

ERPC MPO Regional Freight Plan

Prepared for:

Erie Regional Planning Commission & Metropolitan Planning Organization

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And





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Executive Summary

The purpose for the ERPC MPO Regional Freight Plan is to effectively integrate considerations of freight or goods movement with the regional transportation planning process under the leadership of Erie Regional Planning Commission (ERPC) and Metropolitan Planning Organization (MPO). The ERPC MPO region’s diverse multimodal freight network is a strategic asset for sustaining and growing the region’s economy. The freight plan will ensure that the freight network is consistently considered in selecting and prioritizing transportation investments. It will also help to raise awareness of the importance of efficient, reliable freight movement to employers, workers, and consumers alike.

Critical Context

The Regional Freight Data Memorandum, prepared in 2022, provides important context for the freight plan. Its most significant findings include:

- Advanced manufacturing, food and agriculture, construction materials, and energy are leading freight commodities to and from the ERPC MPO region.
- Freight imports exceed exports—by 207 percent in tons and by 58 percent in value. Rail is the leading import mode, followed by water and truck. Trucks far exceed any other export mode, with water and rail a distant second and third.
- Freight is moved on nearly every roadway in the region. Major highways with significant truck volumes include I-80/I-90/Ohio Turnpike, US 250, and various state routes. Two water ports, four rail yards, and four airports and heliports argue the highway network to create a solid multimodal freight transportation network in the ERPC MPO region.

Regional freight planning must occur in the context of broader freight industry trends and innovations. Topics and trends, both regionally and nationally, will be considered regularly in carrying out the plan’s goals and engaging stakeholders in selecting project investments and other freight planning activities.

Regional Freight Goals

The freight plan’s goals address the transportation system that serves freight movement and the location of future freight generation as well as the capacities of planning staff and stakeholders to make informed decisions about investments. The plan’s strategic initiatives outline how progress toward each goal can be made. They identify actions and activities that leverage existing conditions, as well as trends and forecasts, and planning processes to shape outcomes that benefit the transportation system and the economy.

Freight Goals

- ✦ Integrate land use and freight transportation planning processes.
- ✦ Invest in and promote the region’s multimodal and intermodal capabilities.
- ✦ Improve freight mobility, safety, and operations.
- ✦ Expand regional freight planning capabilities.
- ✦ Increase freight awareness among all stakeholders, including the public.
- ✦ Foster strategic partnerships and alliances for enhanced freight movement.

In recent decades, freight planning has emerged as a needed collaboration of public and private sectors and as a critical intergovernmental partnership. Through legislation and rulemaking, the federal government has given greater priority to freight mobility and requirements to freight planning. The Ohio Department of Transportation has produced an outstanding statewide freight plan and has encouraged its planning regions to convene regional knowledge and perspectives toward better freight movement.

Together, the freight plan’s goals and initiatives set a strategic direction, aligned with national and state planning priorities, for the ERPC MPO and its partner agencies.

Freight Planning Tools & Implementation

- ✦ The ERPC MPO Regional Core Freight Network identifies multimodal transportation facilities used regularly in freight movement. As a planning tool, it will help to frame outreach, discussion, and decision-making for freight mobility in the ERPC MPO region.

ERPC MPO Regional Core Freight Network, May 2023



- ✦ The Freight Planning and Programming Framework advances freight problems and opportunities from identification to project programming using public and/or private transportation funding.
- ✦ The Freight Projects Inventory is the tool that supports the validation of freight problems for consideration as candidate capital projects, private investments, or other regional initiatives.

Implementation will be carried out in line with the resources of the ERPC MPO and the volunteer capacity of the FAC. As such, freight plan implementation will be structured as a continuous process accomplishing what can be done to raise awareness and address freight mobility, safety, and other needs over any given time period.

1. Introduction

Freight growth in combination with the need for targeted investment in infrastructure has resulted in a greater federal and state policy emphasis on freight planning over the past decade. Fixing America's Surface Transportation (FAST) Act of 2015 (the FAST Act) established a national freight transportation policy and set goals related to the nation's freight transportation system across topics such as infrastructure condition, safety, security, efficiency, and resiliency. It required states to develop a freight plan of planning activities and investments and directed a portion of federal funds and established new competitive funds to be used to improve facilities carrying freight.

Under the Infrastructure Investment and Jobs Act (IIJA) / Bipartisan Infrastructure Law (BIL) of 2021, the U.S. Congress expanded transportation funding and strengthened the relationship between transportation and the economy especially in its discretionary grant programs.

[TRANSPORT OHIO](#), the Ohio Department of Transportation's state freight plan, underscores the role of transportation in supporting economic prosperity, quality of life, and environmental stewardship. It examines freight-related conditions to guide ODOT's policy and investment decisions through fiscal year 2027. It provides a model of data considerations for regional freight planning and performance.

The relationship between federal transportation funding and state freight system priorities makes the need for the Erie Regional Planning Commission (ERPC) MPO Freight Plan more important than ever before.



Plan Purpose

The primary purpose for this plan is to effectively integrate considerations of freight or goods movement with the regional transportation planning process under the leadership of Erie Regional Planning Commission (ERPC) and Metropolitan Planning Organization (MPO). Erie County has a diverse multimodal freight network that is a strategic mobility asset and a foundation for sustaining and growing the region's economy. The freight plan will ensure that this network is consistently considered in selecting and prioritizing investments for the regional long-range transportation plan (LRTP) and the transportation improvement program (TIP). It will also help to raise awareness of the importance of efficient, reliable freight movement to employers, workers, and consumers alike.

The ERPC MPO developed the freight plan with input from public agencies at the local, state, and federal level and the private sector. Their involvement is expected to continue via a Freight Advisory Committee (FAC). The FAC will be a forum for freight stakeholders to discuss the region's freight system, its needs, challenges, and opportunities, and how to jointly address them.

The ERPC MPO will carry out its freight plan consistent with and supportive of Ohio's statewide freight plan. This will benefit freight movement via a coordinated approach that transcends regional borders.

Plan Organization

Following this introductory chapter, the freight plan is organized as follows:

- **Chapter 2: Freight Movement Conditions** presents existing freight conditions in the region. It covers regional trends that impact freight particularly population and economic trends, freight's role in the region's economy and a description of the present freight system in the context of the county's varied land uses.
- **Chapter 3: Freight Movement Goals and Objectives** establishes themes for public-private plan collaboration around transportation, land use, and economic development. Six broad goals are set forth for a five-year planning horizon along with the strategic initiatives for their accomplishment. Together, the goals reflect an overall cohesive public-private strategic direction to help ensure effective and efficient freight mobility for the long term.
- **Chapter 4: ERPC MPO Regional Core Freight Network** presents a map of select, multimodal facilities as a planning tool for ERPC MPO staff and its to-be-established Freight Advisory Committee (FAC).
- **Chapter 5: Freight Planning and Programming** considers how freight needs can be identified, vetted, and weighted among all system needs for project programming.
- **Chapter 6: Freight Project Inventory** outlines a freight project inventory tool and process to be kept by the ERPC MPO and regularly reviewed and updated with input from the Freight Advisory Committee.
- **Chapter 7: Implementation Approach** establishes the means for moving forward on the goals, incorporating freight information in the project programming process, and tracking and reporting progress implementing the plan. The freight plan is dynamic and as such will be updated as beneficial to reflect current conditions, challenges, and opportunities.

2. National Trends and Regional Conditions

National Trends in Freight

The development and implementation of the regional freight plan must be considered in the context of broader freight trends that might impact a region's transportation system. Topics and trends such as the following will be regularly considered in carrying out the plan's goals and engaging stakeholders in selecting project investments, where applicable.

- **Logistics Industry Innovation.** Shippers have transitioned from providing product transport to and from traditional warehouses to operating logistics hubs that consolidate and distribute varied freight bound for the same region. Products are delivered more efficiently, with less storage time and cost, to the retail store or final consumer. This innovation has been accompanied by the growth of decentralized distribution centers or fulfillment centers for final deliveries.
- **Multimodal Movements & Intermodal Facilities.** Policy and economics promote multimodal freight movement—using a combination of modes (and operators) especially for shipping or receiving goods across great distances. As such, a connected system of roads, rail, water ports and air cargo modes, and the intermodal facilities to move loads from one mode to another, generally results in a competitive advantage for regions. Further, policy favors multimodal freight systems from the standpoint of reduced highway congestion and pavement wear as some portion of shipping shifts from highways to marine and rail modes for a portion of the shipping distance.
- **E-Commerce and Customer Delivery.** Fulfillment centers have shifted the last destination of retail freight delivery from stores to homes, businesses, and all sorts of facilities and institutions. Particularly since the pandemic, there are package delivery trucks and even large commercial vehicles making daily deliveries throughout communities. The residential subdivision has effectively become a freight generator not unlike a traditional retail center. As e-commerce continues to optimize customer convenience, it will continue to influence freight movement and infrastructure planning.
- **Transportation System Performance—Pavement and Bridge Conditions.** MAP-21 (the Moving Ahead for Progress in the 21st Century) initiated a performance-based approach to transportation system planning and called out facility or asset conditions as one of several measures to be monitored. Pavement and bridge conditions must be monitored on key highway networks such as the Interstate System and the National Highway System, but pavement conditions on first-mile/last-mile connections matter, too. These connections are often a mix of state and local roads that receive less funding for maintenance and improvements and therefore may be classified as in fair or poor condition.

Erie County's freight network is solidly multimodal with highway, rail, water port and airport assets. The ERPC MPO Core Freight Network will help to bring attention to all levels of freight infrastructure.

- **Transportation System Performance—Truck Travel Time Reliability.** Truck travel times can be made more reliable through capital projects that expand facilities, provide operational improvements, and support mode shifts and connections to intermodal hubs. Other considerations include coordinating transportation and land use planning to concentrate new freight-generating development, and truck parking facilities, near infrastructure designed to serve commercial vehicles.
- **Technology Applications for Transportation.** Information technology continues to develop new applications for all industries and sectors, including transportation and especially logistics.

The Freight Advisory Committee will be a forum for stakeholders to share examples of how information technology impacts freight movement and system management and will continue to do so in the years ahead.

- **Vehicle Technology.** Transportation is a major contributor to greenhouse gases and the transportation industry at large is seeking to reduce emissions and improve air quality. In the near term, technology solutions include electrical supply (in lieu of engine idling) at locations where commercial vehicles are stationary. Over the long term, the expected future of electric vehicles, and even connected and autonomous vehicles, will have more significant implications for public-private freight planning and infrastructure readiness. For example, as electric vehicles increase their share in the trucking fleet, the public and private sector will need to collaborate on practical solutions for vehicle charging.
- **Advances in Railroad Operations.** Class I freight railroads have adopted a number of practices to improve operating efficiency and safety in recent years. These practices include the use of distributed power (or "mid-train locomotives") to operate longer trains, positive train control (PTC) implementation and GPS-based technology enhancements to reduce train incidents related to excessive speed and signal violations, and precision scheduled railroading (PSR) to improve operating efficiency by operating freight trains based on fixed schedules and reducing rail car dwell times in yards. Innovations will undoubtedly continue as railroads address changes in freight commodities carried by rail.
- **Resilience and Sustainability.** Climate change and other factors have increased the need to consider measures for promoting the resiliency of our transportation system. Increasing storm intensities and flooding impact all modes of freight transportation and can inhibit the movement of essential supplies and response teams to impacted areas. Transportation planners are increasingly examining weather models to size facilities for long-term weather patterns and seeking alternative solutions that minimize environmental impact to people and nature.

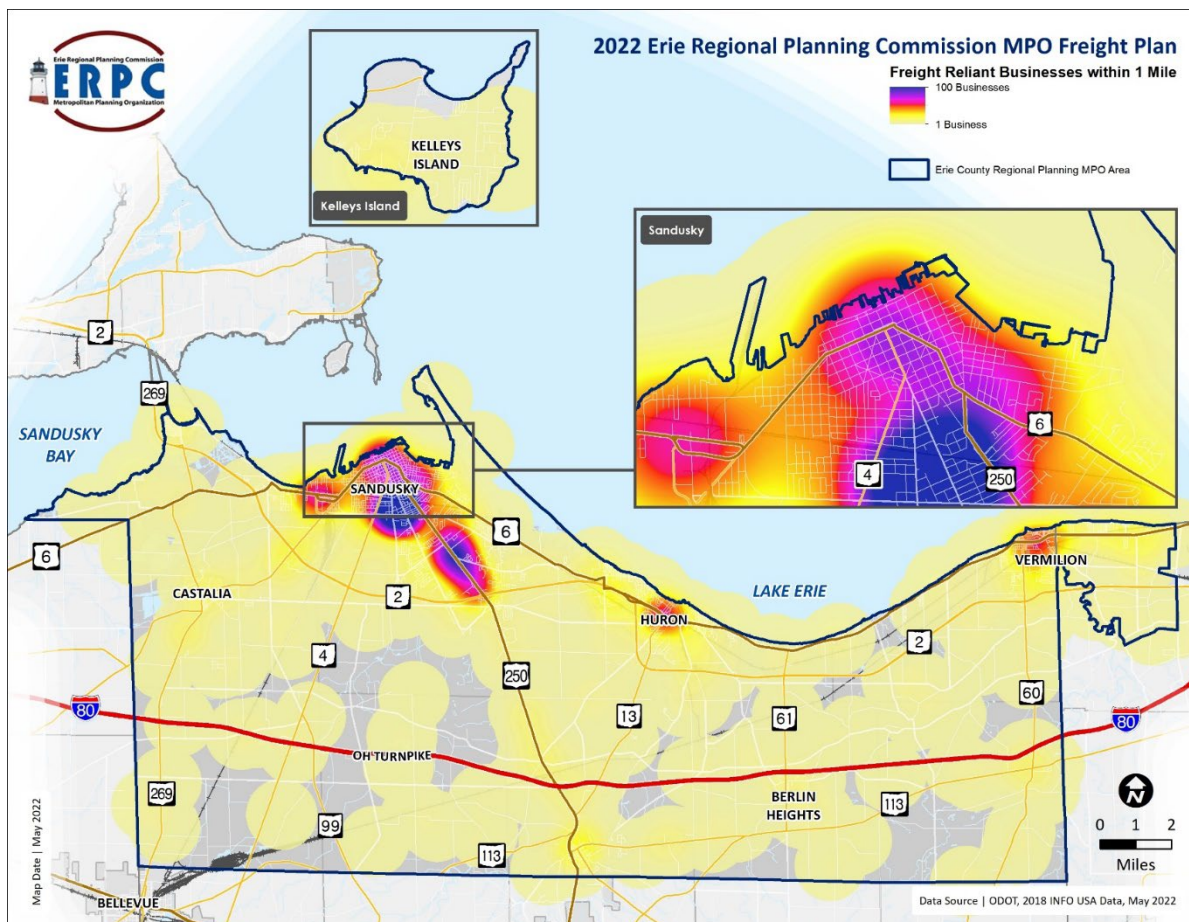
Regional Freight Factors & Conditions

The Regional Freight Data Memorandum was prepared in 2022 and is included as Appendix 1. Key findings are listed below as important context for the freight plan.

Regional Economic Factors Impacting Freight

- There were only slight changes in total population, households, and employment in Erie County from 2010 to 2020; however, all three factors are projected to decline through 2050.
- Data on household income for Erie County indicates a wealth index just above the national average when compared to other U.S. counties. Consumer demand is partially a function of income and can impact freight demand.
- Commercial and industrial uses, as well as agricultural use areas, are common origins and destinations for freight movements. These uses occupy the majority of the ERPC MPO region's 170,999 acres. While municipal governments have zoned for the expansion and new development of commercial and industrial use areas, and the associated reduction of agricultural uses areas, these three freight-generating land uses are still expected to comprise the majority of future land use in the ERPC MPO region.

Figure 1. Freight-Reliant Business Locations



Freight’s Role in the Regional Economy

- The largest employer in Erie County is Cedar Fair Entertainment. While tourism metrics dipped in 2020 due to public health restrictions associated with the COVID-19 pandemic, tourism rebounded to near pre-pandemic levels in 2021. This impacts freight movement in two ways—the overall increase in traffic that effects both freight and passenger movement, and the increase in freight delivery to service tourist destinations.
- Large industrial employers in the ERPC MPO region include Freudenburg-Nok GP (owned by Corteco USA), JBT Food Tech, JH Routh Packing Co., and US Tsubaki Power Transmission.
- According to the Freight Analysis Framework (FAF5), a comprehensive national database of freight information compiled by USDOT’s Bureau of Transportation Statistics and the Federal Highway Administration, top commodity flows in the area include construction materials, food and agriculture, advanced manufacturing, and energy via the roadway network.
- Freight imports exceed exports—by 207 percent in tons and by 58 percent in value. Rail is the largest import mode, followed by water and truck. Trucks far exceed any other export mode, with water and rail a distant second and third. For both imports and exports, freight traffic by air is a small share of overall freight movement.

Table 1: Top Import and Export Community Categories by Mode (tons)

	Top Import Commodity Categories	Top Export Commodity Categories
Air	Advanced Manufacturing (0.73k) Other ¹ (0.49k) Chemicals and Pharmaceuticals (0.06k)	Motorized Vehicles & Parts (0.35k) Advanced Manufacturing (0.25k) Food & Agriculture (0.06k)
Truck	Food & Agriculture (1431k) Construction Materials (718k) Other ¹ (423k)	Food & Agriculture (2176k) Other ¹ (200k) Advanced Manufacturing (186k)
Multiple Modes and Mail	Other ¹ (51k) Advanced Manufacturing (12.9k) Food & Agriculture (10.5k)	Food & Agriculture (16.3k) Advanced Manufacturing (10.5k) Other ¹ (3.8k)
Water	Energy (2544k) Construction Materials (495k) Other ¹ (163k)	Construction Materials (163k) Food & Agriculture (103k) Energy (29k)
Rail	Energy (4089k) Chemicals, Pharmaceuticals & Plastics (126k) Construction Materials (54k)	Construction Materials (368k) Food & Agriculture (19k) Energy (14k)

¹ “Other” includes tobacco products, metal ores and concentrates, fertilizers, logs, and other wood in the rough, pulp, newsprint, paper and paperboard, printed products, textiles and leather, base metals, furniture and mattresses, lamps, and illuminated signs and waste and scrap.

