worked well for the parties involved, the final step in the process would be the consolidation of transportation services and providers to possibly form a countywide service.

Erie County must have a Coordinated Transportation Plan in place to be eligible for certain FTA funding programs. Those funding programs include Transportation for Elderly Persons and Persons with Disabilities (Section 5310), Job Access and Reverse Commute (JARC) Program (Section 5316) and New Freedom Program (Section 5317). Therefore, it is important that the plan be updated on a regular three-year interval.

Seasonal Transit (Tourism) Support

It is important to continue seasonal transit service to Cedar Point from downtown Sandusky and the fixed route transit service to add more vehicles to the route for improved service frequency. Tourism is very important to the Erie County economy. The continued support of this service provides a key connection between hotels and Cedar Point for tourists, but also as a means of getting seasonal Cedar Point employees to work from outlying areas of Erie County.

9.4 Pedestrian & Bicycle Improvements

Existing bicycle travel within the MPO relies primarily on on-road bikeways and is supplemented with bike trails along waterfronts and connecting parkways. The recommended plan for pedestrian and bicycle (non-motorized) improvements are shown in **Figure 9-4**. In addition (not shown in Figure 9-4), is the City of Vermilion's acquisition of the Historic Wakefield property for preservation purposes. The area is located in downtown Vermilion sandwiched between the Vermilion River and the Main Street public beach. The Lake Erie waterfront parcel is 1.6 acres and the property was acquired to allow for public access. Provisions for non-motorized transportation improvements, including bicycle and pedestrian trails, should be encouraged to be included into the design and construction of all new and reconstructed roadways within the MPO. This can be accomplished by reducing lane widths, removing a center lane and replacing it with a narrower raised median, reducing number of lanes if capacity is not compromised or by eliminating on-street parking. The MPO's recommended plans for a non-motorized network are in accordance with Erie County's Comprehensive Plan.

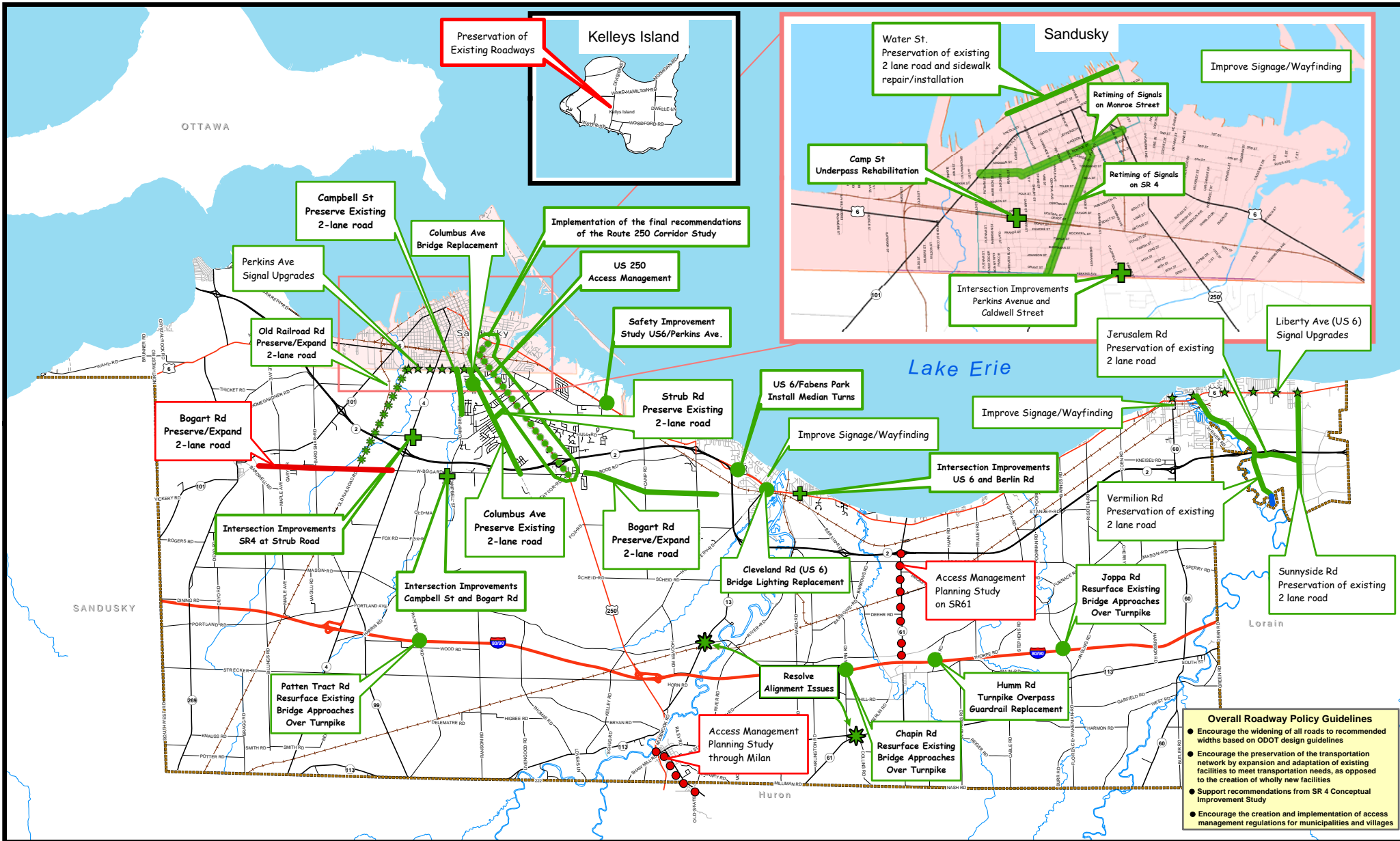
Overall Non-Motorized Policy Guidelines

- Support recommendations from Safe Routes to Schools Program and Travel Plans
- Ensure that widened/paved shoulders are maintained and kept free of debris
- Encourage municipalities to provide bike parking at open space and recreational destinations and encourage and/or require private developers to install bike parking in their developments
- Encourage municipalities and the Townships to require the installation of sidewalks in new residential and commercial developments
- Encourage the municipalities to develop and implement plans to improve sidewalk conditions and complete gaps in the sidewalk network

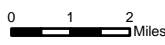
- In conjunction with the awareness campaign, conduct an information campaign to educate the public about share-the-road safety topics.
- Continue bicycle and pedestrian safety programs provided through Erie MetroParks, the local school districts, and other local groups
- Create a marketing campaign to increase awareness of existing bicycling, walking, and recreational facilities in the county

Develop a Hierarchy of Priority Non-Motorized Corridors and Trails

Building off of the existing bicycle/pedestrian facility system, a hierarchy of First, Second, and Third priority non-motorized bicycle and pedestrian corridors will be developed as outlined in the 2040 LRTP.