Freight System Modal Infrastructure

- The Ohio Turnpike is the only corridor in the ERPC MPO region that is part of the National Highway Freight Network (NHFN). No projects are programmed for construction along this segment of the Ohio Turnpike during the current funding period of 2022-2027.
- Roughly 14,000 daily trucks flowed through Erie County on the Ohio Turnpike (I-80/I-90) in 2018 according to the FAF5 data and in 2019 according to the Ohio Department of Transportation (ODOT). Trucks represent more than 20 percent of the overall Turnpike traffic volume in the MPO area according to FAF5; nearly 35 percent according to ODOT.
- The next largest truck flows in 2018 were on US 250 south of the Ohio Turnpike, with over 2,500 daily truck trips (FAF5); ODOT reported a similar volume of 2,203 in 2019.
- Future truck flows on the Turnpike in Erie County are projected to exceed 19,000 by 2040 (ODOT). The heaviest truck flows on the entire Ohio Turnpike are in the vicinity of the ERPC MPO region.

Table 1: Traffic and Truck Volumes in the ERPC MPO Travel Model

Roadway	Existing Total Vehicle (2019) Volume	Projected Total Vehicle (2040) Volume	Projected Growth	Existing Truck Volume	Projected Truck Volume	Projected Truck Growth
US 6	13,232	22,771	+9,539	340	589	+249
SR 2 WB*	11,350	17,413	+6,063	1,101	1,890	+789
SR 2 EB*	11,350	17,666	+6,316	1,101	1,962	+861
Turnpike WB*	20,161	31,264	+11,103	7,016	9,523	+2,507
Turnpike EB*	20,161	31,284	+11,123	7,016	9,507	+2,491
SR 4	12,696	20,525	+7,829	1,116	2,752	+1,636
US 250	30,248	22,098	-8,150	2,203	2,273	+70
SR 13	5,808	8,205	+2,397	499	1,413	+914
SR 61	3,822	8,417	+4,595	370	276	-94
SR 60	3,546	11,974	+8,428	274	538	+264

*Note: *Existing volumes were represented as bidirectional volumes on a single line. For analysis purposes, these volumes were split 50/50 in this table for comparison purposes with the projected volumes.*

Source: ODOT Traffic Count Segments (2019), ERPC MPO Travel Model (2040)

- Congestion is evident near each of the two Turnpike interchanges (SR 4 and US 250). Both interchanges operate and are projected to operate at levels of service (LOS) F.
- Roadway and intersection LOS are not expected to change from 2019 to 2040.
- There are 56 truck spaces in two facilities in the ERPC MPO region. The nearest Ohio Turnpike rest areas with overnight truck parking are in Lorain County and offer more than 100 spaces at both the eastbound and westbound service plazas.
- Highways in the ERPC MPO region have relatively good pavement conditions. Roadways with poor pavement ratings include segments of SR 2, which carries between 2,400 and 2,900 trucks per day, and US 250, which carries between 1,100 and 2,000 trucks per day. Poor road conditions generally correlate with delay and can pose direct and indirect costs on carriers and shippers.
- Nearly half of all truck crashes (489 of 984 crashes; 49.7 percent) in the ERPC MPO region between 2017 and 2021 occurred on the Ohio Turnpike; two were fatal crashes. Other truck crashes resulting in fatalities during this same period occurred on SR 2, SR 4, US 6, and US 250.
- Two ports and four rail yards are located in Erie County, with coal being a major rail commodity.
- The ERPC MPO Long Range Transportation Plan (LRTP) for the 2022-2027 funding period lists 35 projects that will help freight mobility. These projects represent more than 50% of the total projects in the LRTP.

3. Freight Movement Goals

Goals define desired future conditions, both steady and changed conditions, and a framework of strategic initiatives for the how to achieve or make progress toward that future.

Freight Plan goals answer: What are the characteristics of the transportation system the Erie County region needs now and in 20 years?

Strategic Initiatives answer: How can limited resources best be directed to achieve that future system?

Freight Plan goals, listed in Figure 2 and described on the following pages, convey various facets of that envisioned future. They address the transportation system that serves freight movement and the location of future freight generation as well as the capacities of planning staff and stakeholders to make informed decisions about investments. The Freight Plan goals align with national and state planning priorities, while also reflecting top concerns expressed by freight stakeholders.

Strategic initiatives outline how progress toward each goal can be made. They identify actions and activities that leverage existing conditions, as well as trends and forecasts, and planning processes to shape outcomes that benefit the transportation system and the economy.

Together, the freight plan goals and strategic initiatives set a strategic direction and course of action for the ERPC MPO and its regional partner agencies.

Figure 2. Freight Goals



[TRANSPORT OHIO](#) uses goals and focus areas as its framework for improving freight movement. Both goals and focus areas as shown below.

ACCESS OHIO 2045 / TRANSPORT OHIO Goals

Ohio's transportation goals highlight desired trends for the transportation system and its support for the economy and everyday mobility.

Safety

- Reduce fatalities and serious injuries.
- Enhance transportation system security.
- Support effective response to and recovery from natural disasters, emergencies, and incidents.

Preservation

- Maintain transportation assets in a state of good repair.

Economic Competitiveness

- Improve access to job clusters.
- Enhance freight mobility.
- Improve transportation access to attractions.

Efficiency and Reliability

- Increase the efficiency and reliability of moving people and freight.
- Improve the efficiency of connections between modes.

Environmental Stewardship

- Reduce air quality emissions related to transportation.
- Avoid, minimize, or mitigate impacts of transportation on built and natural environment.

Quality of Life

- Coordinate transportation policy and investments with community visions.
- Advance transportation policy and investments that improve public health.

Transport Ohio also address Bipartisan Infrastructure Law (BIL) priorities for freight:

- Enhance reliability and redundancy of freight transportation.
- Improve the ability to rapidly restore access to freight transportation.

TRANSPORT OHIO Focus Areas & Strategies

Planning

- Develop/conduct freight specific plans and studies.
- Monitor and track progress to TRANSPORT OHIO goals/performance.
- Expand access to freight related data and information.
- Encourage Ohio's regions to develop multimodal freight transportation plans and assessments.

Operations and Maintenance

- Maintain transportation assets (including enabling technologies) in a state of good repair.
- Employ Transportation System Management and Operations (TSMO) strategies to address congestion and improve reliability along key Strategic Freight System corridors.
- Identify and mitigate extreme weather and other risks to freight transportation.
- Reduce the number of freight traffic-related fatalities and serious injuries.
- Expand access to truck parking within Ohio.

Innovation and Technology

- Continue to position Ohio as a national leader and support the adoption of connected and automated vehicle technologies for freight.
- Study and support the expanded use of drones/Advanced Air Mobility (AAM) for last-mile freight deliveries.
- Encourage adoption of alternative fuel vehicles for goods movement, including trucks, locomotives, and vessels.

Coordination and Partnerships

- Facilitate and strengthen ongoing dialogue between ODOT and freight stakeholders.
- Partner with public agencies on project delivery and strategic initiatives.

System Investment

- Prioritize transportation system investments that grow the economy and improve access to jobs.
- Support multimodal freight transportation investments that align with community values, public health, environment, and equity.
- Manage and distribute pass-through freight funding to modal agencies.
- Engage the private sector in public-private partnership opportunities.

Goals and Strategic Initiatives

1. Integrate land use and freight transportation planning processes.

Freight-reliant land uses contribute to the growing demands on Ohio's transportation infrastructure. Major generators of freight in the ERPC MPO region include manufacturing facilities, warehouses, and distribution centers. Construction and resource-related industry sectors such as energy, mining and quarrying, and agriculture are also integral to the regional economy. In addition, ports, intermodal facilities, and airports are hubs for freight movement. Aligning transportation infrastructure investment with current and future freight-reliant land use patterns is an effective way to ensure that infrastructure investments are managed in scale and proximity to known and planned sources of freight movement.

This goal aims to align regional land use planning with ERPC's Core Freight Network. It is important to recognize that alignment need not be exact (i.e., all freight-reliant land uses and land use permissions located within two miles of the core freight network) and that alignment will be fluid as land use and freight industry conditions change (i.e., planned land use patterns and the core freight network may each be modified by market demand).

Strategic Initiatives

- A. Establish and maintain a core freight network as a tool for freight planning, freight performance monitoring, and as a primary focal point for Freight Advisory Committee discussions of regional freight trends and issues.
- B. Promote improved land use and freight transportation planning and coordination around the core freight network.
- C. Identify land use-freight coordination practices in use in other regions for potential use and adaptation.

2. Invest in and promote the region's multimodal and intermodal capabilities.

Erie County's freight network is solidly multimodal. With options for moving freight by truck, rail, ship, and aircraft, freight shipments of all volumes, weights, and temperature-control needs can be shipped and delivered locally. These options enable businesses to compare and choose the most cost-effective shipping mode.

Strategic Initiatives

- A. Improve and promote the region's multimodal and intermodal capabilities.
- B. Identify freight needs and opportunities that support economic development and performance.
- C. Establish and maintain an inventory of candidate freight projects for consideration in LRTP and TIP updates.
- D. Advance freight capacity/congestion relief improvements through the LRTP and TIP.

3. Improve freight mobility, safety, and operations.

According to TRANSPORT OHIO, freight movement in Ohio is projected to grow substantially across modes except rail and water through 2045.

The ERPC MPO Regional Freight Plan relied on ERPC’s traffic model for future 2040 truck volumes. In the ERPC MPO region, projected truck volume increases on US 6, SR 2, SR 4, SR 13, and SR 60 from 2019 to 2040 are above 70 percent. While these percentage increases are high, numeric increases only exceed 1,000 on the Ohio Turnpike, SR 2, and SR 4 and the impact of all 2040 traffic on level of service across the region is negligible. Actual traffic volumes will need to be monitored for impacts on travel time (i.e., congestion) and the potential need for improvement.

Table 2. Projected Truck Volumes, 2045

Roadway	Existing Truck Volume	Projected Truck Volume	Projected Truck Change	Projected Change as %
US 6	340	589	249	73%
SR 2	2,202	3,852	1,650	75%
Turnpike	14,032	19,030	4,998	36%
SR 4	1,116	2,752	1,636	147%
US 250	2,203	2,273	70	3%
SR 13	499	1,413	914	183%
SR 61	370	276	-94	-25%
SR 60	274	538	264	96%

Source: ODOT Traffic Count Segments (2019), ERPC MPO Travel Model (2040)

More broadly, this goal supports improved freight mobility across multiple transportation modes, with a focus on non-truck transport for long-haul shipments that can be made using more energy-efficient modes such as railroads and waterways. This will require ongoing investment not only in highway, railroad, and marine infrastructure, but in protecting and enhancing access to terminals that are critical to the overall operation of the freight transportation system. It will be essential that project investments in transportation infrastructure be focused on assets that provide the most value in terms of capacity utilization and allow the state to meet its freight transportation needs in a manner that is as cost-effective as possible.

Strategic Initiatives

- A. Identify, prioritize, and implement freight safety improvements and initiatives.
- B. Develop locations for potential truck parking additions and expansions.
- C. Promote public sector information technology applications that support efficient freight operations.

4. Expand regional freight planning capabilities.

Freight movement has grown faster than passenger travel for many modes of transportation across the U.S. as a whole. It is incumbent upon transportation agencies to enhance their understanding of freight flows and expand their capabilities in forecasting future freight demand. Planning for future system needs dictates the need for these capabilities.

This goal is aimed at improving ERPC MPO staff knowledge of and data sets on freight movement within and through the ERPC MPO region—origins and destinations (including awareness for those beyond Erie County), modal trends, and industry preferences for modal choice to inform facility maintenance/improvement priorities and potential future facility development. Such knowledge and data analysis skills can be acquired through trainings, conferences, and informal networking with freight planning practitioners and regional freight shippers and receivers.

Strategic Initiatives

- A. Share freight trends and (non-proprietary) data among transportation and freight planning agencies in support of data-driven decisions.
- B. Identify the activities and capabilities in freight planning in comparable regions across the nation for potential use and adaptation.
- C. Consider establishing freight planning internships at ERPC as a means of staff support, particularly in early plan implementation years (1-3).

5. Increase freight awareness among all stakeholders, including the public.

It is important for stakeholders and the public to understand the key aspects of freight transportation, particularly how the regional freight network operates and its importance to the economy and the quality of life. Awareness and understanding lead to support for freight-focused projects (or in some cases, less opposition) and will strengthen the work of the ERPC MPO and the FAC in implementing the freight plan. The plan's goals and the core freight network, in particular, provide important starting points for freight literacy among stakeholders in land use planning and economic development and the public at large.

Strategic Initiatives

- A. Communicate freight planning initiatives, general interest topics, and plan status on a regular basis, e.g. press release or ERPC website news item 2-3 times per year as a target.
- B. Expand public understanding of freight movement, benefits, importance to quality of life, etc.

6. Foster strategic partnerships and alliances for enhanced freight movement.

Effective freight transportation planning and programming demands public-private collaboration. Most freight is moved for private shippers by private carriers and most freight infrastructure (rail freight being the primary exception) is public. As such, goods movement is a public-private venture. The foundation for regional freight planning follows suit: public sector transportation system planners working in tandem with private sector freight generators and shippers to ensure that the multimodal freight infrastructure performs as well as possible to satisfy regional mobility, economic development, and quality of life priorities. This collaboration need not divulge proprietary data but does require open discussion of problems and potential solutions, whether system improvements or policy actions to manage problem recurrence. The freight plan and the formation of a public-private Freight Advisory Committee are the foundation for value adding public private planning convened by ERPC MPO.

Strategic Initiatives

1. Establish, grow, and leverage a Freight Advisory Committee (FAC) to advance the freight plan and to collaborate on the accomplishment of its goals. The FAC should have diverse membership including but not limited to representatives from:
 - Regional shippers and carries
 - Economic development organizations
 - Local government
 - ODOT Statewide Planning and Research
 - ODOT Freight and Maritime Planning
 - ODOT District 3
 - Federal modal agencies
2. In years 1 or 2, determine areas of focus for the FAC in addition to its role in implementing the freight plan.

Performance Measurement

Practicality and utility should be the guiding principles for the overall approach to freight performance measurement for the ERPC MPO region. As the region implements this freight plan, the basic focus will be on being able to tell “the performance story” in terms of two major areas—system performance and plan implementation.

System performance will be evaluated over time for goal 3 through various measures for which there is available data, such as roadway conditions, safety, and other factors that were evaluated as part of Phase 1 of the plan’s development. The Freight Advisory Committee will also be used as a barometer as to how the system is performing to meet the freight needs of the region. The Core Freight Network will be a focal point for FAC feedback on system performance.

Plan implementation will be evaluated in basic ways that gauge the progress toward achieving the goals of the plan. This process will engage the FAC around potential measures of progress such as those listed below for goals 1, 2, 4, 5 and 6. At any point in time, overall plan implementation can be measured by the number of strategic initiatives accomplished.

Goal 1 Freight & Land Use Integration Measures

- Integration process completed.
- Rating of freight-land use compatibility completed and measured annually.
- Core Freight Network incorporated with LRTP and TIP development.

Goal 2 Freight & Economic Development Measures

- Multi-modal freight capabilities incorporated in economic development and marketing.
- Growth in freight-reliant businesses and jobs.
- Freight Project Inventory in use and maintained.
- Trends in freight volumes by mode analyzed.

Goal 3 Freight Mobility Measures

- Number of freight projects that are programmed.
- Number of programmed or completed improvements to the core freight network.
- Level of Truck Travel Time Reliability, the sole federally required freight performance measure.
- Increase in number truck parking spaces.

Goal 4 Freight Planning Capacity Measures

- Increase in freight knowledge, skills, and tools acquired through Freight Advisory Committee, training, and conferences.

Goal 5 Public Information Measures

- Number of annual freight information items for the public.
- Number of public inquiries and ERPC/ERPC MPO responses about freight.

Goal 6 Freight Collaboration Measures

- Formation of FAC.
- Diversity and number of members.
- Number of meetings annually.
- Value and impact rating of FAC.

Overall Plan Progress Measure

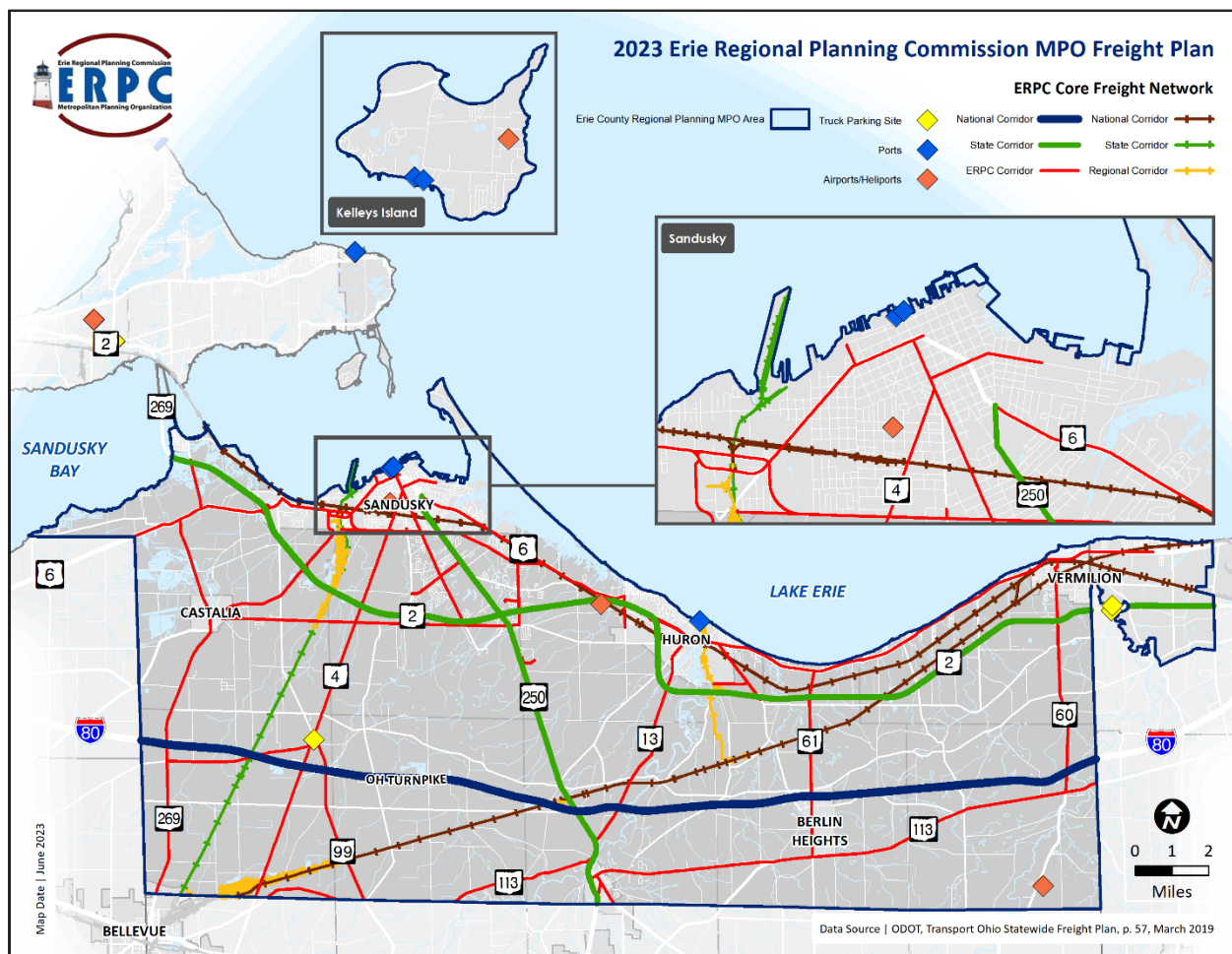
- Number of strategic initiatives accomplished.