Data Sources: Erie Co, Ohio Department of Transportation, ESRI
 April 2015



Legend

- Short-Term Project (within 10 years)
- Mid-Term Project (10-15 years)

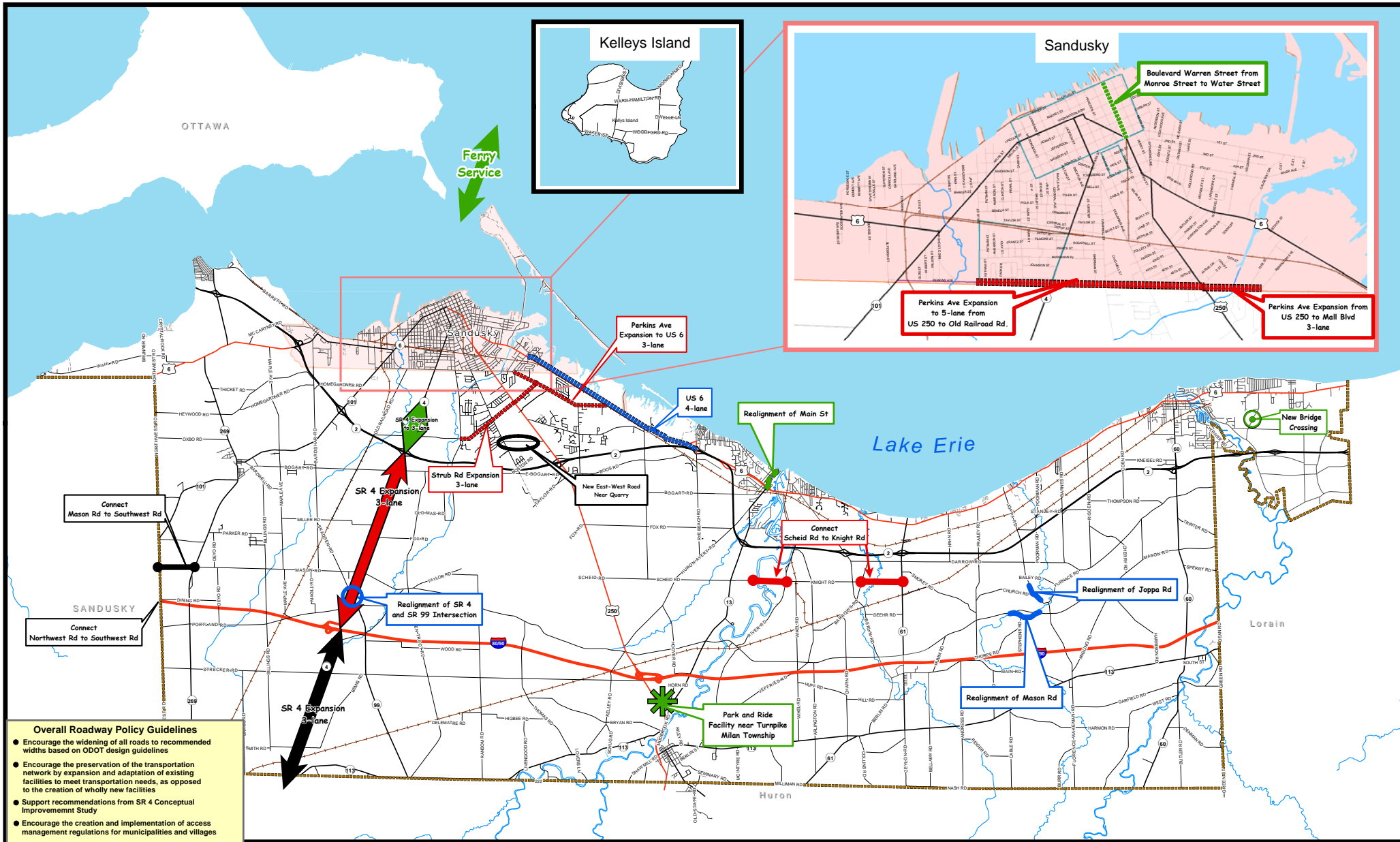
Erie County 2040 Long Range Transportation Plan

Recommended Roadway Preservation Projects Implementation Schedule
Figure 9-1

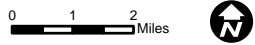
Map created by the Erie County Department Of Regional Planning
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- Overall Roadway Policy Guidelines**
- Encourage the widening of all roads to recommended widths based on ODOT design guidelines
 - Encourage the preservation of the transportation network by expansion and adaptation of existing facilities to meet transportation needs, as opposed to the creation of wholly new facilities
 - Support recommendations from SR 4 Conceptual Improvement Study
 - Encourage the creation and implementation of access management regulations for municipalities and villages