4. The ERPC MPO Regional Core Freight Network

The ERPC MPO Regional Core Freight Network is a multimodal planning tool to support local as well as regional and national freight transportation needs, where appropriate. It designates transportation facilities used regularly in freight movement. Connectivity from local freight generators and receivers to national highway and rail freight networks is an important consideration, along with links to major marine, air, and rail cargo hubs within and outside of Erie County.

The ERPC MPO Regional Core Freight Network is shown in Figure 3. While not shown in the map below, the core freight network should be interpreted as serving freight generated or destined for locations within one to two miles of the network.

Figure 3. Core Freight Network, May 2023



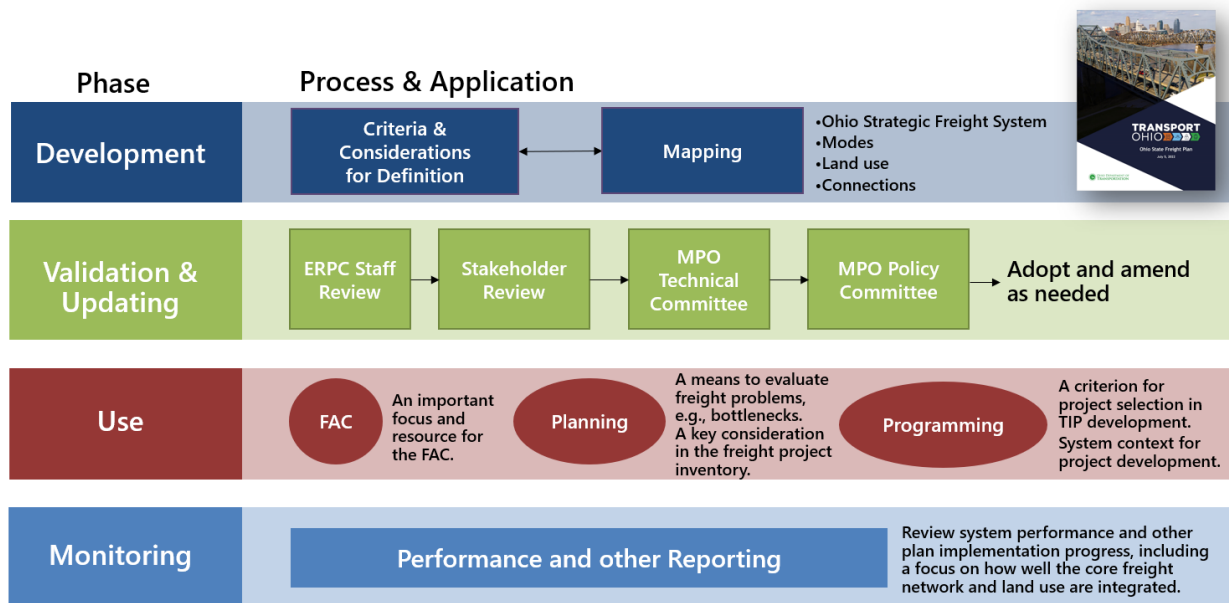
Value of the Core Freight Network

The core freight network will help to frame outreach, discussion, and decision-making for freight mobility in the ERPC MPO region. The core freight network will be used by the ERPC MPO staff, the Freight Advisory Committee, and other freight stakeholders as a reference for:

- Evaluation of freight movement needs.
- Evaluation of regional freight system performance.
- Project selection for LRTP and TIP development.
- Public-private collaboration.
- Freight planning coordination with ODOT coordination and adjoining regions.
 - Public education efforts.

Development and use of the Core Freight Network is highlighted in Figure 4.

Figure 4. Development and Use of the Core Freight Network



The Core Freight Network is a planning tool to foster dialogue and problem-solving among private and public stakeholders, to identify potential solutions and improvements, and to provide the framework for ongoing evaluation of transportation system performance for freight mobility and access in the region.

Development

The development phase defined criteria and considerations for the ERPC MPO Regional Core Freight Network (CFN). Criteria included the National Highway System (NHS) and National Highway Freight Network (NHFN), roadways with volumes of 250 trucks per day, railroads, water ports, and airports and heliports. Considerations included connectivity within the CFN and freight-business access to the CFN within two miles. Ohio’s Strategic Freight System as presented in TRANSPORT OHIO and shown in Figure 5 provided a foundation and checkpoint for regional and state freight system consistency.

Figure 5. Ohio’s Strategic Freight System (SFS)



“A Strategic Freight System (SFS) was designated to highlight the most critical multimodal freight systems and facilities in Ohio, and to build a broad awareness of the system among Ohio’s freight stakeholders, elected officials, and the public. Three key principles guided the SFS designation for Transport Ohio: a focus on current freight demand, a data-driven process, and a connected and contiguous network.”

TRANSPORT OHIO (2022)

Validation and Updating

As an important planning tool, the CFN was reviewed by ERPC staff and validated by freight stakeholders during the plan’s development. It was accepted by the ERPC MPO as an integral plan element in the adopting resolution.

As a planning tool, not a policy, regulation, or standard, the CFN is meant to be modified and maintained consistent with integrated land use and transportation planning and economic development.

The ERPC MPO will likely receive suggestions to modify to the CFN as it is shared in outreach and collaboration efforts. Constructive critique should be encouraged. The decision to accept proposed modifications, i.e., facility inclusion or deletion from the CFN, will entail both objective guidelines and subjectivity. The following guidelines will be followed:

- Core freight network facilities are important for freight mobility and access to existing and planned freight-reliant land uses and industry sectors (e.g., manufacturing, construction, food processing, energy/power generation).
- Traffic volumes or facility usage trends are readily available.
- Multimodal and intermodal connectivity are important considerations for ensuring a connected system
- First-mile and last-mile access are not necessarily the basis for inclusion in the CFN; significant freight-related volume or activity on such facilities will be required for network inclusion.
- In its role as an advisory body to the MPO’s planning and programming decisions, the Freight Advisory Committee has an opportunity to review the proposed modifications, and concurs or recommends the proposed modifications.

Use

The CFN is expected to be an important focus and resource for the Freight Advisory Committee in its activities and discussions; for the ERPC staff during freight need identification and evaluation; and for the ERPC MPO in its projection selection process for the long-range transportation plan (LRTP) and the four-year transportation improvement program (TIP). It will also have value in efforts to inform the public about regional freight transportation.

Metrics for the ERPC MPO Regional Core Freight Network are listed in Table 3.

Table 3. Core Freight Network Facility Counts and Mileage, May 2023

Facility	Counts/Mileage	Facility	Counts/Mileage
Airports / Heliports	4	ERPC Roadway Corridor	198 miles
Water Ports	2	State Roadway Corridor	45 miles
Regional Rail Corridor	4 miles	National Roadway Corridor	26 miles
State Rail Corridor	13 miles	Truck Parking	1 site; 16 spaces
National Rail Corridor	60 miles		

Monitoring

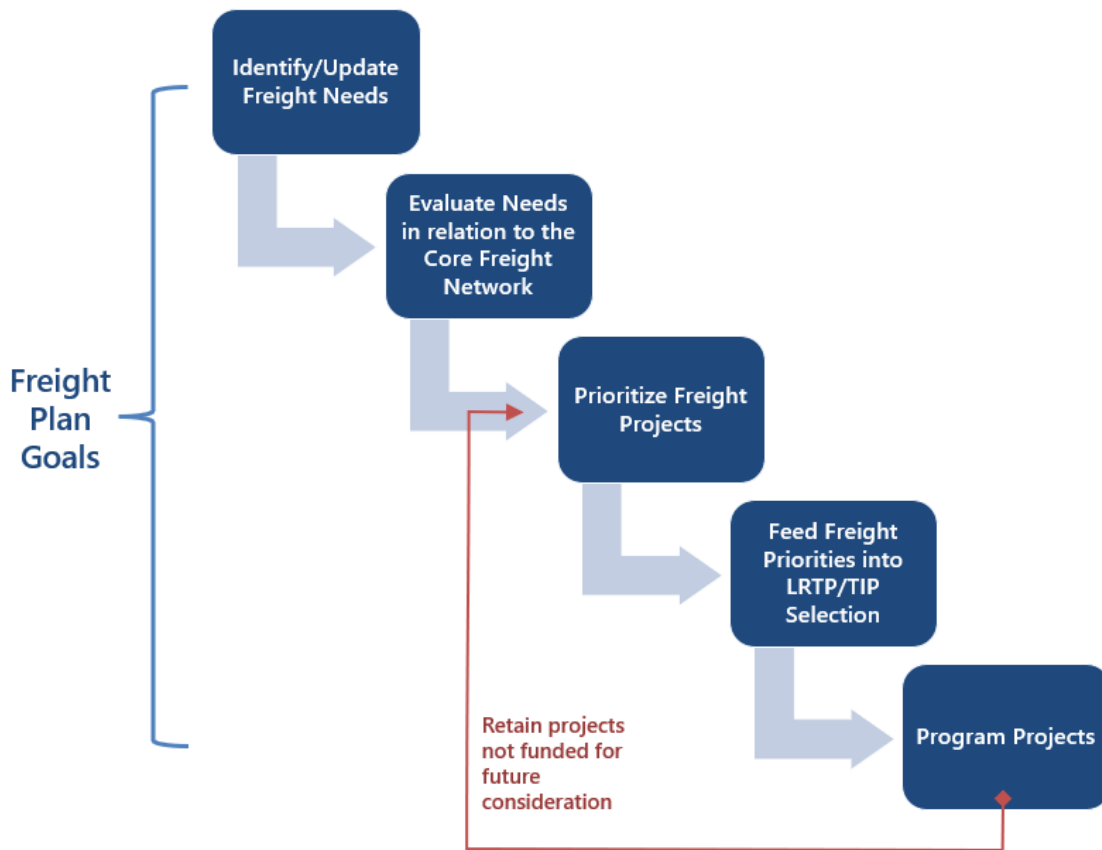
The CFN can also be used as the unique system by which freight performance is assessed and measured. Regional freight system measures may include the measures listed under Goal 3, Freight Mobility on page 17 as well as freight volumes by mode, freight safety (number of crashes and other incidents on the CFN), and freight delays on the regional CFN (the federal government requires truck travel time reliability only on the interstate system).

Performance monitoring, as distinct from performance measurement, entails dialogue among stakeholders as to how well the core system is operating. The value of such dialogue was demonstrated even during the initial CFN development as a highly effective means to obtain stakeholder feedback and perspective. It is expected the Freight Advisory Committee will serve as an excellent forum for this continued dialogue and in doing so, a sharper focus, if not consensus, will result regarding freight system planning and improvement.

5. Freight Project Planning and Programming

As shown in Figure 6, the freight planning and programming framework is a recurring five-step process to advance freight problems and opportunities from initial identification to project programming using public and private transportation funding. Problems are advanced from one step to the next by the ERPC staff with input from the Freight Advisory Committee (FAC). Projects need not be capital improvements; they may be smaller-scale operational or maintenance projects that could be referred to the respective state or local jurisdiction(s) for consideration.

Figure 6. Freight Project Planning and Programming Framework



Freight Needs Identification

The first step is the identification freight problems. This is an ongoing activity of the ERPC staff and the FAC. Freight problems can be sourced from FAC discussions, municipalities, technical studies, or even a body of documented observations. Basic information about each problem, i.e., location, problem type (connectivity, access, safety, delay, etc.), frequency, and impact, is to be documented to create an initial concise description of need. This initial description will likely be revised multiple times throughout freight planning and project development. It is nonetheless important to begin to define the problem as early as possible.

Freight Need Evaluation

This step is intended to validate each problem and consider if and how each problem impacts performance of the core freight network (CFN). For example, if the problem is identified as a freight safety need, crash data would be analyzed for truck crashes and potential contributing factors; in the absence of truck crashes, the problem would be removed or archived. If the problem is identified as a congestion or delay issue, travel time data would be reviewed to confirm (or invalidate) the problem.

This step will also determine if the problem location is on the CFN and whether the problem compounds another known issue on the CFN, and should be incorporated into that need, or if the problem is isolated.

In evaluating the problem, the ERPC MPO may find that the problems can be addressed through minor action or improvement, such as signage replacement, signal timing update, or minor earthwork. These types of needs and suggested improvements could be referred to ODOT district or municipal maintenance department as relevant to the facility and location.

Need Prioritization

Once validated, the ERPC MPO will prioritize freight needs, either by numeric ranking or scoring, or by qualitative ranking, e.g., high, medium, or low, as candidate projects. Ranking This step will enable the ERPC MPO to advance the most urgent or important needs into the LRTP and TIP project selection processes.

Integration with LRTP and TIP Development

With problems validated and priorities determined, the ERPC MPO will advance the high priority candidate freight projects for consideration in LRTP and TIP development. LRTP and TIP project selection should acknowledge the value of improvements to the CFN with specific criteria. Example criteria with simple binary weights (yes = 1, no = 0) include:

- Core Freight Network
- AADTT > 250
- Truck percentage > 10%

Alternatively or additionally, freight improvement metrics could be developed to indicate the improved system performance. For example,

- Reduction in aggregate average delays (hours) in excess of 10 percent
- Reduction in aggregate average delays (truck costs; labor and mileage, inclusive of maintenance) in excess of 10 percent

In the MPO's 2045 Long Range Transportation Plan, adopted in 2020, there are 35 projects that will help freight mobility, as shown in Appendix 1. Regional Data Memo, Table 2 and Table 3. They include a range of projects including intersection improvements, roadway widening projects, safety improvements, roadway realignments, access management, and preservation projects. A majority of these projects are located on the core freight network and will be competitive for future LRTP or TIP selection and prioritization.

Programming

The final step in the freight planning and programming framework is programming. At this point, freight projects will be programmed as anticipated funds are available. Project development and project delivery status should be monitored until the project is complete.

Freight projects not selected for the LRTP or TIP (within their time periods) should be retained for future consideration or alternative funding opportunities such as US DOT discretionary grant programs.

6. Freight Project Inventory

The Freight Projects Inventory is a list of freight needs—problems, issues, and challenges in the freight environment. The purpose of the inventory is to compile needs for joint consideration as candidate capital projects, private investments, or other regional initiatives. From the inventory, the ERPC staff and Freight Advisory Committee (FAC) can determine if existing data warrants the need for public, private, or joint investment or if further data is necessary to demonstrate a valid freight need.

Freight needs are not limited to the highway and bridge system. Problems, deficiencies, or challenges with any of the modal or intermodal facilities in the region can be listed. The ERPC MPO will serve as the convener for all freight transportation discussion, facilitating varied perspectives on the significance and impact of the freight issue. It will seek the advice of the FAC in prioritizing candidate freight projects on federal-aid highways and bridges and will share FAC insights with freight facility owners, whether state, county, city, or private.

While all freight needs must include a freight movement aspect, broader transportation needs that impact both passenger and freight movement may be included.

The inventory will be maintained as a table and updated regularly update the status of known needs and to add new freight needs. It will strive to clearly describe the need in terms of freight movement impacts (congestion/travel time delay, truck crashes, frequency, etc. in as much detail as known through data or observation) and the purpose of improvement, including benefits to the economy and quality of life. These details, and other notes or anecdotes, will help public agencies make the case for improvement. Problem locations should be compared to the Core Freight Network and a local priority determined. Planning and programming status should also be documented and updated. All candidate freight projects will remain on the inventory until completed.

The initial Freight Project Inventory shown in Table 4 includes projects from ERPC’s 2045 LRTP and its 2021-2024 TIP as well as needs identified by stakeholders during freight plan development.

Inter-regional Freight Needs

Freight mobility conditions beyond the ERPC MPO region may impact freight movements and economic development within the region. The ERPC MPO, ERPC staff, and the FAC should maintain awareness for freight planning activities across northern and central Ohio and participate in inter-regional freight collaborations.

Freight stakeholders raised support for greater connectivity between Sandusky and Columbus via SR 4 and US 23 during the plan’s development. ERPC staff agreed and noted that it has already expressed support to ODOT for improving this inter-regional connection.