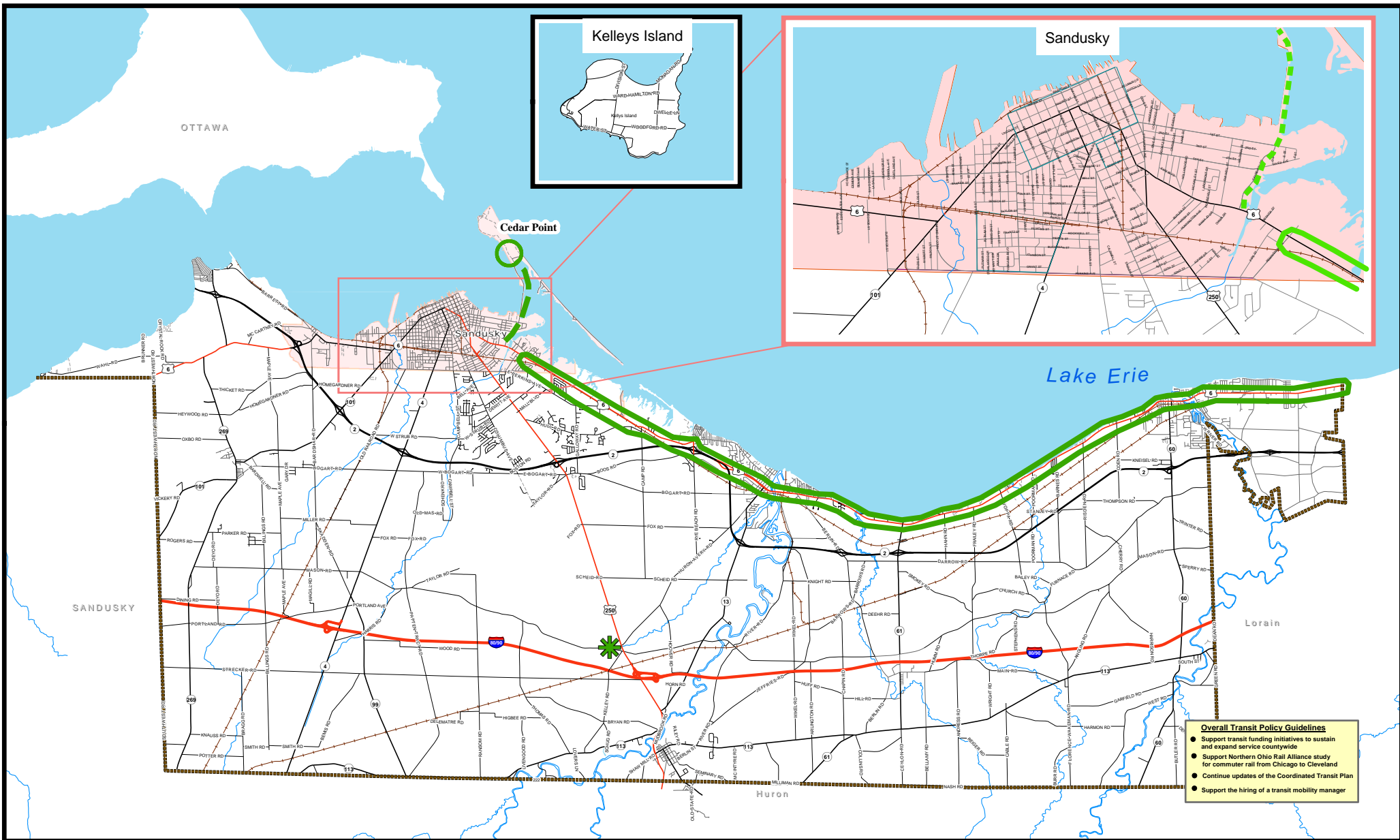
Data Sources: Erie Co, Ohio Department of Transportation, ESRI
 April 2015



Erie County 2040 Long Range Transportation Plan

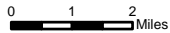
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**Recommended Roadway Expansion Projects
 Implementation Schedule
 Figure 9-2**



- Overall Transit Policy Guidelines**
- Support transit funding initiatives to sustain and expand service countywide
 - Support Northern Ohio Rail Alliance study for commuter rail from Chicago to Cleveland
 - Continue updates of the Coordinated Transit Plan
 - Support the hiring of a transit mobility manager

Data Sources: Erie Co, Ohio Department of Transportation, ESRI
 April 2015



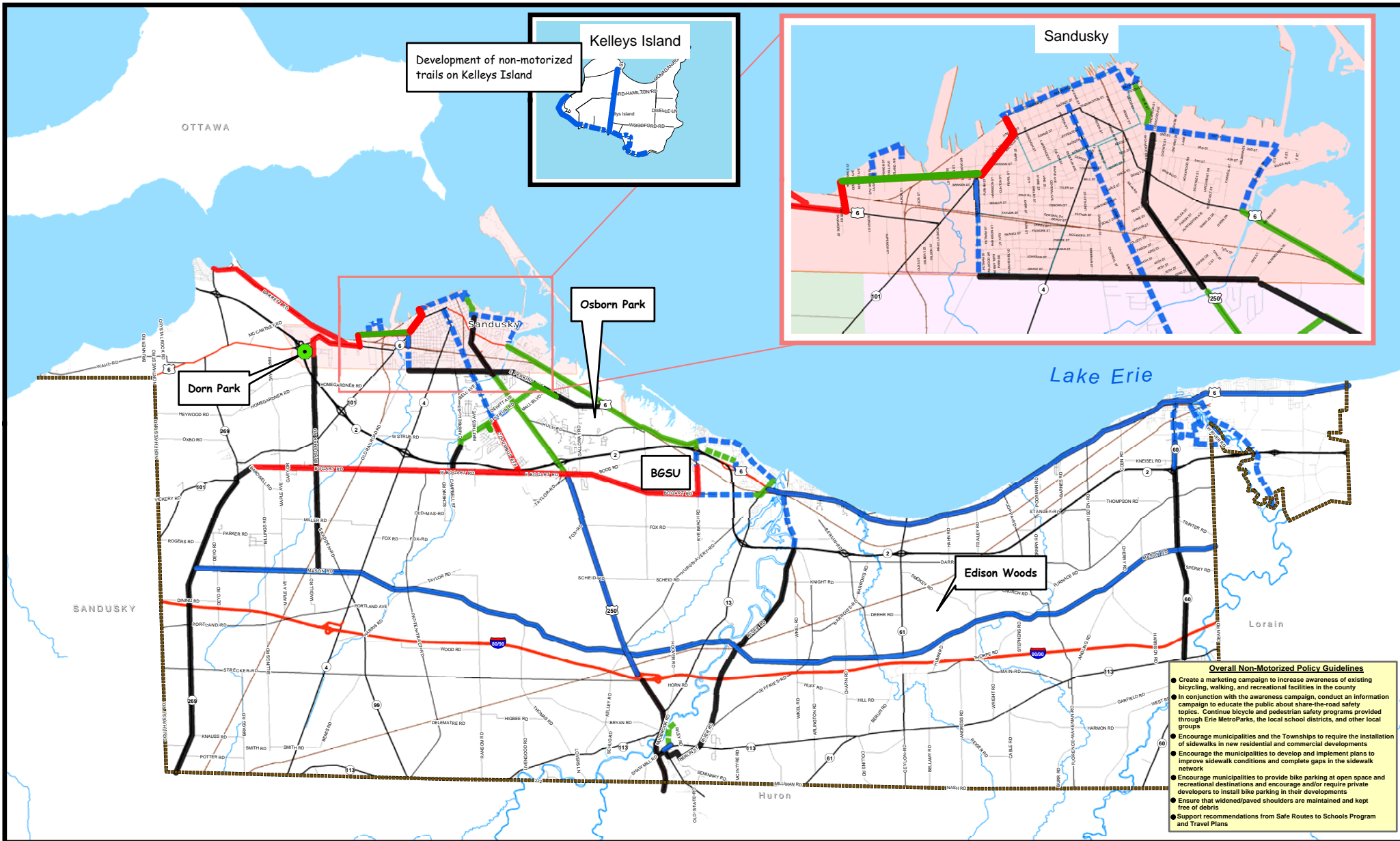
Legend

- Fixed Route Corridor transit service
Short-Term Project (within 10 years)
- Inter-County Transfer Point
Short-Term Project (within 10 years)
- Seasonal Route
Short-Term Project (within 10 years)

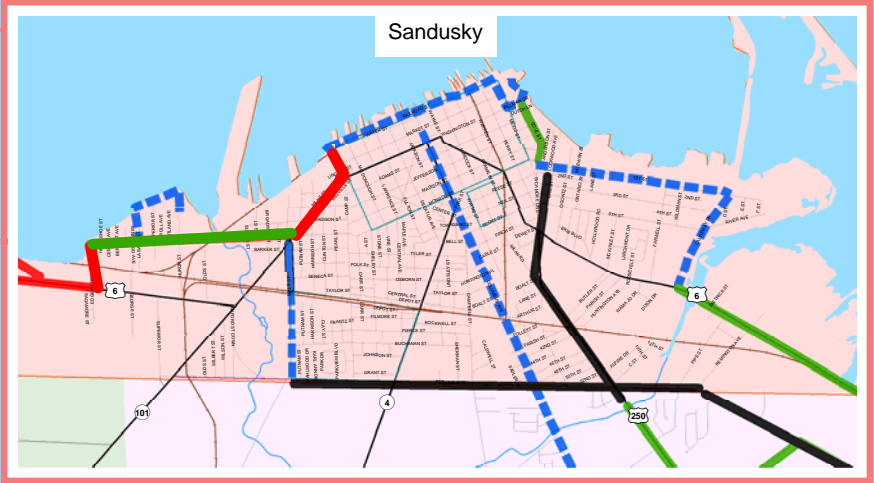
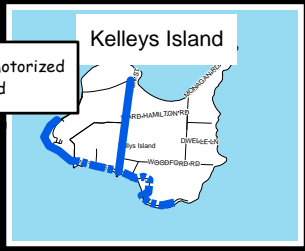
Erie County 2040 Long Range Transportation Plan

**Recommended Transit Projects
 Implementation Schedule
 Figure 9-3**

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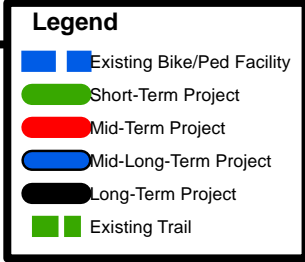
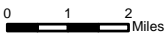


Development of non-motorized trails on Kelleys Island



- Overall Non-Motorized Policy Guidelines**
- Create a marketing campaign to increase awareness of existing bicycling, walking, and recreational facilities in the county
 - In conjunction with the awareness campaign, conduct an information campaign to educate the public about share-the-road safety topics. Continue bicycle and pedestrian safety programs provided through Erie MetroParks, the local school districts, and other local groups
 - Encourage municipalities and the Townships to require the installation of sidewalks in new residential and commercial developments
 - Encourage the municipalities to develop and implement plans to improve sidewalk conditions and complete gaps in the sidewalk network
 - Encourage municipalities to provide bike parking at open space and recreational destinations and encourage and/or require private developers to install bike parking in their developments
 - Ensure that widened/paved shoulders are maintained and kept free of debris
 - Support recommendations from Safe Routes to Schools Program and Travel Plans

Data Sources: Erie Co, Ohio Department of Transportation, ESRI
April 2015



Erie County 2040 Long Range Transportation Plan

Recommended Non-Motorized Projects Implementation Schedule
Figure 9-4

ERPC Map created by the Erie County Department Of Regional Planning
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9.5 Freight & Regional Transportation Modes

Continued investment in the rail and airport facilities is necessary to maintain and enhance the region's position as a hub for freight and passengers. Intermodal facilities benefit the MPO area by supporting economic development throughout the MPO area across all modes of transportation.

- Study the possibility of a runway at NASA Plum Brook.
- Develop a relationship with the freight community.
- Support the advancement of Intermodal facilities to foster the growth of a multimodal transportation system.
- Support rail line projects that include a hub in Vermilion and Sandusky.

The railroads that serve the MPO are owned and operated by private freight entities; therefore no designated funding is available for government or improvement of these facilities, beyond adopting policies to ensure the safety and maintenance of the network, especially the smaller class lines. In addition, these facilities and their operations are typically regulated through the Federal Railroad Administration.

Railroad freight services are directly correlated with the economic vitality of the businesses and the communities that they serve. Therefore, ODOT has implemented the following statewide objectives for its management of the railroad network in the Statewide Long-Range Transportation Plan: ODOT will coordinate with the major carriers, such as Norfolk Southern on all track abandonment to preserve the right-of-way for future work and to minimize any adverse impacts on the communities affected by abandonment. ODOT will work with the small railroad companies to support their efforts to maintain appropriate conditions of their infrastructure, including enhancement of their access to the major carrier lines. ODOT will continue its railroad grade-crossing improvement program to minimize the conflicts between railroad operations and people and property and ensure a safe and efficient railroad system.

Because of the expense of roadway freight shipping, private companies continue to seek new ways to haul more raw goods and materials via rail service. This expansion of rail service does not necessarily equate to infrastructure expansion, but improving the operations by either "double-stacking" the cargo containers or other efficiencies. While there are some significant projects taking place statewide, no railroad infrastructure expansions in the operations are expected in the ERPC MPO region in the near future.

9.6 Funding and Costs

This section summarizes the financial analysis of potential transportation investments. Estimated revenue from existing and proposed funding sources is compared with estimated project costs of constructing and maintaining the transportation system to the year 2040.

Prior to ISTEA and TEA-21, LRTP's often contained "wish lists" of projects that had very little chance of being constructed. The planning regulations of ISTEA and TEA-21 brought about a change that required MPOs to consider the financial implications of their planning efforts. To this end, the federal planning regulations put in place the requirement for financial constraint of these documents. In 23 CFR 322 (b)(11), it is stated that transportation plans shall:

“Include a financial plan that demonstrates the consistence of proposed transportation investments with already available and projected sources of revenue. The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan. The estimated revenue by existing revenue source (local, State Federal, or private) available for transportation projects shall be determined and any shortfalls identified. Proposed new revenues and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues shall cover all forecasted capital, operating, and maintenance costs. All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends.”