Table 4. ERPC MPO Freight Project Inventory as of June 1, 2023

Ref. No.	Candidate Freight Project	Location	Purpose and Need Notes (benefits, issues, etc.)	Core Freight Network (Y/N)	Priority	Planning / Program Status
Capital Improvement Needs						
1	SR 4 at SR 99 Intersection Improvement	SR 4 at SR 99, Groton Township	<p>Purpose: Improve intersection with round-about design.</p> <p>Need: Truck traffic has difficulty negotiating the intersection geometry, causing delays.</p>	Yes	High	PID 110898; ODOT Let FY 2023
2	E. Perkins Avenue Minor Rehab	E. Perkins Avenue, City of Sandusky	<p>Purpose: Resurface Perkins Avenue from Milan Road to Remington Avenue.</p> <p>Need: Pavement replacement and stormwater facility and sidewalk upgrades following water line construction.</p>	Yes	High; Local Let FY 2025	PID 113959; Local Let FY 2025
3	Strub Road at Campbell Street Intersection Improvement	T-7/W Strub Rd, Perkins Township	<p>Purpose: Improve intersection with round-about design. Enhance safety with sidewalks.</p> <p>Need: There is moderate congestion at the Strub Road at Campbell Avenue intersection. There are no sidewalks, crosswalks, or alternative pedestrian facilities between the Windamere Subdivision south of Strub Road and the Perkins High School north of Strub Road—a travel distance of approximately 1,000 feet.</p>	Yes	High; Local Let FY 2028	PID 118819; Local Let FY 2028
4	SR 99 Corridor Signage/ITS	SR 99, Groton Township, Oxford Township	<p>The ERPC MPO has been advised that the current AADT at this location does not justify the cost of a grade separated crossing. ERPC staff believes that travel demand along SR 99 may be suppressed by the lack of a grade separated railroad crossing. In the absence of data to quantify true demand, an ITS approach is proposed. Should data and funding opportunities become available, the ERPC MPO may pursue a grade separated crossing in the future.</p> <p>Continued</p>	Yes	Medium	TBD

Ref. No.	Candidate Freight Project	Location	Purpose and Need Notes (benefits, issues, etc.)	Core Freight Network (Y/N)	Priority	Planning / Program Status
			<p>Purpose: Provide timely information to access alternative route and avoid delay at rail crossing. Add warning light and advance travel notifications prior to the railroad crossing at SR 99 one mile north of SR 113.</p> <p>Need: Highway traffic on SR 99 in both northbound and southbound directions is blocked between SR 113 and Strecker Road West by freight trains queued to enter the NS railyard at Bellevue. Traveling northbound, the rail crossing and train signals are visible from the SR 113 intersection with SR 99. Traveling southbound, Strecker is the last intersection to detour/avoid the RR crossing. SR 4 to the west has a highway overpass over the rail corridor.</p> <p>Delay (duration, especially during peak hours) - <i>unknown</i></p> <p>Frequency (especially during peak hours) - <i>unknown</i></p> <p>Environmental Impact – vehicles idle while waiting for the rail crossing to clear.</p> <p>Alternative candidate project: Extend Smith Road east to SR 99 as a connection to SR 4.</p>			
5	Miller Rd at SR 4 Intersection Improvement	T-26/Miller Rd near SR 4, Margareta Township	Need: TBD – evaluate in the field, including turning radii at SR 4.	Yes	TBD	TBD
6	Low Overpass Advance Warning Signage on Strecker Road	T-15/Strecker Rd, Milan Township	<p>Purpose: Add advance warning signage of low railroad overpass on Kelley Road to Strecker Road.</p> <p>Need: Trucks taller than 11'9" cannot travel north-south on T-116/Kelley Road north of Strecker Road due to the limited clearance between the roadway and the railroad overpass. Advance warning signage is provided on Kelley Road. Visibility of advance warning signage is low from Strecker Road approaches to Kelley Road.</p>	No	Low	TBD

Ref. No.	Candidate Freight Project	Location	Purpose and Need Notes (benefits, issues, etc.)	Core Freight Network (Y/N)	Priority	Planning / Program Status
7	Train Detector System Upgrade	City of Vermilion	<p>Purpose: Improve travel efficiency, safety, and quality of life at the rail crossing.</p> <p>Need: The existing freight train loop detector system is unreliable.</p>	Yes	TBD	TBD by City
8	Roadway Network Planning for the Margarettta-Perkins Industrial Zone	Margaretta Township Perkins Township	<p>Purpose: Plan for highway/roadway network layout and development in the industrial zone of SR 2 north to Homegardner Road east to 101 east to 106 south to 20/W Bogart Road.</p> <p>Need: An industrial development zone is planned for vacant, undeveloped lands near the SR 101/Tiffin Avenue interchange with SR 2. A road network, or at minimum, highway access points, needs to be defined to manage traffic flow and safety along SR 101.</p>	Yes	TBD	TBD by Townships
Outreach for Freight Needs						
A	Port to US 6 Highway Access in Huron	Meeker Ave, Tiffin Ave to US 6 in Huron	<p>The Port of Huron has had limited activity in recent years. The ERPC MPO, ERPC staff, and the FAC should seek to understand the near- and long-term future vision for port activity and the needs for sustained or improved roadway access from the port to US 6.</p>	Yes	TBD	TBD
Land Use & Economic Development						
i	Market Study for Redevelopment of the former Triple Crown Intermodal Site	Margaretta Township, Perkins Township	<p>Purpose: A market study should be conducted to determine if the site can be re-used for intermodal transportation services between Ohio, Canada, and New York, or if other transportation-intensive uses should be pursued for redevelopment of the site.</p> <p>Need: The former Triple Crown intermodal site does not currently contribute to the regional economy. Triple Crown closed its freight carrier operations circa 2015 and the site remains inactive.</p>	Yes	TBD	TBD

Ref. No.	Candidate Freight Project	Location	Purpose and Need Notes (benefits, issues, etc.)	Core Freight Network (Y/N)	Priority	Planning / Program Status
ii	Roadway Network Planning for the US 250/Sandusky/Milan interchange area	Milan Township	<p>Purpose: Plan for highway/roadway network layout and development in the commercial and industrial zones surrounding the US 250/Sandusky/Milan interchange area. Ensure that trucking parking is a permitted land use in these zones.</p> <p>Need: Lands surrounding the US 250/Sandusky/Milan interchange are planned for commercial and industrial uses. The area is served by state and local routes and is located along a rail corridor. A road network, or at minimum, highway access points, needs to be defined to manage traffic flow and safety in this area.</p>	Yes	TBD	TBD
iii	Roadway Network Planning at SR 4 and SR 99	Groton Township	<p>Purpose: Plan for highway/roadway network layout and development in the commercial and industrial zones at the intersection of SR 4 and SR 99.</p> <p>Need: Lands surrounding the intersection of SR 4 and SR 99 are planned for commercial and industrial uses. The area is served by state and local routes. A road network, or at minimum, highway access points, needs to be defined to manage traffic flow and safety in this area.</p>	Yes	TBD	TBD

7. Implementation Approach

Implementation is about putting the Freight Plan to work by translating the long-range transportation direction for freight into tangible progress over the next five years.

Implementation is intended to be carried out in line with the resources of the ERPC MPO and the volunteer capacity of the FAC. As such, freight plan implementation will be structured as a continuous process accomplishing what can be done to raise awareness and address freight mobility, safety, and other needs over any given time period. In short, the freight plan should be used to consider freight movement across plans, programs, and regional initiatives through public-private collaboration.

Start-Up Activity

Establish a Freight Advisory Committee

The ERPC MPO intends to form a Freight Advisory Committee (FAC) during the balance of calendar year 2023 and to have that Committee up and running in early 2024. The FAC will be a key focal point for a collaborative public-private freight planning process.

The FAC will provide an important forum for education and awareness of freight issues, trends, needs and opportunities. This role benefits FAC members and other stakeholders, including the public, by improving their understanding of freight matters.

Meetings are expected to be held on a quarterly basis for the first year with consideration for changing the frequency in following years, i.e., more or fewer meetings based on the experience of the first year. In the first year, the primary focus will be on organizing the committee—potentially including a few work groups that align with one or more of the plan goals, having members become familiar with the successful experiences of other freight advisory committees nationally, input on projects and prioritization, and mutual education (e.g., guest speakers, facility tours, etc.).

By or before the second year, the FAC will formally begin providing input on the conditions of the Core Freight Network and freight project prioritization for the Long-Range Transportation Plan and the TIP.

Composition

The FAC membership will comprise:

- a cross-section of public sector transportation planning agencies;
- Private sector representatives from freight carriers (trucking, railroads, and air cargo handlers), freight-related industry (major manufacturing, construction, and resource-based industries), and key associations such as the Greater Sandusky Partnership;
- Members from the ERPC MPO Technical and Coordinating committees as a means for establishing a strong connection between the FAC and the existing ERPC MPO structure; and
- Dedicated ERPC staff responsible for supporting administering the FAC's development and discussions.

In its early years, the size of the FAC need not be limited. The value of diverse perspectives generally outweighs the need for membership limits unless meeting facilities or other factors constrain equitable participation.

Governance Structure

The formation of the FAC will need to consider a few basic structural items:

- Level of formality, i.e., need for a chairperson or co-chairpersons to lead meetings. The chairperson (or chairpersons) helps to provide leadership and work with staff to prepare for FAC meetings.
- If co-chairs are chosen, one chairperson from the public sector and one chairperson from the private sector are recommended at least for the first year or two to underscore the importance of public-private collaboration and balanced voices in FAC discussions.
- Sub-committees or work groups to focus on a particular issue or topic.

Duties/Activities

Typical activities for a freight advisory committee include the following:

- Raising awareness among the members of the YAMPO transportation planning process and how freight is integrated with its plans and programs.
- Formation of subcommittees, task forces, or working groups typically around select areas of freight plan implementation.
- Touring freight and freight-reliant industry facilities.
- Guest speakers, including those from other regions with years of freight planning and freight advisory committee experience.
 - It will be invaluable for the FAC to interact with established freight advisory committees in other areas. It is recommended that speakers from three freight-planning MPOs present annually for the first two years. Alternatively, a special meeting could include a panel of freight planning staff and committee members from other regions.
 - In-person interaction for adjacent planning regions; virtual meetings for FACs farther away.
- Networking, i.e., relationship building, including items as basic as two-minute verbal reports among members to highlight activity of note in their sphere of freight transportation (this has proven itself to be a valuable and appreciated practice in other regions).
- Collaboration with ODOT on statewide freight planning efforts.
- Data and information sharing among members and with the public.

Annual Activities

Prepare and Implement an Annual Action Plan

A basic annual action plan will be prepared using the starting template in the next section of the plan (See Section 7. Action Plan). It will identify actions spanning the plan's goals targeted for accomplishment for the year. The action plan will include a few activities each year and a schedule, responsible/involved organizations, and targeted dates for accomplishment for each activity. The action plan will be reviewed and updated as part of FAC meetings. Keeping freight stakeholders at the table will entail, in part, an action focus. The Freight Plan is a multi-year plan; not all goals will have actions each year.

Track and Report Plan Implementation Progress

Once a year, a concise freight plan implementation progress report will be prepared and presented to the MPO Board. Summary information will be shared with the public. The annual progress report will be organized around the key activities of the FAC and progress across the priority goals. The report will also identify expected activity for the ensuing year. Finally, it will provide status information on programmed projects and other freight investment priorities. Performance measures will also be part of the progress reporting. Reporting holds the ERPC MPO accountable to implementing the freight plan and helps keep freight visible in the regional transportation planning and programming process. Further, it provides an opportunity to relate regional freight planning to statewide freight efforts and national freight priorities.

Integrate Planning and Programming

The ERPC MPO will consider all potential freight beneficial projects as part of the development and update of the regional Transportation Improvement Program (TIP). Working with the FAC and ODOT the Freight Projects Inventory will be kept current and be the primary reference point for ensuring that freight benefits are routinely part of the consideration in prioritizing and programming projects for the TIP.

Continue to Develop Freight Knowledge, Skills, and Abilities

A key facet of the plan's implementation is to continue to develop freight knowledge and capabilities to bolster the regional planning process. Learning will be achieved by:

- FAC interaction.
- Monitoring freight industry trends.
- Monitoring USDOT activity in the freight arena.
- Participating in the Transportation Research Board (TRB) committees on freight topics.

Conduct an Annual Review for Plan Currency

The Freight Plan is expected to be updated on a four-year cycle. Annually, the ERPC staff and the FAC will follow a simple process to ensure that the plan is kept current given the dynamism of the freight sector. This review should document any new, significant drivers of change and any trends that might have a bearing on the freight plan, then propose adjustments to the plan's goals and initiatives or the core freight network. If plan adjustments are proposed, the modified plan should be reviewed and amended. If only the action plan is adjusted, there is no need for plan adoption. Frequent action plan updates, in fact, will be helpful and provide documentation of the Freight Plan's active use and implementation. This continuous process of plan review and adjustment will "smooth" the period between freight plan updates.

Appendices

- 1. Regional Freight Data Memo**
- 2. Public Stakeholder Report Findings**
- 3. Freight Planning Workshop Report**
- 4. Freight Plan Briefing Report**
- 5. Illustrative Year One Work Program for the ERPC MPO Freight Advisory Committee**



Appendix 1

Regional Freight Data Memo

October 2022

Erie Regional Planning Commission Regional Freight Data Memorandum

Prepared for:

**Erie Regional Planning Commission
Metropolitan Planning Organization**

Prepared by:



OCTOBER 2022

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This Regional Freight Data Memorandum (October 2022) updates a portion of the 2013 ERPC Freight Study. It presents recent data on freight, freight-moving facilities and their conditions, freight generations and destinations via land use data, and planned and programmed freight-related network improvements.

The Regional Freight Data Memorandum will be used as the foundation for an ERPC MPO Freight Plan and as a tool for engaging freight stakeholders in the plan's preparation and implementation. Further analysis of regional system performance, freight goals, and system improvement strategies and recommendations will be developed in the Freight Plan.

Summary Data Findings

The following points represent the key findings from the Regional Freight Data Memorandum. For ease of review, these are organized by their respective subject matter.

Regional Economic Factors Impacting Freight

- There were only slight changes in total population, households, and employment in Erie County from 2010 to 2020; however, all three factors are projected to decline through 2050.
- Data on household income for Erie County indicates a wealth index just above the national average when compared to other U.S. counties. Consumer demand is partially a function of income and can impact freight demand.
- Commercial and industrial uses, as well as agricultural use areas, are common origins and destinations for freight movements. These uses occupy the majority of the ERPC MPO area's 170,999 acres. While municipal governments have zoned for the expansion and new development of commercial and industrial use areas, and the associated reduction of agricultural uses areas, these three freight-generating land uses are still expected to comprise the majority of future land use in the ERPC MPO area.

Freight's Role in the Regional Economy

- The largest employer in Erie County is Cedar Fair Entertainment, followed by several large office operations. While tourism metrics dipped in 2020 due to public health restrictions associated with the COVID-19 pandemic, tourism rebounded to near pre-pandemic levels in 2021. This impacts freight movement in two ways—the overall increase in traffic that effects both freight and passenger movement, and the increase in freight delivery to service tourist destinations.
- There are also several large industrial employers in the ERPC MPO area. They include Freudenburg-Nok GP (owned by Corteco USA), JBT Food Tech, JH Routh Packing Co., and US Tsubaki Power Transmission.
- According to the Freight Analysis Framework (FAF5), a comprehensive national database of freight information compiled by USDOT's Bureau of Transportation Statistics and the Federal

Highway Administration, top commodity flows in the area include construction materials, food and agriculture, advanced manufacturing, and energy via the roadway network.

- Freight imports exceed exports—by 207 percent in tons and by 58 percent in value. Rail is the largest import mode, followed by water and truck. Trucks far exceed any other export mode, with water and rail a distant second and third. For both imports and exports, freight traffic by air is a small share of overall freight movement.

Freight System Modal Infrastructure

- The Ohio Turnpike is the only corridor in the ERPC MPO area that is part of the National Highway Freight Network (NHFN). No projects are programmed for construction along this segment of the Ohio Turnpike during the current funding period of 2022-2027.
- Roughly 14,000 daily trucks flowed through Erie County on the Ohio Turnpike (I-80/I-90) in 2018 according to the FAF5 data and in 2019 according to the Ohio Department of Transportation (ODOT). Trucks represent more than 20 percent of the overall Turnpike traffic volume in the MPO area according to FAF5; nearly 35 percent according to ODOT.
- The next largest truck flows in 2018 were on US 250 south of the Ohio Turnpike, with over 2,500 daily truck trips (FAF5); ODOT reported a similar volume of 2,203 in 2019.
- Future truck flows on the Turnpike in Erie County are projected to exceed 19,000 by 2040 (ODOT). The heaviest truck flows on the entire Ohio Turnpike are in the vicinity of the ERPC MPO area.

Table ES-1: Traffic and Truck Volumes in the ERPC Model

Roadway	Existing Total Vehicle (2019) Volume	Projected Total Vehicle (2040) Volume	Projected Growth	Existing Truck Volume	Projected Truck Volume	Projected Truck Growth
US 6	13,232	22,771	+9,539	340	589	+249
SR 2 WB*	11,350	17,413	+6,063	1,101	1,890	+789
SR 2 EB*	11,350	17,666	+6,316	1,101	1,962	+861
Turnpike WB*	20,161	31,264	+11,103	7,016	9,523	+2,507
Turnpike EB*	20,161	31,284	+11,123	7,016	9,507	+2,491
SR 4	12,696	20,525	+7,829	1,116	2,752	+1,636
US 250	30,248	22,098	-8,150	2,203	2,273	+70
SR 13	5,808	8,205	+2,397	499	1,413	+914
SR 61	3,822	8,417	+4,595	370	276	-94
SR 60	3,546	11,974	+8,428	274	538	+264

Note: *Some existing Volumes were represented in database as bidirectional volumes on a single line. For analysis purposes, these volumes were split 50/50 in this table for comparison purposes with the Projected Volumes.

Source: ODOT Traffic Count Segments (2019), ERPC Travel Model (2040)

- Congestion is evident near each of the two Turnpike interchanges (SR 4 and US 250). Both interchanges operate and are projected to operate at LOS F.

- Roadway levels of service (LOS) are not expected to change from 2019 to 2040.
- There are 56 truck spaces in two facilities in the ERPC MPO area. The nearest Ohio Turnpike rest areas with overnight truck parking are in Lorain County and offer more than 100 spaces at both the eastbound and westbound service plazas.
- Highways in the ERPC MPO area have relatively good pavement conditions. Roadways with poor pavement ratings include segments of SR 2, which carries between 2,400 and 2,900 trucks per day, and US 250, which carries between 1,100 and 2,000 trucks per day. Poor road conditions generally correlate with delay and can pose direct and indirect costs on carriers and shippers.
- Nearly half of all truck crashes (489 of 984 crashes; 49.7 percent) in the ERPC MPO area between 2017 and 2021 occurred on the Ohio Turnpike; two were fatal crashes. Other truck crashes resulting in fatalities during this same period occurred on SR 2, SR 4, US 6, and US 250.
- Two ports and four rail yards are located in Erie County, with coal being a major rail commodity.
- The ERPC MPO Long Range Transportation Plan (LRTP) for the 2022-2027 funding period lists 35 projects that will help freight mobility. These projects represent more than 50% of the total projects in the LRTP.

Preliminary Priorities for Freight Planning

- Based on this initial review of available data, there are two potential locations for future highway improvement that could improve freight movement in the ERPC MPO area.
 - The two Ohio Turnpike interchanges at US 250 and SR 4, where the level of service (LOS) is projected to remain at LOS F in 2040.
 - Milan, where LOS is projected to remain at LOS E on portions of SR 13 near Milan and SR 113 through Milan, as well as Lockwood Road.
- The Regional Freight Data Memorandum is a starting point for the ERPC MPO Freight Plan. Additional data and perspective are anticipated as freight stakeholders are engaged around this data. Further analysis of regional system performance, freight goals, and system improvement strategies and more importantly, goals, policy priorities, and recommendations will be developed and reviewed to complete the ERPC MPO Freight Plan.

1. Introduction

Background and Purpose

The Erie County Regional Planning Commission (ERPC) was designated as a Metropolitan Planning Organization after the 2000 decennial census when its urbanized area exceeded a population of 50,000. The MPO planning area is comprised of all of Erie County and the Lorain County portion of the City of Vermilion. The MPO conducts short-range and long-range transportation planning activities for its planning area using a continuing, comprehensive, and cooperative (3C) approach. The MPO plans for both passenger travel and freight movement.

Figure 1-1 depicts the project MPO area and the associated regional highway network.

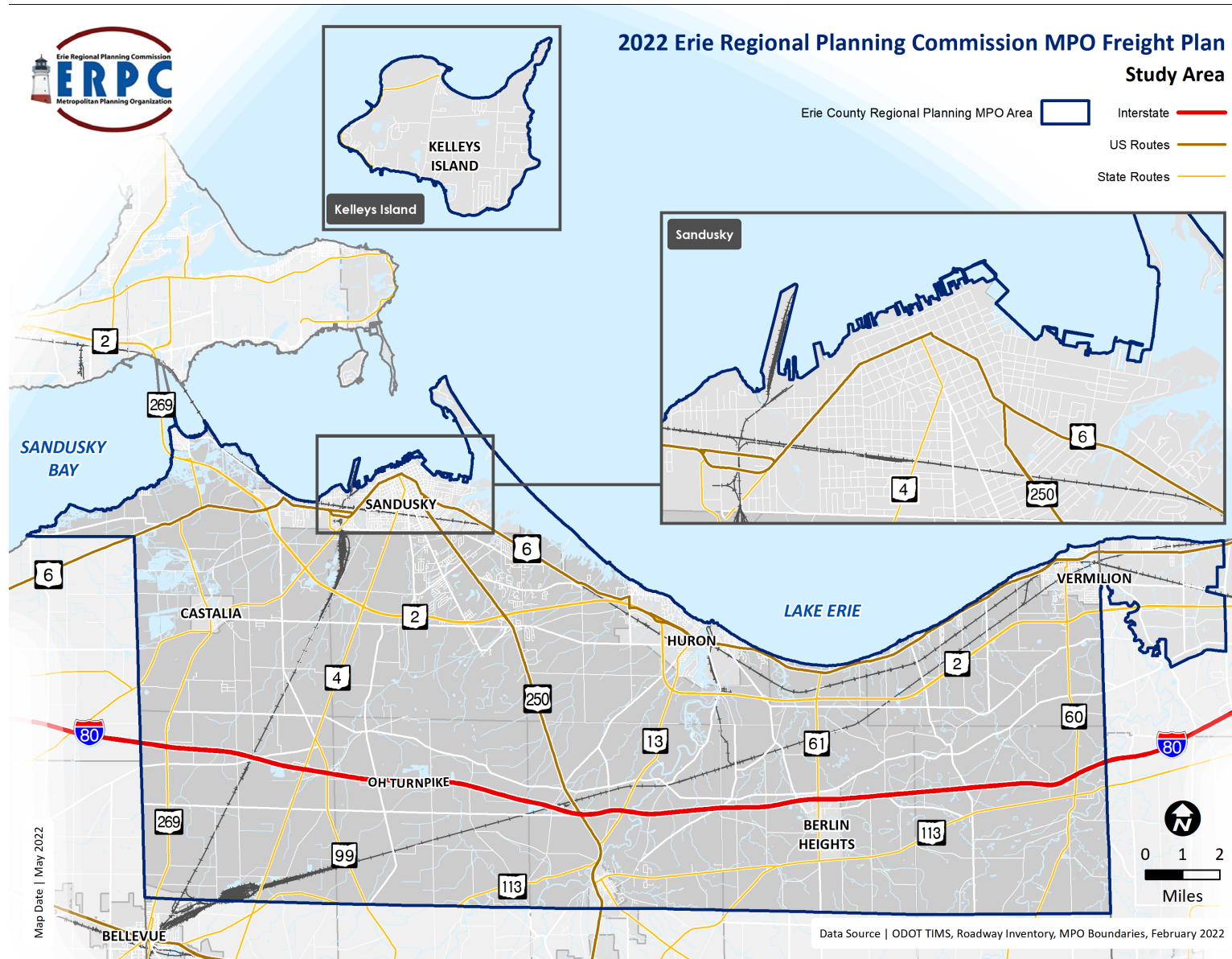
In 2013, the MPO completed its first freight study, which evaluated freight movement across its transportation network. This Regional Freight Data Memorandum (August 2022) updates a portion of that study. It presents recent data on freight, freight-moving facilities and their conditions, freight generations and destinations via land use data, and planned and programmed freight-related network improvements. Notably, data from 2020 and 2021 show freight demand impacted by the COVID-19 pandemic; more recent data indicate a return to near pre-pandemic conditions.

The Regional Freight Data Memorandum will be used as the foundation for the Regional Freight Plan and a tool for engaging freight stakeholders in the update's preparation and implementation. Further analysis of regional system performance, freight goals, and system improvement strategies and recommendations will be developed in the Freight Plan.

Relevant Policy

As stated in the Transport Ohio Statewide Freight Plan (OSFP) "MAP-21 established a national freight policy (NFP) in section 1115. The policy included seven goals *'to improve the condition and performance of the national freight network to ensure that the national freight network provides the foundation for the United States to compete in the global economy.'* These goals, retained by the FAST Act, served as a guide to state Departments of Transportation in developing their individual freight plans." The recently passed Infrastructure Investment and Jobs Act (IIJA) continues this already established Federal focus on the importance of freight movement. According to the draft update to the OSFP, Ohio is anticipated to receive over \$290 million in funding through the National Highway Freight Program.

Figure 1-1: Study Area



Data Sources

Data utilized for the ERPC Regional Freight Data Memorandum was collected from public sectors sources, including local and regional agencies, state agencies, and federal agencies, as listed below, and supplemented with socio-economic data and projections from Woods & Poole Economics, Inc. (W&P).

Local and Regional Data

Local and Regional datasets included GIS and tabular data from the Erie Regional Planning Commission, Erie County, and Lorain County.

Erie Regional Planning Commission

ERPC provided several datasets which were utilized throughout this document including roadways, railroads, proposed improvements, zoning, and their LRTP travel demand model GIS Shapefiles. The Model GIS shapefiles include information such as traffic forecasts and future levels of service (LOS).

Erie and Lorain Counties

Parcel databases were collected from both Erie and Lorain counties. These parcels databases included existing land use information used in later analysis to identify commercial and industrial areas in the MPO area.

State Data

The Ohio Department of Transportation provided the following data:

- Roadway Information and Statistics
- Railroad Information and Statistics
- Airport Information and Statistics
- Multimodal and Intermodal Facility Information
- County Industry Information
- Aggregated FAF5 Commodity Flow Data
- Pavement Conditions
- Administrative Boundaries
- Truck Parking Information

Federal Data

Datasets collected from Federal sources included data on intermodal rail, rail nodes, and the National Bridge Inventory from the USDOT, national land cover data from the US Geological Survey, and the 2020 Census Redistricting Data and American Community Survey from the U.S. Census Bureau.

2. Regional Economic Factors Impacting Freight

Population

The population of Erie County was 75,622 persons in 2020, according to the U.S. Census Bureau's 2020 Census Redistricting Data. This reflects a decline of 1,457 persons (-1.0 percent) from 77,079 in 2010. Woods & Poole Economics, Inc. (W&P) projected a decline of 4,722 (6.3 percent) to 70,900 by 2050.

Households

In 2020, the number of households within Erie County was estimated at 31,319 by the 2016-2020 American Community Survey (ACS) and estimated at 32,500 by W&P. The ACS reflects a decline of 541 households (-1.7 percent) from 31,860 in 2010. In line with the population projection, W&P projected the number of households to decline by 1,000 households (3.2 percent) to 31,500 households by 2050.

Household Income

According to 2016-2020 ACS, the median household income for Erie County in 2020 was \$58,400 while the per capita income was \$34,352, with 10.9 percent of persons in poverty. This reflects a negligible loss in median household income value from \$58,408 in 2010 (in 2020 dollars) and a one percent increase in poverty.

Total 2021 retail sales per household were \$43,000 in 2021 dollars. This places the County at 103.26 in the W&P wealth index, where the U.S. is rated at 100.

Employment

Total employment provides the workforce metric in this report. Employment data includes proprietors (self-employed) and part-time jobs in addition to full-time jobs. The U.S. Census Bureau reported 32,236 jobs in Erie County in 2010. W&P estimated 32,700 total jobs in Erie County in 2020. By 2050, the estimated total number of jobs is projected to decline to 31,400 jobs, a loss of 1,300 or 4 percent.

According to Lake Erie Shores & Islands Ohio, Erie County's destination marketing organization, tourism is a significant economic sector, contributing 13,721 jobs and \$2.2 Billion in economic impact in 2019. The largest employer in Erie County is Cedar Fair Entertainment, operators of the Cedar Point amusement park located in Sandusky, employs 2,200 and draws \$1.5 billion in revenue. The remaining top 5 employers in Erie County are essentially "white collar" operations. These non-industrial large employers, as well as hospitals located in and around Sandusky, generate steady demand for supply delivery. While tourism metrics dipped in 2020 due to public health restrictions associated with the COVID-19 pandemic, tourism rebounded to near pre-pandemic levels in 2021.

Major Industrial Employers

The largest industrial employers in the ERPC MPO area include:

- Freudenburg-Nok GP, manufacturer of sealing technologies (400)
- JBT Food Tech, manufacturer of food processing equipment (350)
- JH Routh Packing Co., wholesale meat packing (315)
- US Tsubaki Power Transmission, manufacturer of roller chains & engineering class chains (160)
- Chef's Garden, produce grower (150)

In addition, there are other industrial employers in the ERPC MPO area, such as Industrial Nut (100 employees); LEWCO Conveyers (100); Encore Industries (50); and Decko Products (50). All of these employers are located in Sandusky. Other industrial employers, located across Erie County include Flex-N-Gate (Margaretta Township), AkzoNobel Coatings (Huron), AutoGate (Berlin Heights), and Ardagh Metal Beverage USA (Huron).

Another unique freight-related facility located within the ERPC MPO area is the NASA Neil A. Armstrong Test Facility, formerly known as Plum Brook Station. Located southeast of Sandusky along US 250, it is test facility for NASA performing “complex and innovative ground tests for the international space community.”¹ The study team contacted the facility to better understand its freight needs, however they were unable to comment due to the sensitive nature of the facility.

[Transport Ohio](#), the state’s freight plan, describes freight reliant industries as those in the following US Census industry sectors:

- Transportation and Warehousing
- Manufacturing
- Construction
- Mining, Quarrying, and Oil and Gas Extraction
- Agriculture, Forestry, Fishery
- Utilities
- Retail Trade
- Wholesale Trade

Data for these industries were provided by ODOT. Figures in this section highlight the locations of key areas within the ERPC MPO area related to freight reliant businesses and jobs. Figure topics and takeaways include:

- There are four higher concentrations of freight reliant businesses in the ERPC MPO area. The highest concentrations are in downtown Sandusky and along US 250 south of Sandusky; these locations have of 50 to 100 freight reliant businesses. Smaller concentrations of about 50 freight reliant businesses are in western Sandusky, Huron, and Vermilion. See Figure 2-1.
- Freight reliant jobs are generally also concentrated in Sandusky and Huron. Vermilion has few freight reliant jobs relative to its freight reliant businesses; see Figure 2-1 and Figure 2-2.

¹ <https://www.nasa.gov/centers/glenn/about/testfacilities/index.html>

Freudenberg-Nok is an isolated manufacturer along SR 13 east of the Ohio Turnpike Interchange at US 250 with 400 freight reliant jobs; see also Figure 2-1 and Figure 2-2.

- As a subset of all freight reliant businesses, manufacturing sites are located throughout the ERPC MPO area with concentrations of five or more manufacturers in Sandusky and Huron, and smaller clusters in Milan and Vermilion. See Figure 2-3.
- Manufacturing jobs area are more narrowly concentrated at the waterfront in eastern Sandusky, along US 6 and the railroad in eastern Sandusky, along W Bogart Road south of the SR 2 and SR 101 interchange, and along SR 113 east of the I-80/US 250 interchange—the general location of Freudenburg-Nok. Smaller clusters of manufacturing jobs are located at the I-80/US 250 interchange and along US 6/SR 2 west of Huron. See Figure 2-4.
- There are 23 construction businesses concentrated long the city’s southern border between SR 4 and US 250 and about a dozen in Huron. Smaller clusters of construction businesses are located along US 6 in western Sandusky and also US 6 at the City’s southeastern border, along SR 269 south of Castalia, and in along SR 60 in Vermilion and along US 6 at the far eastern border of the ERPC MPO area. See Figure 2-5.
- Construction jobs are more narrowly concentrated in two nodes in Sandusky, southeast of Huron, eastern Vermilion, and south of Castalia. See Figure 2-6.
- Natural resource production and extraction businesses, i.e., agriculture, forestry, fishing, are dispersed throughout the ERPC MPO area in more than 20 locations. Of these business locations, only one business, located along Huron-Avery Road, hosts more than 35 jobs.