Funding for the Erie County MPO area’s transportation maintenance and improvement projects comes from a variety of Federal, State, local and private sources. The federal government is the primary source of funding for transportation systems in the United States. These funds come from federally assessed user fees, fuel taxes, and landing fees. They are apportioned back to the states on a formula basis. The primary source of revenue at the Federal and State levels includes motor fuel taxes, vehicle registration fees, special motor carrier fees, parking fees and toll fees. Finance at the county and municipal levels are primarily based on property taxes, sales taxes, and special assessments. The private sector, such as developers and business associations, often support transportation projects through impact fees, right-of-way donations, and cost sharing.

Federal, State, local agencies and private developers have invested hundreds of millions of dollars in the region’s transportation system over the past several decades. In the late 1990’s, programs such as TEA-21 significantly increased Federal and State funding authorizations above previous levels. However, the cost of maintaining the existing transportation infrastructure is continually increasing as the facilities age. The challenge that the MPO faces in the future is to balance the maintenance of the existing transportation infrastructure while at the same time identifying adequate funding for the construction of new transportation facilities.

Roadway improvement costs were identified using the current TIP (FY 2015 to FY 2018) and programmed project funding. For those projects not included in the TIP, general planning level construction costs were developed using general cost estimates provided by local and state agencies. It is important to consider the following when reviewing the project cost estimates. First, because it is difficult to identify a specific year that each project might be constructed, all estimated costs are presented in 2015 dollars. Second, since specific details regarding design, engineering, and construction are often not available, the estimated costs represent a very general planning level cost estimate. As projects proceed to the detailed planning and engineering phases, resulting in more accurate estimates, the project cost estimates contained in this LRTP should be updated.

Based on the identified projects and estimated costs, it is projected that the roadway improvement projects would total approximately \$214.7 million in year 2015 dollars.

Projected Revenues

The projected funding levels provide a general comparison between the estimated roadway improvement costs and estimated funding levels. It should be noted that the estimated maintenance costs and funding sourced are tabulated in year 2015 dollars to provide a consistent comparison to the estimated roadway improvements, which are also presented in year 2015 dollars.

A significant percentage of funding over the next twenty-five years will be dedicated to the preservation of the existing transportation infrastructure. This includes the routine maintenance and repair of bridges, pavement, traffic signals and traffic signs. Based upon the assumptions, the estimated preservation costs for the next twenty-five years total approximately \$57 million in year 2015 dollars as shown in

Table 9-1.

The estimated funding sources over the next twenty-five years are approximately \$215 million in year 2015 dollars. Under this funding scenario, there would be approximately \$158 million available for the implementation/construction of the roadway improvement projects identified in **Table 9-2**, which total \$84.8 million.

Federal Funding Sources

While the percent of federal funding for a project varies by category, the Federal government typically provides 80 percent of the funding, with 20 percent of the funding matched by ODOT or a local agency. Of the federal funding programs identified in MAP 21, the MPO has direct access to two. Although congress assigns Surface Transportation Program (STP) funding to each MPO, ODOT sub-allocates a portion of the STP and TA funding assigned to Ohio. Funding for all other categories is determined by ODOT (through a statewide ranking process), by the Federal government, or is not applicable to the MPO. The categories that the ERPC MPO has direct input and/or selection responsibility include the following.

Surface Transportation Program- This category is for transportation needs with urbanized areas with populations less than 200,000 and greater than 50,000. Funding is 80 percent Federal and 20 percent State and Local. Census population allocates funds and projects are selected by the MPO and ODOT.

Transportation Alternative Program - Ten percent of STP funding is available for this category. Enhancements include bike and pedestrian facilities, preservation of historic site, scenic beautification and other transportation related projects. The MPO must submit a letter stating their support of the project, identifying funding, and attesting that the project is consistent with long range transportation plans.

Additional Funding- Additional funding is available through the Federal Highway Administration's (FHWA) discretionary funding categories where FHWA solicits for applicants and selects projects based on a set of selection criteria.

State Funding Sources

State funding is administered by ODOT. Among the most common forms of funding are the following:

Motor Vehicle and Gas Tax (MVGT)- This tax is collected on each gallon of gas that is purchased. The State of Ohio levies a tax of 28.0 cents per gallon of gasoline. The tax is included in the selling price so the user of the motor fuel ultimately pays the tax. The tax is collected by the Department of Taxation and distributed to local governments. To qualify for funding, municipalities must be incorporated. Municipalities receive their funding based on population. Counties receive their allotment based on total license fees in the county.

Surface Transportation Program (STP)- The STP is administered by the State of Ohio for the MPO. STP money is sub-allotted to each MPO for use on many transportation projects. Ten percent of all STP funds must be used for safety projects. These funds can be used for rail crossing improvements, signals, and other accident-reducing methods of transportation improvement.

Economic Development Funds- Economic Development funds may be used for transportation projects if the new or improved facility will attract or create jobs. This program can be used for industrial, commercial and recreational projects if the project is necessary.

Highway Bridge Replacement and Rehabilitation Program (HBRRP)- HBRRP Funds are provided to replace or rehabilitate structurally deficient bridges on or off the system for the safe and expeditious transportation of the general public. The funds are allotted to districts based on a formula involving square footage of eligible bridges. Ohio distributes BR funds through the Municipal Bridge, Major Bridge, County Bridge, and Ohio Bridge Partnership programs.

Local Funding Sources

The basis of local funding of transportation projects in the local municipalities and Erie County is primarily through Federal and State allocations and block grants. Additional revenues come from property taxes, sales taxes, special assessments, and special tax districts. General funds for the roadway maintenance may be obligated from the general property tax proceeds for transportation purposes. While this represents a funding source, the trend in local government is to use general fund property tax proceeds for operation and maintenance of general government. Additional funding includes:

Bonds- Transportation projects may be financed utilizing bonded indebtedness. This method allows a unit of government to raise capital through the sale of public bonds to be repaid with interest by either general property tax receipts, motor fuel tax, or revenue from the project upon completion.

Tax Increment Financing (TIF)- The TIF technique captures all increases in property tax resulting from improvements to a property until such time as allowable project expenses have been paid. Proposed improvements and planned expenditures are defined in a plan and must meet eligibility requirements under the enabling legislation. City government defines district and program in consultation with unites of local government impacted by the proposed district.

Capital Improvement Program (CIP)- Funding for near-term (one to five years) transportation projects are identified in the State’s multi-year program also known as Issue 2, municipalities’ Capital Improvement Program (CIP) and Erie County’s CIP. Estimates of near-term transportation funding are based on appropriated levels of federal funding, cash flows of state funding sources, and city and county bonding programs and general revenue sources.

Private Sector Funding Sources

As a community grows, vacant land or farmland is often converted to urban uses. As part of that growth, land developers may pay the cost of infrastructure development including streets. Particularly as it relates to commercial development and industrial development, developers may potentially pay a large share of arterial and collector street widening, enhancement, or rehabilitation. The continued enforcement and management of growth through subdivision code administration minimizes the cost to the community.