Figure 2-1: Freight Reliant Businesses

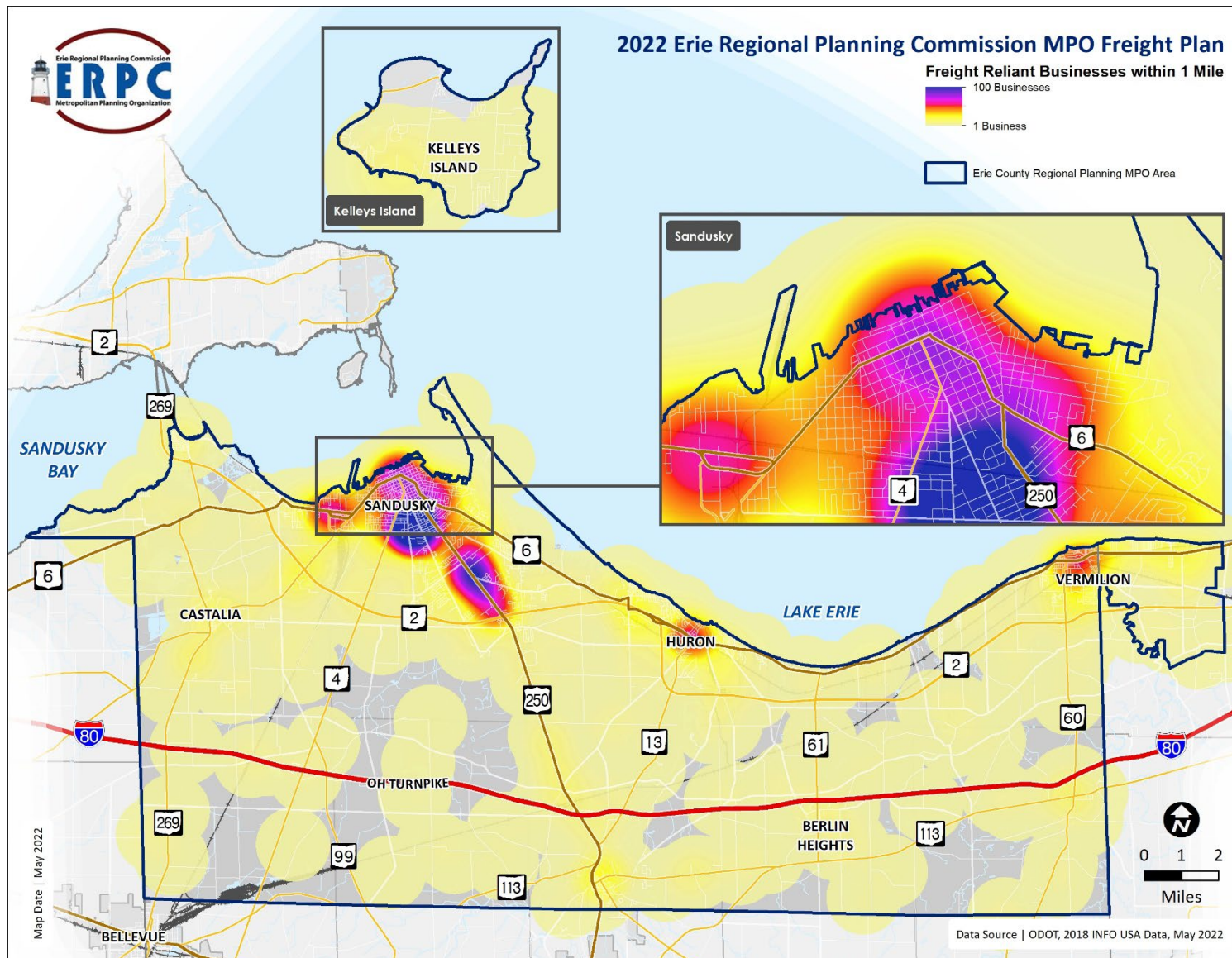


Figure 2-2: Freight Reliant Jobs

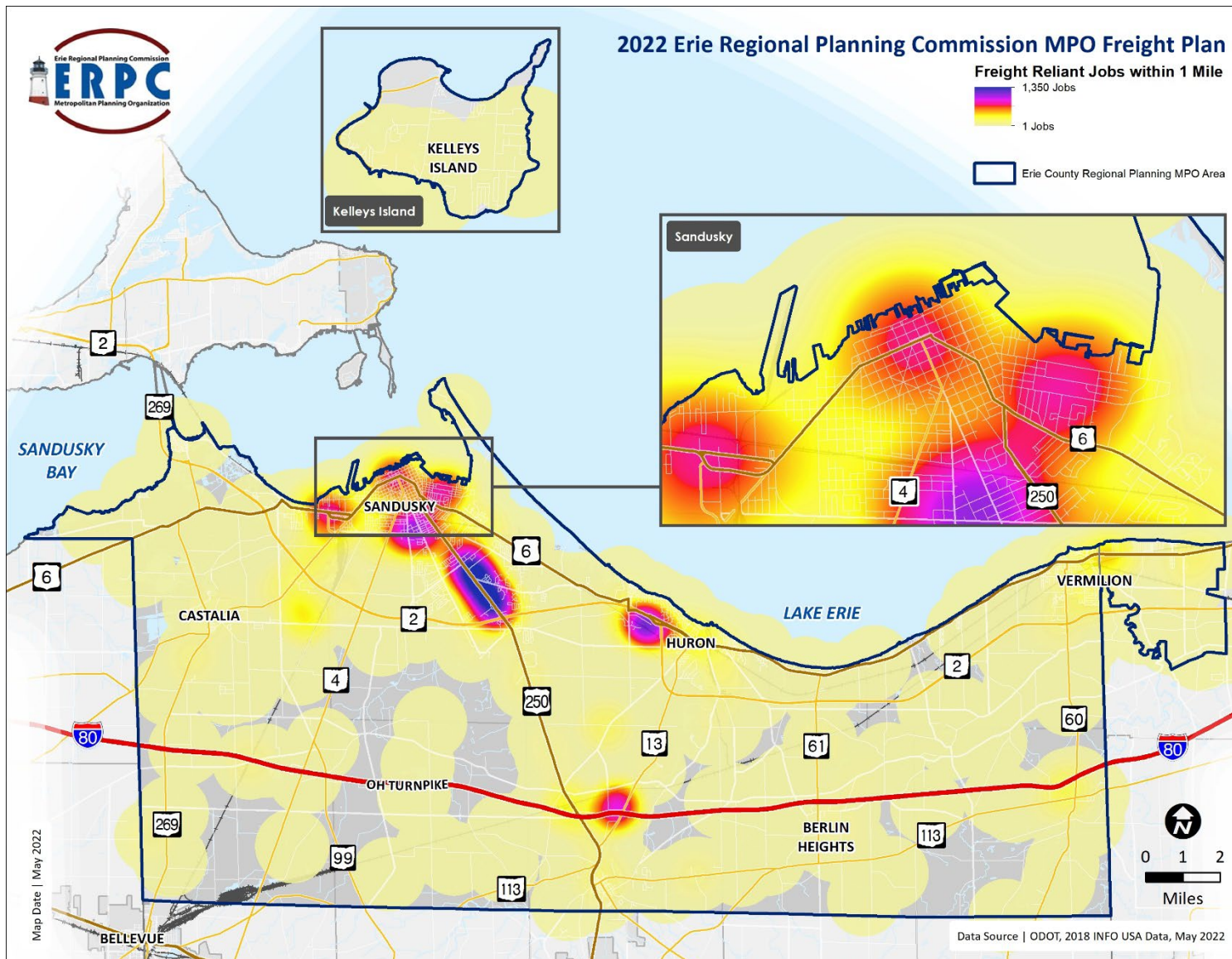


Figure 2-3: Manufacturing Freight Reliant Businesses

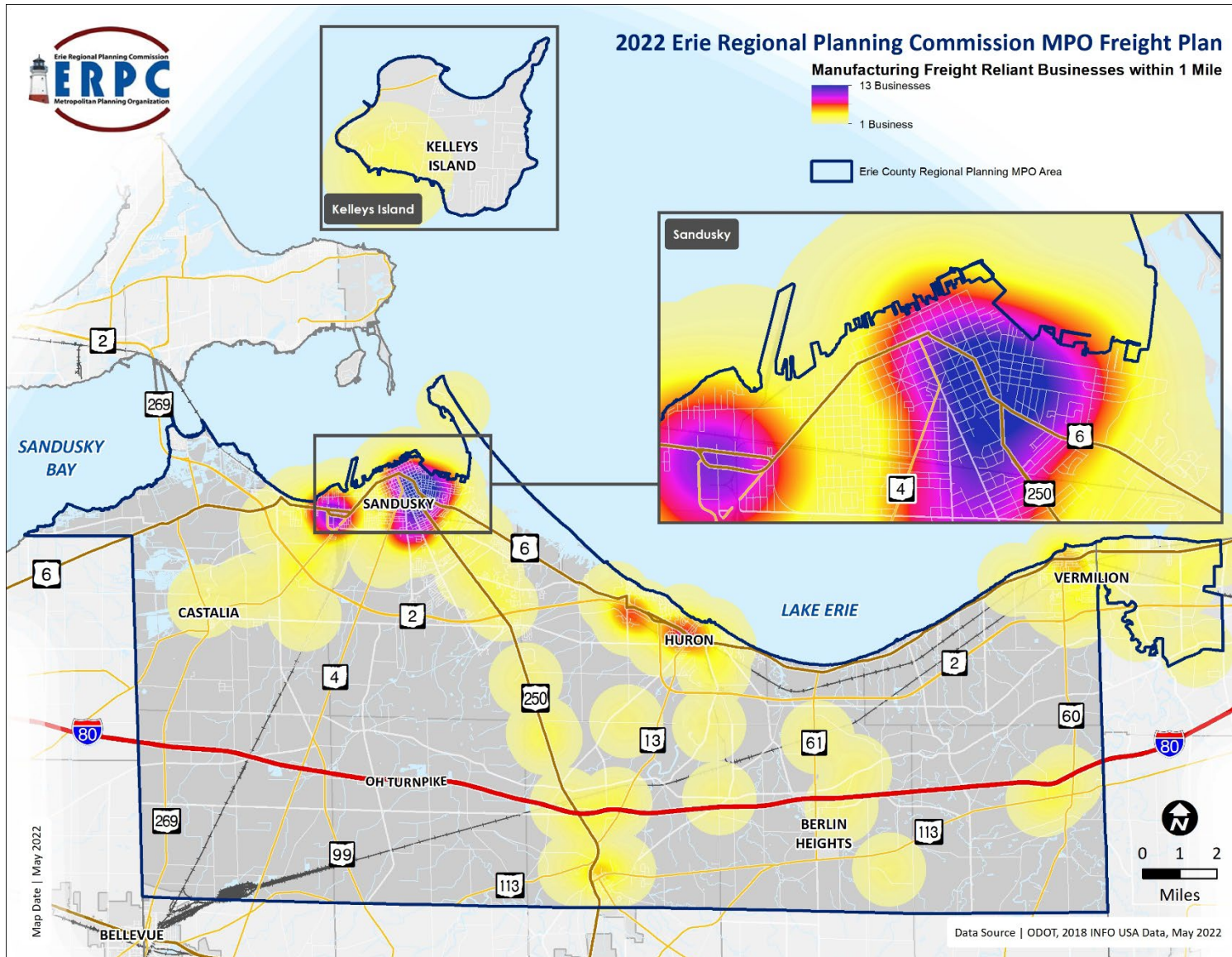


Figure 2-4: Manufacturing Freight Reliant Jobs

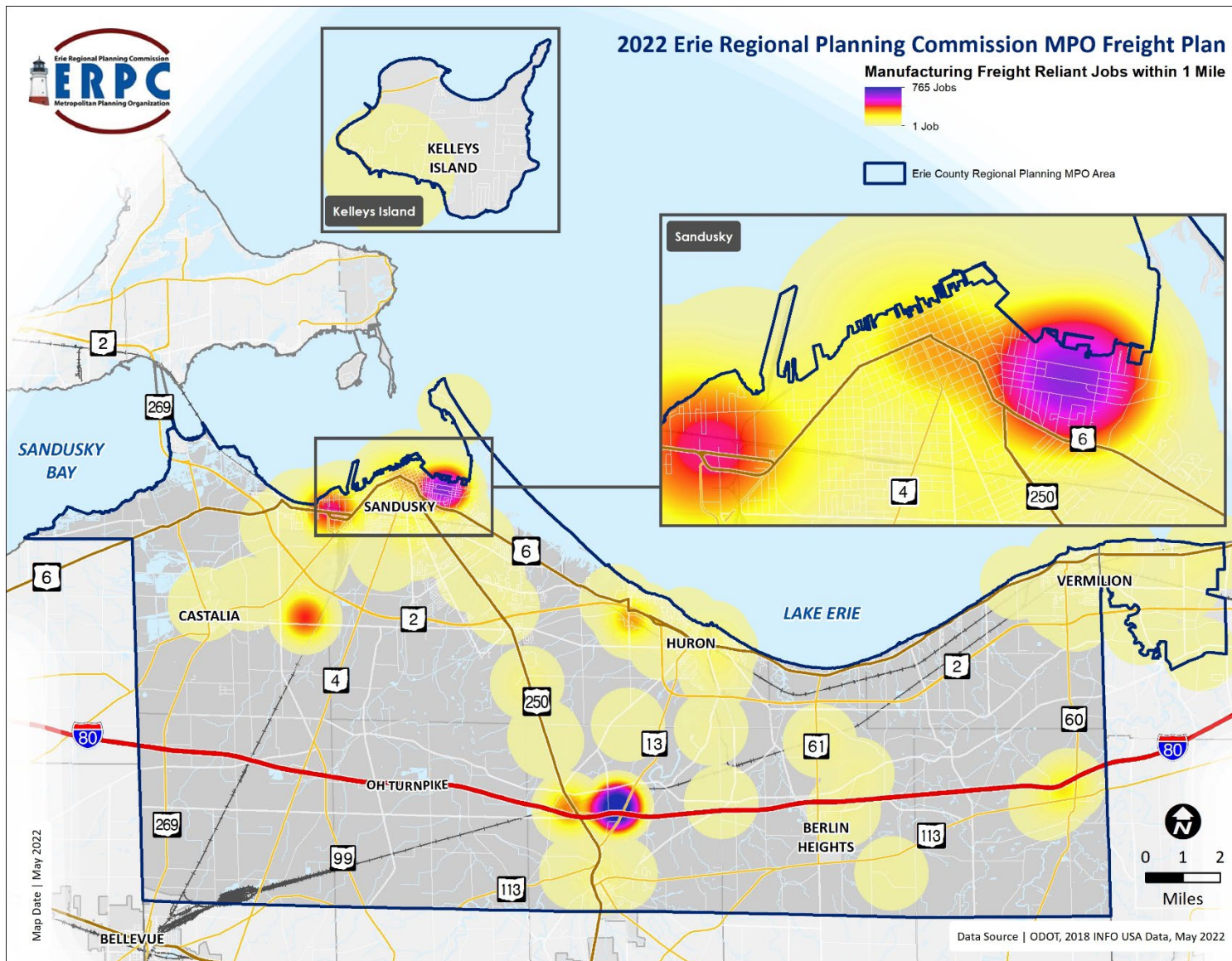


Figure 2-5: Construction Freight Reliant Businesses

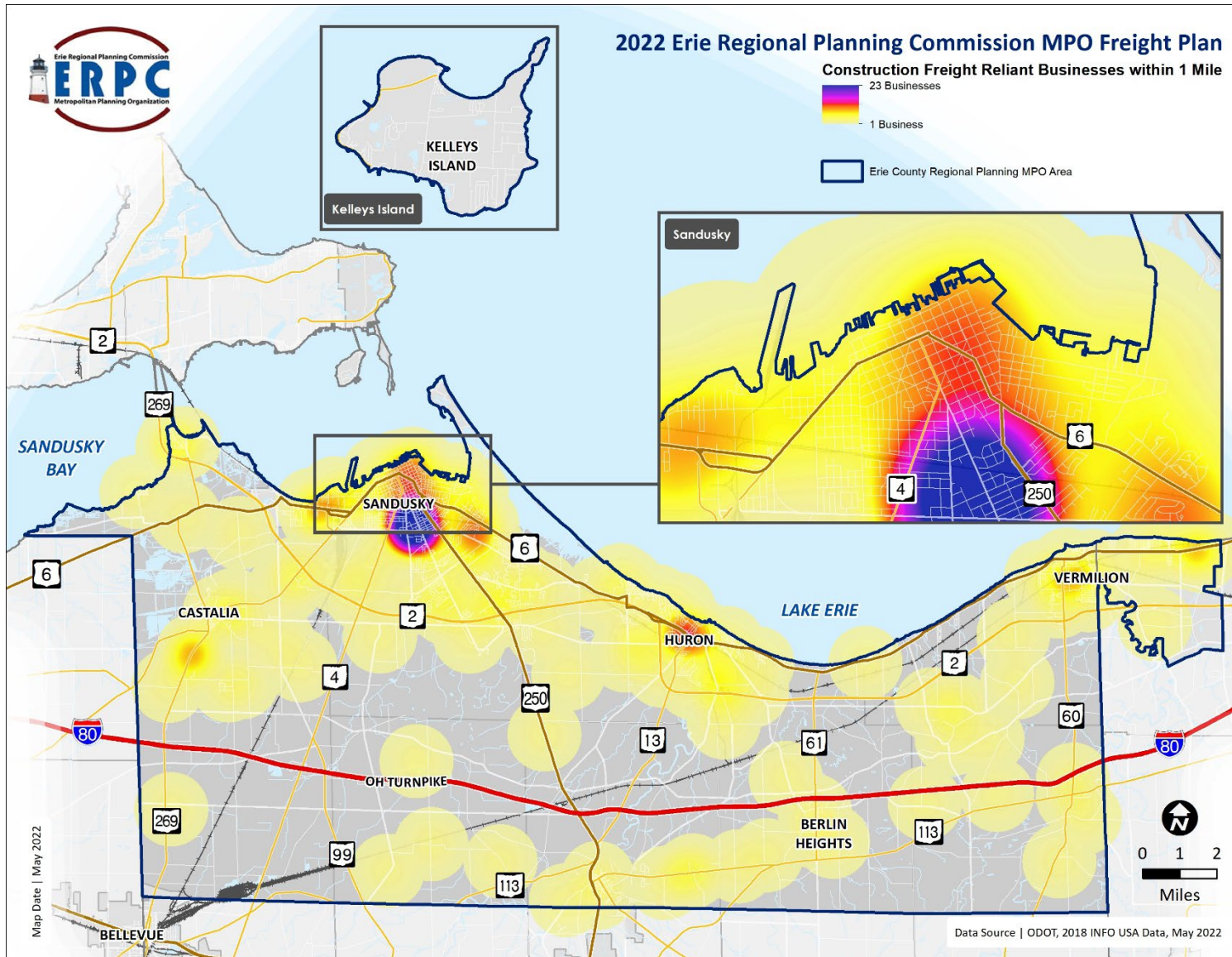


Figure 2-6: Construction Freight Reliant Jobs

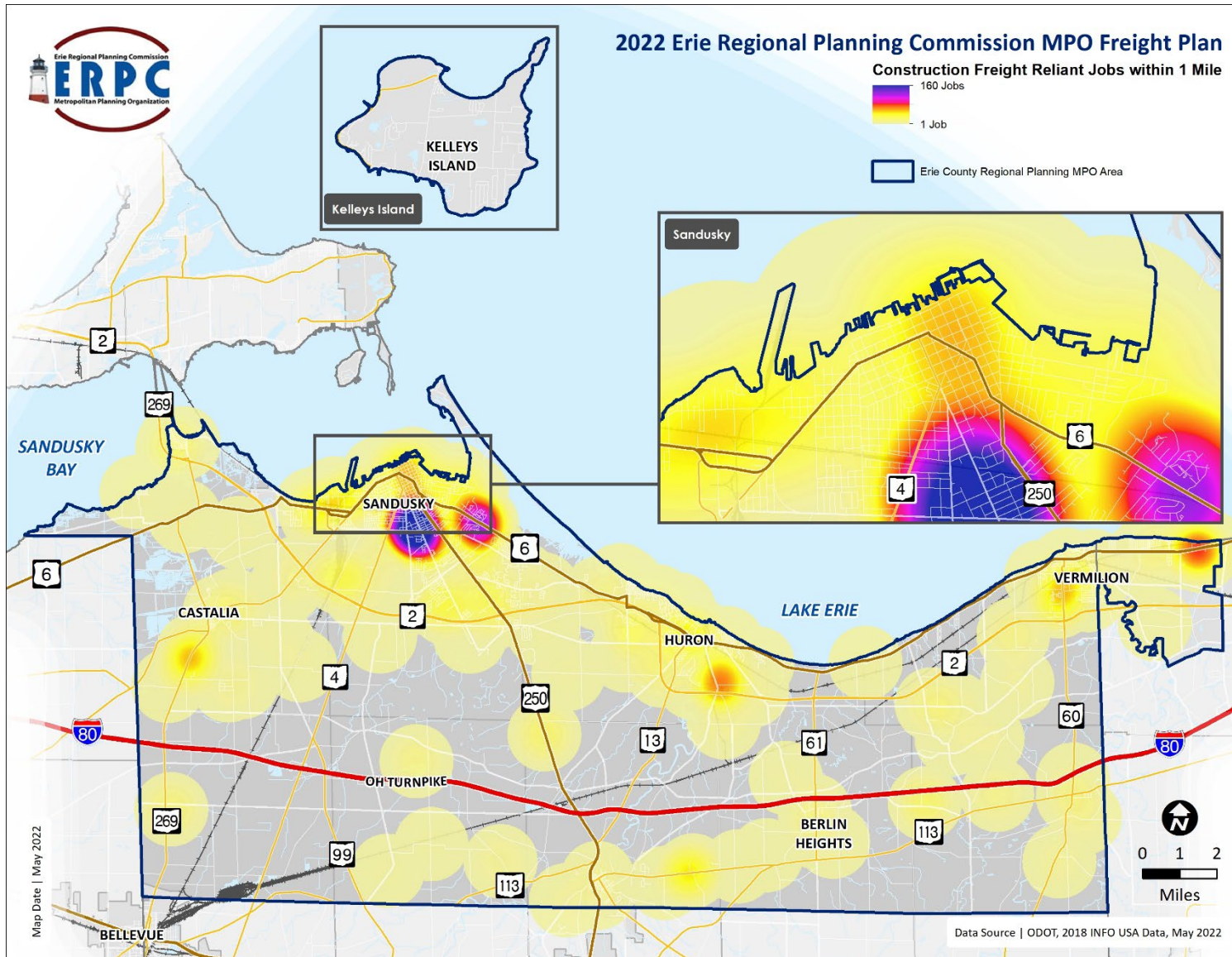


Figure 2-7: Agricultural, Forestry, and Fishery Freight Reliant Businesses

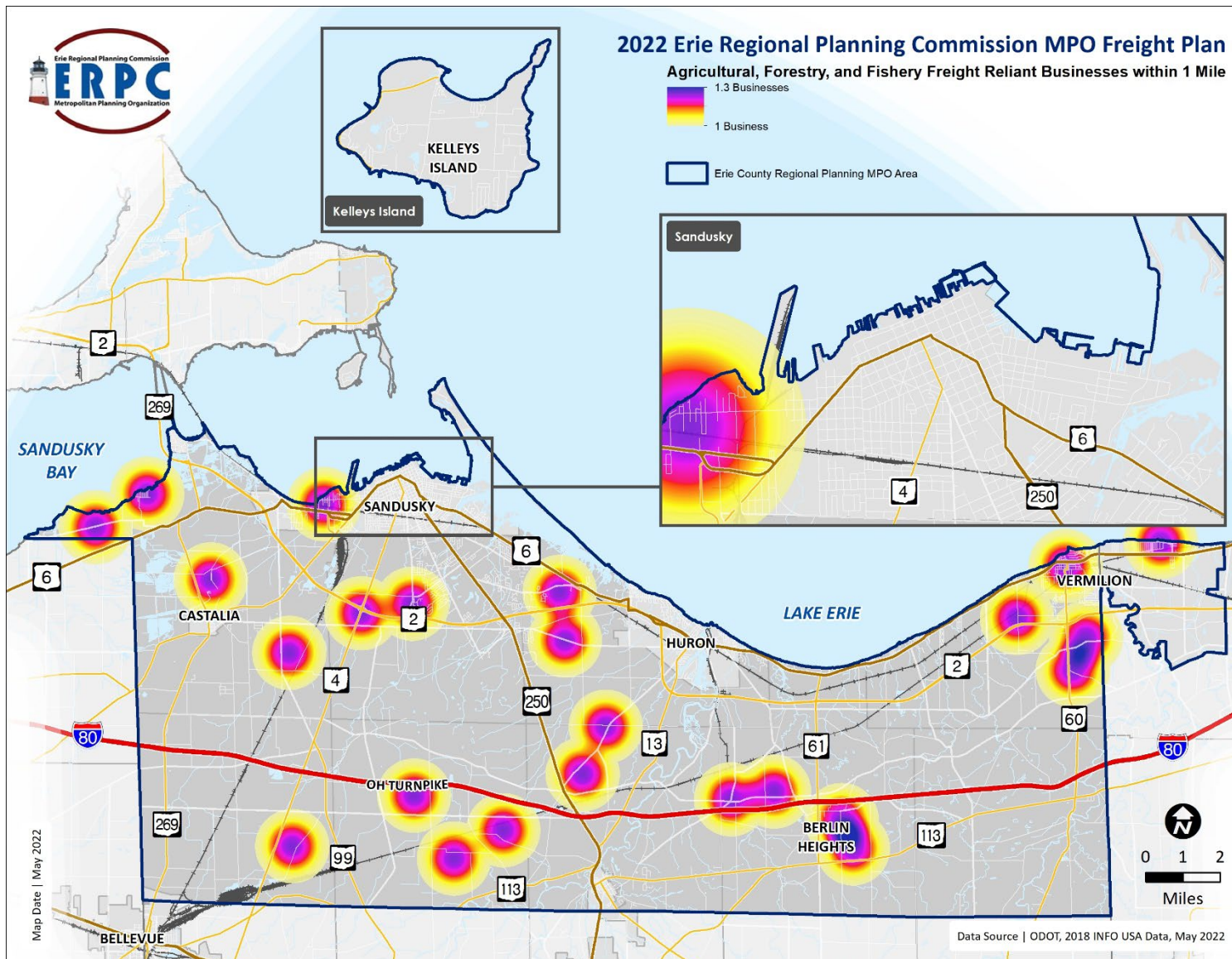
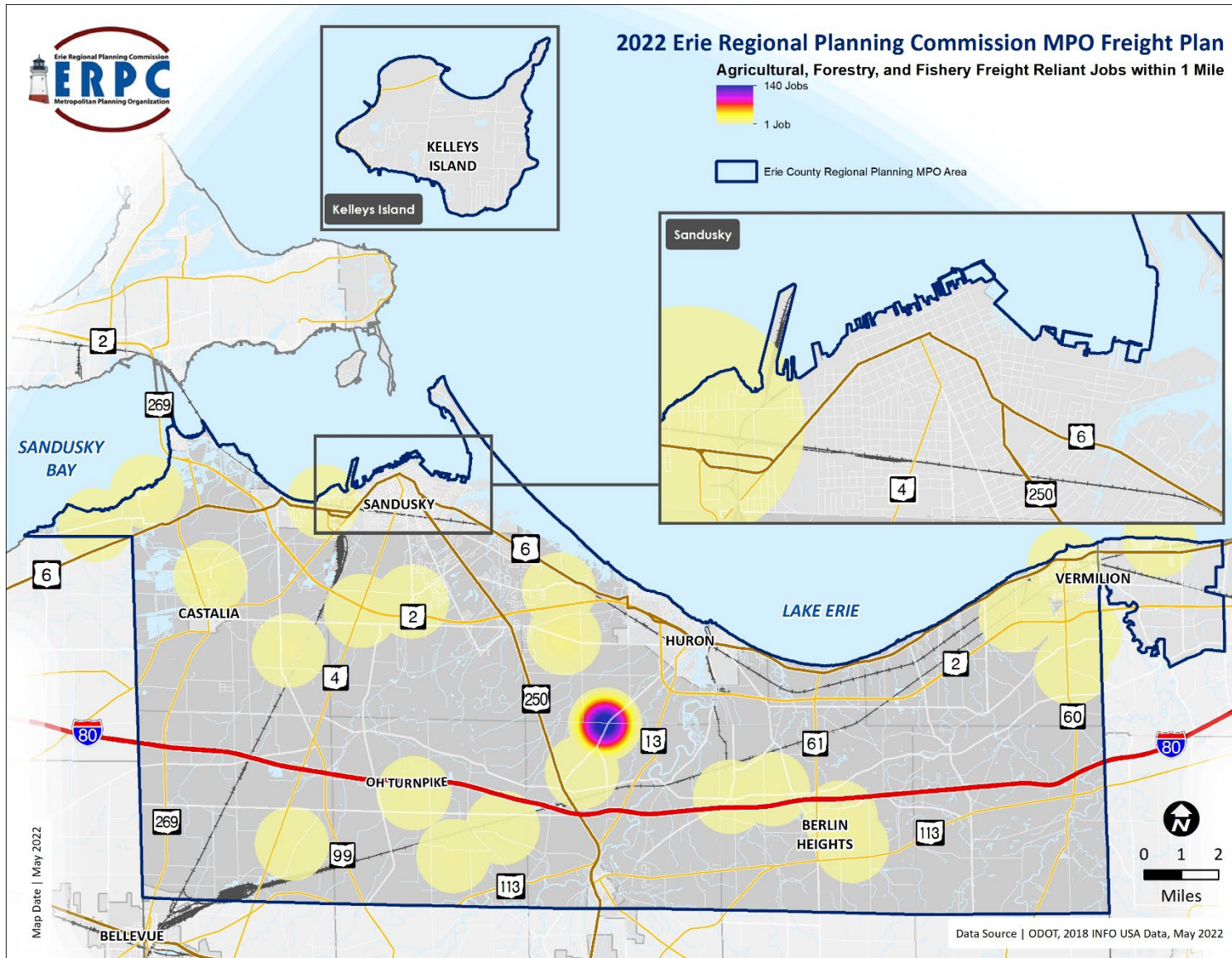


Figure 2-8: Agricultural, Forestry, and Fishery Freight Related Jobs



Freight Demand

Land use is an important consideration in regional freight planning. Commercial and industrial uses, as well as agricultural use areas, are common origins and destinations for freight movements.

Existing and Future Land Use Pattern

Figure 2-9 illustrates the land use/land cover pattern for the ERPC MPO area in May 2022 as the existing condition.

Figure 2-10 shows municipal zoning designations in the ERPC MPO area as the future land use condition.

Existing Land Use

According to the USGS National Land Cover Database, the vast majority of land within the ERPC MPO area is used for agriculture and accompanied by other vegetative covers. NASA's Neil A. Armstrong Test Facility is the largest commercial use in the ERPC MPO area, though much of the 6,400-acre facility is wooded or other greenspace (more than shown in Figure 2-9). Smaller commercial use areas occupy the waterfront in Sandusky and Huron, the southern outskirts of Sandusky along Perkins Avenue and Milan Road (US 250), downtown Vermilion, and many rural highway intersections. There are four industrial use areas in and around Sandusky, including two along the waterfront, and several smaller industrial sites throughout the area used for mining operations and granaries. Residential uses are concentrated in Sandusky, Huron, Vermilion, Castalia, Berlin Heights, and Avery.

Future Land Uses

More land is zoned for commercial and industrial uses than has been developed for such uses to date. Future commercial uses may be developed west of Sandusky toward Sandusky Bay and toward Castalia, along Milan Road (US 250) including south of I-80/Ohio Turnpike, and southwest of Vermilion. Future industrial uses may develop or expand southwest of Sandusky along Tiffin Avenue, along Milan Road (US 250), along the Norfolk-Southern rail line between Sandusky and Vermilion, southeast of Huron, and along I-80/Ohio Turnpike and other southern highways. Several municipalities in the ERPC MPO area zone land for agriculture and/or rural residential uses; these future land uses cannot be separated for mapping purposes. Both uses may generate or receive freight, though the type and volume of freight would be different.

Figure 2-9: Existing Land Cover

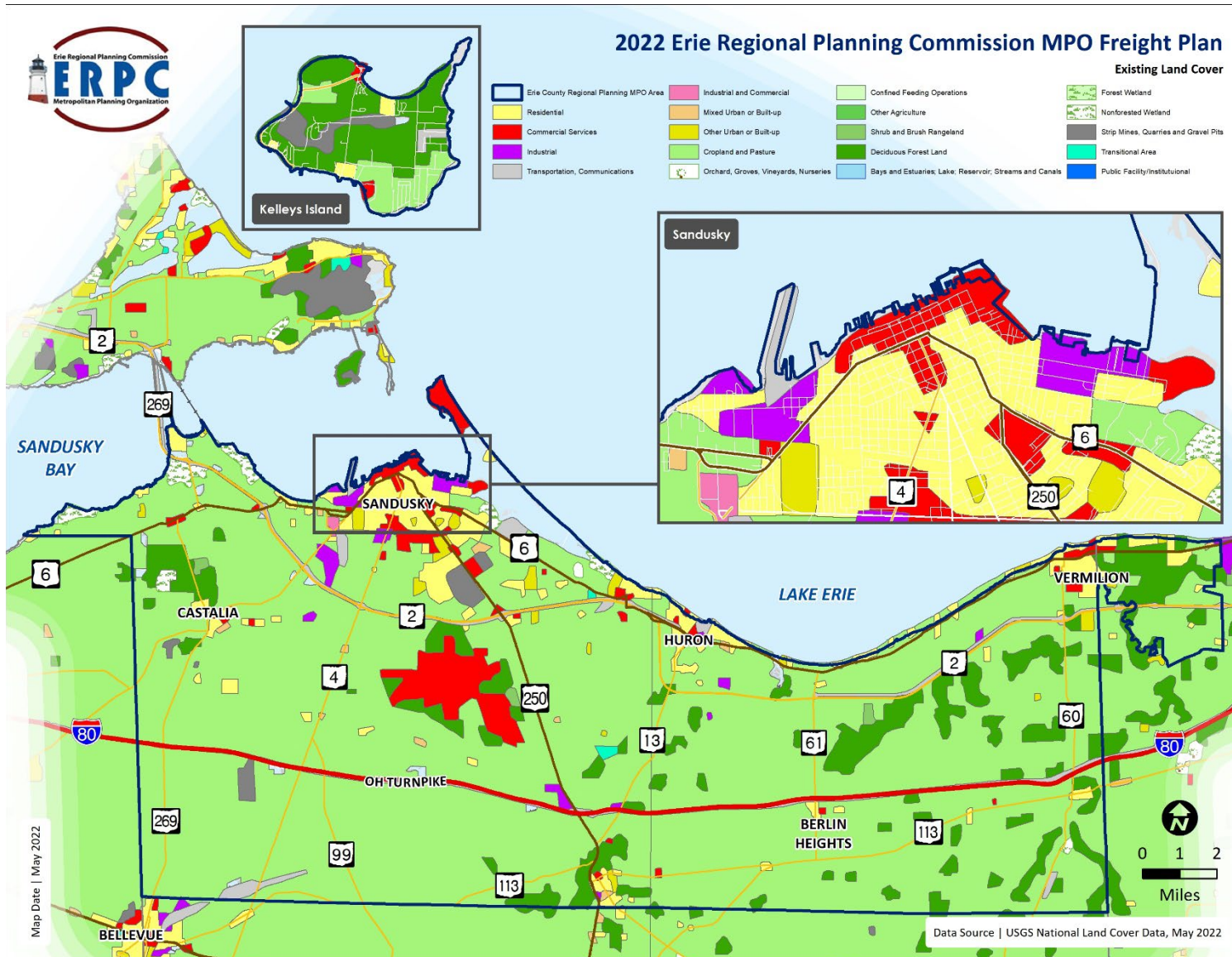
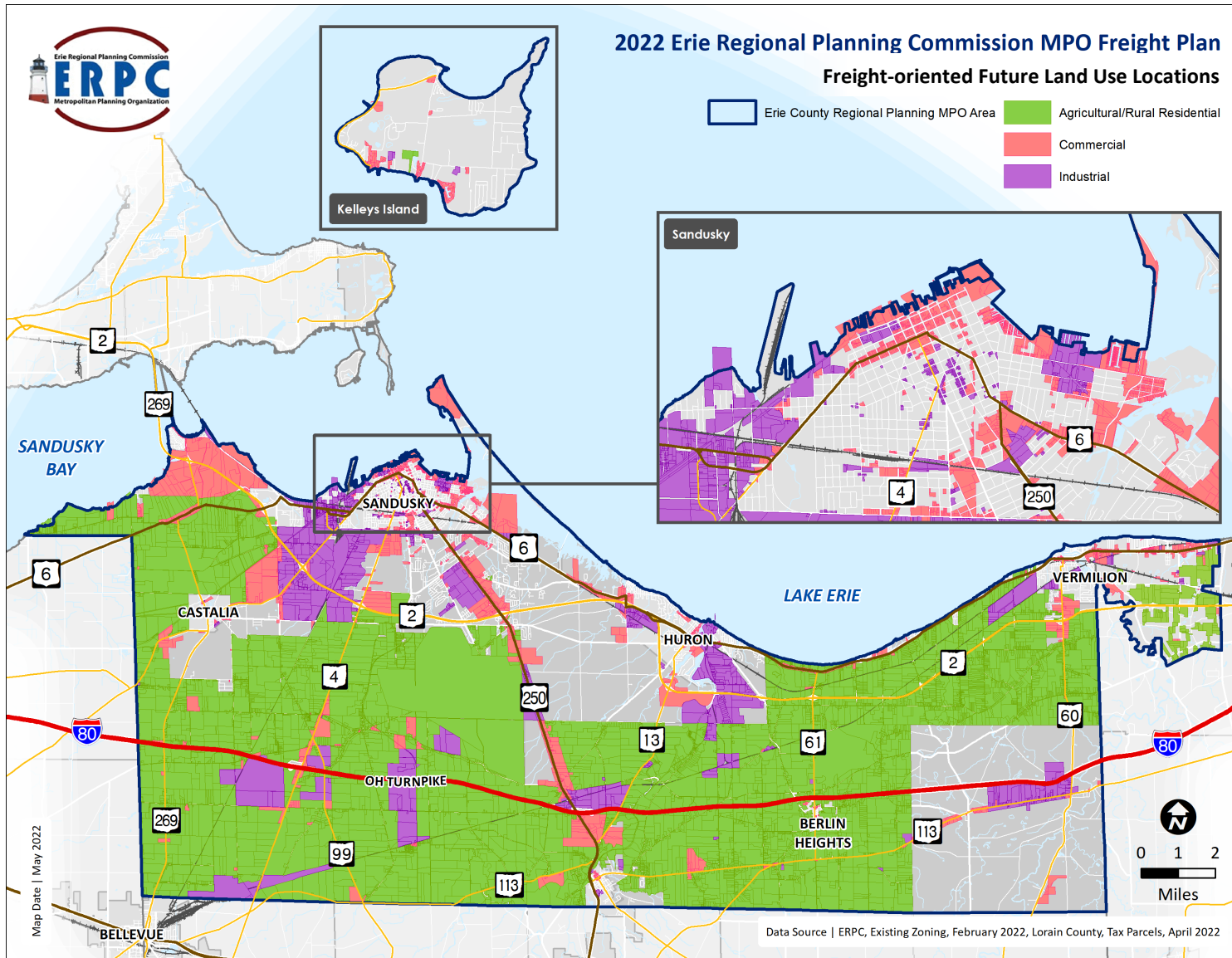


Figure 2-10: Freight-oriented Future Land Use Locations



3. Freight’s Role in the Regional Economy

Regional Gross Domestic Product

For comparative purposes, the Erie County gross domestic product is shown alongside Lorain and Ottawa Counties and the state of Ohio in Table 3-1 and Figure 3-1. Takeaways of note include:

- All three counties and Ohio show a continued recovery in GDP from the 2008 recession through 2013.
- Erie County shows a slight increase in GDP from 2011 through 2014 with a general declining trend through 2020 which is opposite the trend of both Lorain and Ottawa Counties and Ohio.
- In comparison, both Lorain County and Ottawa County show a steady increase in GDP from 2011 through 2018 with a slight decrease through 2020.
- Both Ottawa and Lorain Counties show a decline in GDP after 2019.
- Ohio's GDP trend slowly increases from 2011 through 2019 and decreases slightly through 2020 similar to the three counties.
- Additional analysis of Erie County economic variations during this 10-year period would be needed to identify the potential factors that may account for the declining GDP.