When developing major roadways, units of local government may negotiate with private interests to share in the development costs of arterial or collector streets that provide direct benefit to private interests. The amount of money available using this technique is limited only by the degree of commitment from the private sector and the willingness of the private sector to share in those costs.

Impact or entertainment fees are costs assigned to new development of the maintenance of existing facilities. Developers pay these fees with costs generally passed on to the eventual owners of the property.

Funding/Implementation

As part of metropolitan planning organization regulations, the recommended long-range transportation plan must be financially constrained.

The capital cost estimate in dollars for each transportation improvement and the schedule for implementation of those projects are summarized in **Tables 9-1** through **9-7**.

Overall, the amount of dollars that will be available to fund the planning, design, and construction of the recommended transportation plan projects can be divided into two types of funds: Roadway/Non-Motorized project improvement funds and Transit project improvement funds.

Roadway/Non-Motorized project Improvement Funding

- Several types of funding are available
- MPO funds
- Surface Transportation Planning (STP) is available.
- Congestion Mitigation Air Quality (CMAQ) is not available since Erie County is an air quality attainment area.
- Transportation Enhancement (TE) is available.
- Other Funds
- Transportation Review Advisory Council (TRAC), ODOT District 3, County STP, County Bridge, City Bridge, and Safety.

Based on the available information for existing and future funding of transportation projects the following dollars will be available:

- In the Year 2015, \$6,884,661 is potentially available for roadway/non-motorized improvements
- In the Year 2040, \$8,755,701 is potentially available for roadway/non-motorized improvements

Transit Project Improvement Funding

Funding for transit project improvements are available through the Federal Transit Agency and are distributed by the Ohio Department of Transportation

- Currently, \$2,196,990 is available for transit improvements
- In the Year 2040, the current amount is forecasted to increase by 3% per year to \$4,600,010.

Table 9.1 Roadway Improvements - Preservation Projects

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule	Planning Level Cost Estimate
1	Implementation of the final recommendations of the Route 250 Corridor Study	US250	Between US6 and Bogart Road - Length = 4.1 miles	Short term project (within 10 years)	\$26,700,000
2	Safety improvement study at the Perkins Avenue-Cleveland Road (US6) intersection in Huron Township	Perkins Avenue and Cleveland Road	1,000 feet from each leg of the intersection	Short term project (within 10 years)	\$35,000
3	US/6 Fabens Park Median Turns in City of Huron	US 6	US 6 Entrance to Fabens Park	Short term project (within 10 years)	\$247,730*
4	Intersection Improvments	US 6/Cleveland Road at Berlin Road	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	\$500,000*
5	Preservation of existing roadways	Roadways on Kelleys Island	Major roadways - Length = approximately 4 miles	Mid term project (10-15 years)	\$4,191,900
6	Preservation/Widening of existing 2-lane road to accommodate commercial truck traffic	Old Railroad Road	From Perkins Avenue South to Urbanized Area Boundary - Length = Approximately 2.75 miles	Short term project (within 10 years)	\$1,066,600
7	Intersection Improvments	Bogart Road at Campbell Street	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	\$800,000
8	Retiming of traffic signals	SR4	Between Perkins Avenue and Monroe Street - Length = 1.3 miles	Short term project (within 10 years)	\$30,000
9	Retiming of traffic signals	Monroe Street	Between US6 and Warren Street - Length = 1.4 miles	Short term project (within 10 years)	\$38,900
10	Upgrade traffic signals/install turn lane in Vermilion	US 6/Liberty Avenue	From Main Street to Sunnyside Road - 9 intersections - install WB turn lane at Vermilion Road	Short term project (within 10 years)	\$1,337,660*
11	Resolve roadway alignment issues	SR13	At Mason Road - Length = 1,200 feet from each leg of the intersection	Short term project (within 10 years)	\$555,500
12	Resolve roadway alignment issues	SR113	At SR61 - Length = 1,200 feet from each leg of the intersection	Short term project (within 10 years)	\$555,500

Table 9.1 Roadway Improvements - Preservation Projects

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule	Planning Level Cost Estimate
13	Preservation/Widening of existing 2-lane road to match widening done between SR4 and US250	Bogart Road	Between US250 and Huron - Length = 4.1 miles	Short term Project (within 10 years)	\$4,250,000
14	Preservation/Widening of existing 2-lane road to match widening done between SR4 and US250	Bogart Road	Between Castalia and SR4 - Length = 3.9 miles	Mid term project (10-15 years)	\$4,042,860
15	Intersection Improvements	SR4 at Strub Road	Length = 1,000 feet on legs of the intersection	Short term project (within 10 years)	\$1,500,000
16	Intersection Improvements	Perkins Avenue and Caldwell Street	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	\$444,400
17	Preservation of existing 2-lane road	Sunnyside Road	Norfolk Southern Railroad to North Ridge Road = approximately 2 miles	Short term project (within 10 years)	\$1,700,000
18	Preservation of existing 2-lane road	Jerusalem Road	Vermilion Road to Sunnyside Road = approximately 1.0 mile	Short term project (within 10 years)	\$676,871*
19	Preservation of existing 2-lane road	Vermilion Road	US 6 (Liberty Avenue) to Jerusalem Road = 2.1 miles	Short term project (within 10 years)	\$1,637,450*
20	Preservation of existing 2-lane road	Campbell Street	Perkins Avenue to Marshall Avenue = approximately 1.1 miles	Short term project (within 10 years)	\$380,000
21	Preservation of existing 2-lane road with sidewalk repair/installation	Columbus Avenue and Strub Road	Columbus Avenue - Bogart Road to Perkins Ave = 2.82 miles Strub Road - Coumbus Avenue to US 250 = approx. 0.5 mile	Short term project (within 10 years)	\$1,192,000*
22	Preservation of existing 2 lane road and sidewalk repair/installation	Water Street	From Meigs Street to Shelby Street-Length = approximately 1.0 mile	Short term project (within 10 years)	\$993,052*

Table 9.1 Roadway Improvements - Preservation Projects

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule	Planning Level Cost Estimate
23	Bridge Lighting Replacement in City of Huron	US 6/Cleveland Road	Crosses Huron River - approximately 0.20 mile	Short term project (within 10 years)	\$90,000*
24	Underpass Rehabilitation	Camp Street	Norfolk Southern Railroad - Underpass, Located North of Filmore Street and South of Depot Street in the City of Sandusky	Short term project (within 10 years)	\$1,800,000*
25	Signal Upgrades	Perkins Avenue	From Camp Street to 50th Street	Short term project (within 10 years)	\$790,648*
26	Access Management Planning Study	SR61	Between the north side of Berlin Heights to 1,000 feet north of SR2 - Length = 2.5 miles	Mid term project (10-15 years)	\$55,000
27	Improve signage/wayfinding	City of Vermilion	Various Roads	Short term project (within 10 years)	\$300,000
28	Improve signage/wayfinding	City of Huron	Various Roads	Short term project (within 10 years)	\$300,000
29	Improve signage/wayfinding	City of Sandusky	Various Roads	Short term project (within 10 years)	\$300,000
30	Preservation of existing 2-lane/ bridge approaches	Joppa Road	Bridge Crossing over I80/I90 (Ohio Turnpike)	Short term project (within 10 years)	\$110,000
31	Preservation of existing 2-lane/ bridge approaches	Patten Tract Road	At Bridge Crossing over I80/I90 (Ohio Turnpike)	Short term project (within 10 years)	\$110,000
32	Preservation of existing 2-lane/ bridge approaches	Chapin Road	At Bridge Crossing over I80/I90 (Ohio Turnpike)	Short term project (within 10 years)	\$166,000
33	Guardrail Replacement	Humm Road	At Bridge Crossing over I80/I90 (Ohio Turnpike)	Short term project (within 10 years)	\$50,000
34	Access Management Planning Study	Through downtown Milan into Huron County	Along SR601 through Milan into Huron County - Length = 1.3 miles	Mid term project (10-15 years)	\$60,000

*** Indicates cost shown is the MPO contribution toward the project

Table 9.2 Roadway Improvements - Expansion Projects

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule	Planning Level Cost Estimate
1	Roadway Realignment	Main Street in City of Huron	From US 6 to Huron Pier (note: some sections not on federal aid network) Length approximately = 0.50 mile	Short term project (within 10 years)	\$500,000*
2	Boulevard widening (Note: Not eligible for MPO funding)	Warren Street in Sandusky	Between Monroe Street and Water Street - Length = 0.5 miles	Mid term project (10 to 15 years)	\$332,500 (Funded through Community Development Block Grant Program)
3	Realignment of roadway and intersection	SR99 and SR4 in Groton Township	Realignment of SR99 and SR4 intersection - Length = 1,200 feet from each leg of the intersection	Mid term project (10 to 15 years)	\$333,300
4	3-lane roadway expansion (add middle turn lane)	Perkins Avenue	Between US250 and Mall Boulevard-Length = 0.5 miles	Mid term project (10 to 15 years)	\$1,733,200
5	Addition of middle turn lane (5-lane roadway expansion)	Perkins Avenue	Between US250 and Old Railroad Road - Length = 2.1 miles	Mid term project (10 to 15 years)	\$7,979,400
6	Ferry Service	Service from Sandusky, Vermilion, and Marblehead to Cedar Point and the Islands		Short term project (within 10 years)	\$7,000,000 (Funded through Ferry Boat Discretionary Program)
7	3-lane roadway expansion (add middle turn lane)	Strub Road	Between Perkins Ave and Campbell St. - Length = approximately 2.35 miles	Mid term project (10 to 15 years)	\$8,147,100
8	3-lane roadway expansion (add middle turn lane)	SR4	Between Wade Boulevard and SR2 - Length = 1.5 miles	Short term project (within 10 years)	\$5,200,000
9	3-lane roadway expansion	SR4	Between SR2 and I-80/90 - Length = 4.6 miles	Mid term project (10 to 15 years)	\$15,945,500
10	3-lane roadway expansion	SR4	Between I-80/90 and Erie/Huron County Line - Length = 4.1 miles	Long term project (25 + years)	\$14,212,100

Table 9.2 Roadway Improvements - Expansion Projects

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule	Planning Level Cost Estimate
11	New East-West Road Connection	Near Quarry	Between US250 and Columbus Avenue - Length = approximately 0.8 miles	Long term project (25 + years)	\$1,386,550
12	Roadway extension between Mason Road and Southwest Road with 2-lane road	Mason Road in Margareta/Groton Townships	Between SR269 and Southwest Road - Length = 0.9 miles	Long term project (25 + years)	\$4,000,000
13	Roadway extension connecting Northwest Road and Southwest Road with 2-lane road	Northwest Road in Margareta/Groton Townships	Between SR101 and I-80/90 - Length = 1.5 miles	Long term project (25 + years)	\$2,600,000
14	4-lane roadway expansion	US6	Between Remington Avenue and Rye Beach Road - Length = 4.5 miles	Mid Long term project (15 to 25 years)	\$15,598,670
15	3-lane roadway expansion	Perkins Avenue	Between US6 and Mall Boulevard - Length = 2.5 miles	Mid term project (10 to 15 years)	\$6,332,800
16	Roadway extensions with a 2-lane road (Note: Not eligible for MPO funding)	Connect Sheid Road to Knight Road in Huron/Milan Townships	Length = 0.8 miles	Mid term project (10 to 15 years)	Not Applicable for MPO Funding
17	Roadway extensions with a 2-lane road (Note: Not eligible for MPO funding)	Connect Knight Road to SR61 in Berlin Township	Length = 1.0 miles	Mid term project (10 to 15 years)	Not Applicable for MPO Funding
18	Roadway realignment	Joppa Road	In the vicinity of Furnace Road and Church Road in Florence Township - Length = 0.7 miles	Mid Long term project (15 to 25 years)	\$333,300
19	Roadway realignment	Mason Road in FlorenceTownship	In the vicinity of Burrows Road and Stephens Road/Joppa Road in Florence Township - Length = 0.8 miles	Mid Long term project (15 to 25 years)	\$333,300
20	New Bridge	High Bridge Road - City of Vermilion	Length= approximately 1,100 feet of structured roadway	Short term project (within 10 years)	\$56,000* (Right of Way)
21	Park and Ride Facility	Milan Township	Park and Ride facility near the turnpike for use by commuters - Approximate size of parking lot = 1 acres	Short term project (within 10 years)	\$60,000

*** Indicates cost shown is the MPO contribution toward the project

Table 9.3 Transit Alternatives

No.	Type of Transit Project	Implementation Scheduled	Planning Level Cost Estimate
1	Work with local transportation/transit stakeholders to secure funding for transit services.	Short term project (within 10 years)	Not Applicable
2	Develop Inter-County Transfer Point at the US250 and I-80/90 interchange area. A possible location for the facility would be near the Lake Erie Outlet Mall at US250 and Mason Road.	Mid-term project (10-15 years)	\$54,000
3	Develop corridor level fixed-route transit service in the US6 corridor between downtown Sandusky, the City of Huron, and the City of Vermilion - Length = approximately 23.4 miles	Short term project (within 10 years)	\$750,000 annually for operations & maintenance (includes 3 buses)
4	Work with local transportation/transit stakeholders to secure funding for transit mobility manager.	Short term project (within 10 years)	\$50,000 annually for salary (funded through Specialized Transportation Program 5310)
5	Complete update of the Coordinated Public Transit-Human Services Transportation Plan	Short term project (within 10 years)	\$10,000
6	Continue seasonal transit service to Cedar Point from downtown Sandusky and the developed JARC corridor fixed route transit service	Short term project (within 10 years)	\$750,000 annually for operations and maintenance (includes 3 busses, Funded through JARC)

**Table 9.4 Non Motorized Alternatives
First Priority Bicycle/Pedestrian Corridor**

No.	Type of Non-Motorized Corridor and Trail Improvement	Implementation Schedule	Planning Level Cost Estimate
1	Sandusky Bay Pathway from Decatur Street to Downtown Sandusky Boat Launch Ramp - Length = 0.5 mile	Short term project (within 10 years)	\$303,550
2	Monroe Street from Edgewater to Tiffin Ave (US 6) Length = approximately 1.25 miles	Short term project (within 10 years)	\$310,000
3	Tiffin Ave (US 6) from Monroe Street to Sandusky Bay Pathway Length = 0.5 mile	Mid term project (10 - 15 years)	\$125,000
4	Edgewater Ave. from Venice Road to Monroe Street - Length = 0.3 mile	Mid term project (10 - 15 years)	\$75,000
5	Venice Road from Barrett Road to Edgewater Avenue - Length = 1.1 miles	Mid-long term project (15 - 25 years)	\$250,000
6	Barrett Road from Village of Bayview to Venice Road - Length = 3.1 miles	Mid-long term project (15 - 25 years)	\$695,000
7	US 6 (Cleveland Road) from Cedar Point Drive to the City Limits - Length = 1.3 miles	Short term project (within 10 years)	\$340,000
8	US250 from Perkins Avenue to Bogart Road - Length = approximately 3.2 miles	Short term project (within 10 years)	\$1,251,250
9	Columbus Avenue from Strub Road to Bogart Road - Length = 1.5 miles	Mid term project (10 - 15 years)	\$392,000
10	Perkins Avenue from Strub Road to Peterson Lane - Length = 0.53 mile	Short term project (within 10 years)	\$305,000

**Table 9.4 Non Motorized Alternatives
First Priority Bicycle/Pedestrian Corridor**

No.	Type of Non-Motorized Corridor and Trail Improvement	Implementation Schedule	Planning Level Cost Estimate
11	Bogart Road from the downtown Castalia to Patten Tract Rd - Length = 4.7 miles	Mid term project (10 - 15 years)	\$1,102,000
12	Strub Road from Perkins to US 250 Length = Approximately 0.75 mile	Mid term project (10 - 15 years)	\$225,000
13	Strub Road from US 250 to Campbell Street Length = Approximately 1.62 miles	Short term project (within 10 years)	\$381,000
14	Campbell Street from Strub to Windamere Lane - Length = 0.18 mile	Short term project (within 10 years)	\$50,000
15	Bogart Road from Columbus Avenue to downtown Huron - Length = 6.0 miles	Mid term project (10 - 15 years)	\$1,406,500
16	Didion Drive from Douglas to Strub Road Street Length = 0.16 mile	Short term project (within 10 years)	\$87,500*
17	US6 from Perkins Avenue to Rye Beach Road with a connection/stop at Osborn Park in between Sandusky and Huron - Length = 2.2 miles	Short term project (within 10 years)	\$515,750
18	US 6 from Main Street in Huron to Vermilion Corp. Line in Lorain County - Length = approximately 22.5 miles	Mid-long term project (15 - 25 years)	\$5,275,000
19	Rye Beach Road from US6 to SR 2 - Length = 0.32 mile	Mid term project (10 - 15 years)	\$84,000

*** Indicates cost shown is the MPO contribution toward the project

Second Priority Bicycle/Pedestrian Corridor

No.	Type of Roadway Expansion Project	Implementation Schedule	Planning Level Cost Estimate
1	Mason Road from SR 269 to the Erie/Loarin County line - Length = 26.75 miles	Mid-long term project (15 - 25 years)	\$6,271,000
2	SR 113 from US 250 to Edison Drive in the Village of Milan - Length = 0.4 mile	Mid term project (10 - 15 years)	\$100,000
3	SR 60 in Vermilion Township from Wine Street to SR 2 - Length = 0.60 mile	Mid-long term project (15 - 25 years)	\$160,000
4	US 250 from Bogart Road to Ohio Turnpike - Length = 5.40 miles	Mid-long term project (15 - 25 years)	\$1,266,000
5	Development of non-motorized trails on Kelleys Island as roadways are preserved - Length = 4.5 miles	Mid-long term project (15 - 25 years)	\$2,731,350

Third Priority Bicycle/Pedestrian Corridor

No.	Type of Roadway Expansion Project	Implementation Schedule	Planning Level Cost Estimate
1	Bardshar Road from Dorn Park to Mason Road - Length = 3.1 miles	Long term project (25 + years)	\$726,750
2	Perkins Avenue from Mills Street to Strub Road - Length = 3.2 miles	Long term project (25 + years)	\$750,200
3	Perkins Avenue from Cleveland Road to Peterson Lane - Length = 1.4 miles	Long term project (25 + years)	\$365,850
4	Campbell Street from Windamere to Bogart Road - Length = 1.2 miles	Long term project (25 + years)	\$315,000
5	River Road from US 250 to Sprowl Road - Length = 7.0 miles	Long term project (25 + years)	\$1,650,000
6	US 250 from Ohio Turnpike to County Line - Length = 2.8 miles	Long term project (25 + years)	\$656,400
7	Sycamore Line from Perkins Ave to First Street - Length = 2.6 miles	Long term project (25 + years)	\$680,000
8	SR 269 from County Line to Bogart Road in Castalia - Length = 8.0 miles	Long term project (25 + years)	\$1,875,400
9	Mills Street from RR xing to Monroe Street - Length = 0.40 miles	Long term project (25 + years)	\$105,000
10	Florence Wakeman Road from SR2 to the Erie/Huron County line - Length = 8.2 miles	Long term project (25 + years)	\$1,922,300