Table 3-1: Gross Domestic Product (GDP), All Industry Sectors (Millions in Current Dollars)

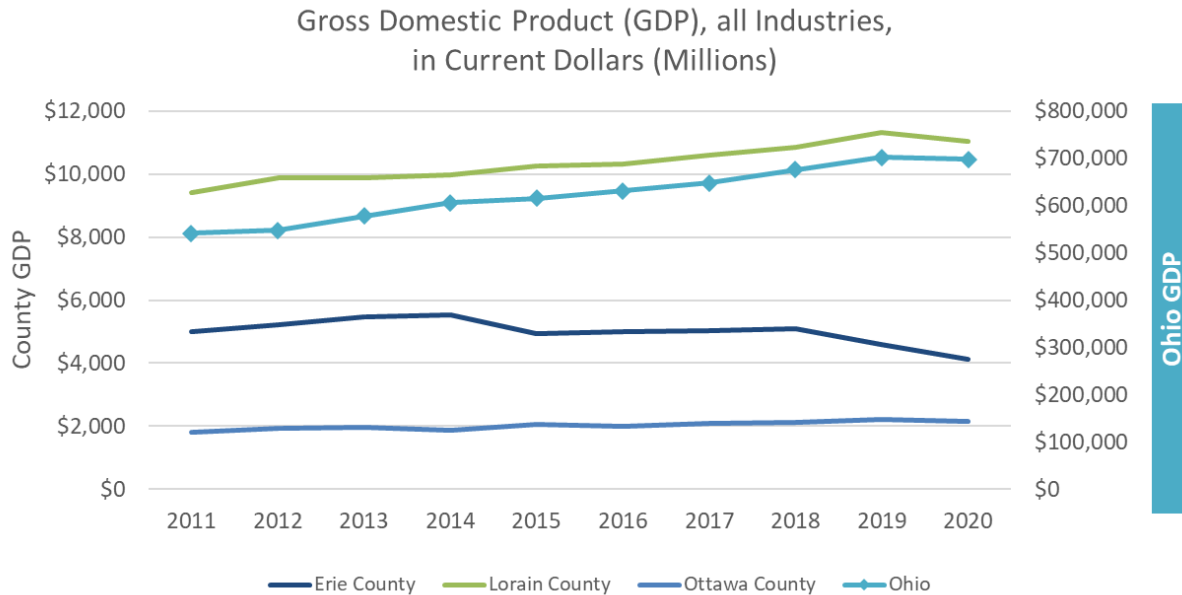
	Erie County ¹	Lorain County ¹	Ottawa County ¹	Ohio ²
2011	4,987	9,426	1,792	541,315
2012	5,216	9,896	1,921	548,291
2013	5,457	9,889	1,950	577,890
2014	5,529	9,975	1,872	606,729
2015	4,953	10,258	2,042	616,279
2016	5,002	10,340	1,992	631,606
2017	5,018	10,614	2,101	648,574
2018	5,089	10,861	2,114	676,721
2019	4,601	11,330	2,221	702,055
2020	4,133	11,031	2,137	697,868

Source: Bureau of Economic Analysis, US Department of Commerce

1- <https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1&acrdn=1>

2- <https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1&acrdn=5>

Figure 3-1: Gross Domestic Product Trendline



According to Woods & Poole Economics, Inc. (W&P), Erie County had a gross regional product of \$4.8 billion and total wage earnings of \$3 billion in 2021 (in 2021 dollars). Approximately \$388 million of these earnings were in the manufacturing sector, with another \$74 million in transportation and warehousing earnings.

Truck Flows

Figure 3-2 and Figure 3-3 depict truck flows from the Freight Analysis Framework (FAF5) across northern Ohio and into neighboring states for the years 2018 (actual) and 2045 (forecasted), respectively.

As noted earlier, 14,000 daily trucks flowed through Erie County on the Ohio Turnpike (I-80/I-90) in 2018—by far the highest flows of any highway in the MPO area. This volume is continuous from southern Detroit through Toledo and the ERPC MPO area to southern Cleveland. Turnpike truck volumes decrease where I-80 and I-90 diverge to the east and in Toledo to the west.

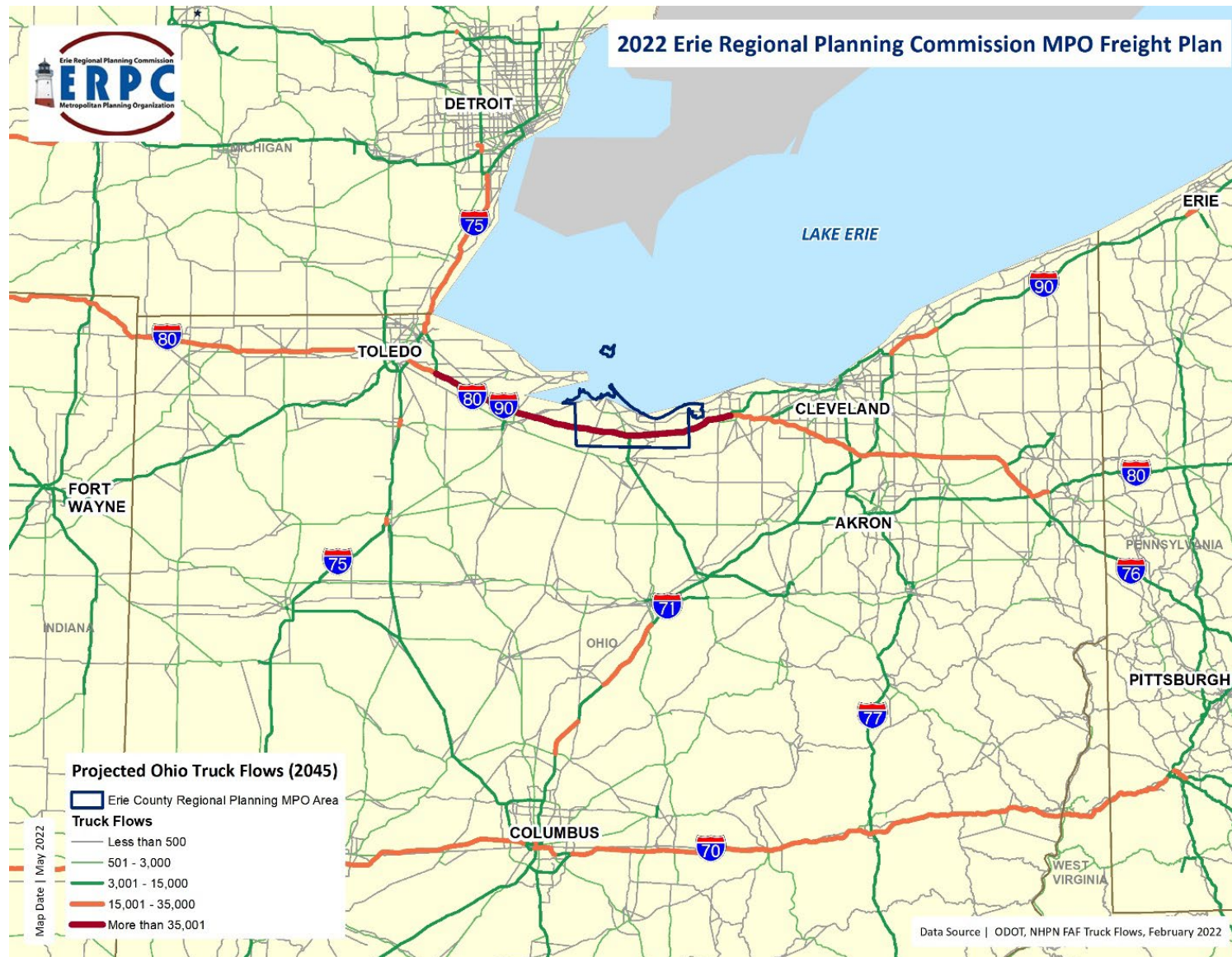
The next largest 2018 truck flows were on US 250 south of the Ohio Turnpike, with over 2,500 daily truck trips. Other significant truck volumes occur on State Routes (SR) 2 and 4, along with US 6. Truck flows on the Turnpike in Erie County could exceed 35,000 in 2045, according to FAF5 freight flows.

The most obvious difference between the two analysis years is the increase in truck volumes on the Ohio Turnpike to more than 35,000 trucks per day and on US 250 south of the Ohio Turnpike to more than 3,000 trucks per day in 2045 in the ERPC MPO area.

Figure 3-2: Ohio Truck Flows at a Regional Level (2018)



Figure 3-3: Projected Ohio Truck Flows at a Regional Level (2045)



Commodity Flows by Mode

Additional FAF5 data was collected from ODOT which provides additional detail on commodity by modes. A summary of the top commodity categories by mode is shown in Table 3-2. A breakdown of regional commodity flows by transportation mode using 2018 data is found in Table 3-3, Table 3-4, Table 3-5, and Table 3-6. The FAF5 data is organized into categories based on the Standard Classification of Transported Goods (SCTG) Commodity Codes and reviews imports and exports from Erie County.

These data show that imports exceed exports—by 207 percent in tons and by 58 percent in value. Rail is the largest import mode, followed by water and truck. Trucks far exceed any other export mode, with water and rail a distant second and third. For both imports and exports, freight traffic by air is a small share in regard to overall freight movement.

Table 3-2: Top Import and Export Commodity Categories by Mode (tons)

	Top Import Commodity Categories	Top Export Commodity Categories
Air	Advanced Manufacturing (0.73k) Other ² (0.49k) Chemicals and Pharmaceuticals (0.06k)	Motorized Vehicles & Parts (0.35k) Advanced Manufacturing (0.25k) Food & Agriculture (0.06k)
Truck	Food & Agriculture (1431k) Construction Materials (718k) Other ² (423k)	Food & Agriculture (2176k) Other ² (200k) Advanced Manufacturing (186k)
Multiple Modes and Mail	Other ² (51k) Advanced Manufacturing (12.9k) Food & Agriculture (10.5k)	Food & Agriculture (16.3k) Advanced Manufacturing (10.5k) Other ² (3.8k)
Water	Energy (2544k) Construction Materials (495k) Other ² (163k)	Construction Materials (163k) Food & Agriculture (103k) Energy (29k)
Rail	Energy (4089k) Chemicals, Pharmaceuticals & Plastics (126k) Construction Materials (54k)	Construction Materials (368k) Food & Agriculture (19k) Energy (14k)

² https://bhs.econ.census.gov/bhsphtext/brdsearch/scs_code.html. The other category as defined by the ODOT data source are SCTG Commodity Codes 9, 14, 22, 25, 27, 28, 29, 30, 32, 33, 39, and 41. These codes include tobacco products, metal ores and concentrates, fertilizers, logs, and other wood in the rough, pulp, newsprint, paper and paperboard, printed products, textiles and leather, base metals, furniture and mattresses, lamps, and illuminated signs and waste and scrap.

Table 3-3: Erie County Existing (2018) Imports by Tons, Mode, and Category

Category	Tons (Thousands)					Total
	Air	Truck	Multiple Modes and Mail	Water	Rail Carload	
Advanced Manufacturing (34, 35, 37, 38, 40, 43)	0.731	190.443	12.959	4.160	0.000	208.293
Chemicals, Pharmaceuticals & Plastics (20, 21, 23, 24)	0.061	61.609	10.498	3.533	126.540	202.241
Construction Materials (10, 11, 12, 13, 26, 31)	0.015	718.379	10.224	495.748	54.290	1,278.656
Energy (15, 16, 17, 18, 19)	0.000	341.032	0.786	2,544.936	4,089.430	6,976.184
Food & Agriculture (1, 2, 3, 4, 5, 6, 7, 8)	0.034	1,430.720	10.529	4.804	0.030	1,446.423
Motorized vehicles & Parts (36)	0.041	8.721	0.894	0.059	0.000	9.715
Other	0.493	423.520	51.812	163.996	1.000	640.821
Total Tons by Mode	1.375	3,174.424	97.701	3,217.235	4271.290	10,762.025

Source: ODOT, FAF5 Data

Table 3-4: Erie County Existing (2018) Imports by Value, Mode, and Category

Category	Value (Millions, \$)					Total
	Air	Truck	Multiple Modes and Mail	Water	Rail Carload	
Advanced Manufacturing (34, 35, 37, 38, 40, 43)	73.130	1,089.080	378.651	9.812	0.000	1,550.673
Chemicals, Pharmaceuticals & Plastics (20, 21, 23, 24)	25.900	303.285	127.775	5.052	232.700	694.712
Construction Materials (10, 11, 12, 13, 26, 31)	0.231	76.773	4.161	4.831	6.010	92.006
Energy (15, 16, 17, 18, 19)	0.004	159.922	0.836	124.094	131.110	415.966
Food & Agriculture (1, 2, 3, 4, 5, 6, 7, 8)	0.544	554.429	10.659	2.064	0.020	567.716
Motorized vehicles & Parts (36)	0.670	56.991	11.077	0.523	0.000	69.261
Other	16.795	738.742	395.484	39.192	4.600	1,194.813
Total Value by Mode	117.273	2,979.224	928.643	185.569	374.440	4,585.149

Source: ODOT, FAF5 Data

Table 3-5: Erie County Existing (2018) Exports by Tons, Mode, and Category

Category	Tons (Thousands)					Total
	Air	Truck	Multiple Modes and Mail	Water	Rail Carload	
Advanced Manufacturing (34, 35, 37, 38, 40, 43)	0.257	186.912	10.562	4.932	0.000	202.663
Chemicals, Pharmaceuticals & Plastics (20, 21, 23, 24)	0.061	24.189	1.018	0.200	0.000	25.468
Construction Materials (10, 11, 12, 13, 26, 31)	0.006	81.326	0.456	163.872	368.820	614.48
Energy (15, 16, 17, 18, 19)	0.000	24.400	0.222	29.851	14.570	69.043
Food & Agriculture (1, 2, 3, 4, 5, 6, 7, 8)	0.063	2,176.914	16.333	103.578	19.990	2,316.878
Motorized vehicles & Parts (36)	0.354	45.862	2.996	0.013	0.000	49.225
Other	0.016	200.462	3.842	23.406	0.000	227.726
Total Tons by Mode	0.758	2,740.063	35.429	325.850	403.380	3,505.48

Source: ODOT, FAF5 Data

Table 3-6: Erie County Existing (2018) Exports by Value, Mode, and Category

Category	Value (Millions, \$)					Total
	Air	Truck	Multiple Modes and Mail	Water	Rail Carload	
Advanced Manufacturing (34, 35, 37, 38, 40, 43)	53.428	924.205	142.969	33.224	0.000	1,153.826
Chemicals, Pharmaceuticals & Plastics (20, 21, 23, 24)	2.203	103.402	9.210	0.241	0.000	115.056
Construction Materials (10, 11, 12, 13, 26, 31)	0.304	38.779	1.256	1.243	6.090	47.672
Energy (15, 16, 17, 18, 19)	0.000	6.787	0.115	9.360	4.110	20.372
Food & Agriculture (1, 2, 3, 4, 5, 6, 7, 8)	2.532	974.544	39.380	37.379	3.110	1,056.945
Motorized vehicles & Parts (36)	9.833	346.404	27.661	0.104	0.000	384.002
Other	0.718	94.083	12.512	10.899	0.000	118.212
Total Value by Mode	69.018	2,488.202	233.104	92.448	13.310	2,896.082

Source: ODOT, FAF5 Data

4. Freight System Modal Infrastructure

Road and Bridge Classifications

Numerous highway network classifications exist within the ERPC MPO area. This section describes the National Highway Freight Network and roadway functional classifications in the ERPC MPO area. These classifications provide an important framework for planning and programming freight improvements.

Federal Freight Networks and Corridors

National Highway Freight Network (NHFN) - The Ohio Turnpike (I-80/I-90) is the only NHFN highway located within the MPO area, as depicted in Figure 4-1, making it the only highway eligible for federal freight funds. The Ohio Turnpike follows a relatively linear path between the eastern and western borders of the ERPC MPO area. The NHFN includes several subsystems of roadways, as described below.

Primary Highway Freight System (PHFS) - As described on the FHWA NHFN website, “the PHFS is a network of highways identified as the most critical highway portions of the U.S. freight transportation system determined by measurable and objective national data.” The entire Ohio Turnpike is included on the PHFS.

Critical Rural Freight Corridors (CRFC) - FHWA describes the CRFC as “public roads not in an urbanized area which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.” A review of the 2019 Ohio Statewide Freight Plan and the draft 2022 Ohio State Freight Plan indicates that Ohio DOT has elected to not designate a CRFC network.

Critical Urban Freight Corridors (CUFC) - FHWA describes the CRFC as “public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.” Likewise, Ohio DOT has elected to not designate a CUFC network.

Ohio’s State Freight System (SFS)

According to Transport Ohio (2019), the statewide freight plan, “the highway portion of Ohio’s State Freight System (SFS) (was) developed through Access Ohio 2040 and Transport Ohio. ODOT may direct freight funds to these roadways upon FHWA approval of these additional corridors.” The SFS provides an important network consideration for the development of the ERPC MPO Freight Plan.

Primary Highways as noted in the Ohio Statewide Freight Plan

The highway portion of the SFS includes the Ohio Turnpike, SR 2, and US 250. See Figure 4-2.

- The Ohio Turnpike and SR 2 run east-west across the entire ERPC MPO area.
- US 250 is the only north-south corridor in the ERPC MPO area on the SFS.

Highway Functional Classification

Figure 4-3 depicts the FHWA highway functional classification of all major roadways in the ERPC MPO area.

- The Ohio Turnpike is functionally classified as an “Interstate” highway while SR 2 as “Other Freeway or Expressway” across the entire ERPC MPO area.
- Aside from the Ohio Turnpike and SR 2, US 250, and SR 4 are identified as Principal Arterials and are major north-south routes through the MPO area. US 6 is a major east-west corridor that is also classified as a Principal Arterial.
- All other roadways are classified as minor arterials, collectors, or local roads.
- Based on the locations of freight reliant businesses, local freight is also carried across other principles arterials, minor arterials, and collectors for first-mile and last-mile connections.

Roadway Capacity

Number of Travel Lanes

Figure 4-4 depicts the number of travel lanes on major roadways in the ERPC MPO area as classified in the ODOT Road Inventory data. The ODOT data reflects pavement width, including paved shoulders that are not used as travel lanes.

- The Ohio Turnpike is the only 6-lane highway in the ERPC MPO area.
- US 2 is a 4-lane highway. The interchange west of Huron and Huron River bridge appear as 6-lane segments in the data and in Figure 4-4 but are in fact 4-lane segments with wide shoulders.
- US 6 is a 2-lane highway except near Cedar Point Drive where the roadway widens to four lanes. Cedar Point Drive is also four lanes.
- US 250 is a 4-lane highway from US 6 south to Milan where it narrows to two lanes.
- Perkins Avenue in Sandusky is the only other 4-lane roadway. All other roads in the city shown as 4-lane are in fact 2-lane streets with paved shoulders—many of which are used for on-street parking.
- All remaining streets and roadways in the ERPC MPO area are 2-lane corridors.

Figure 4-1: National Highway Freight Network

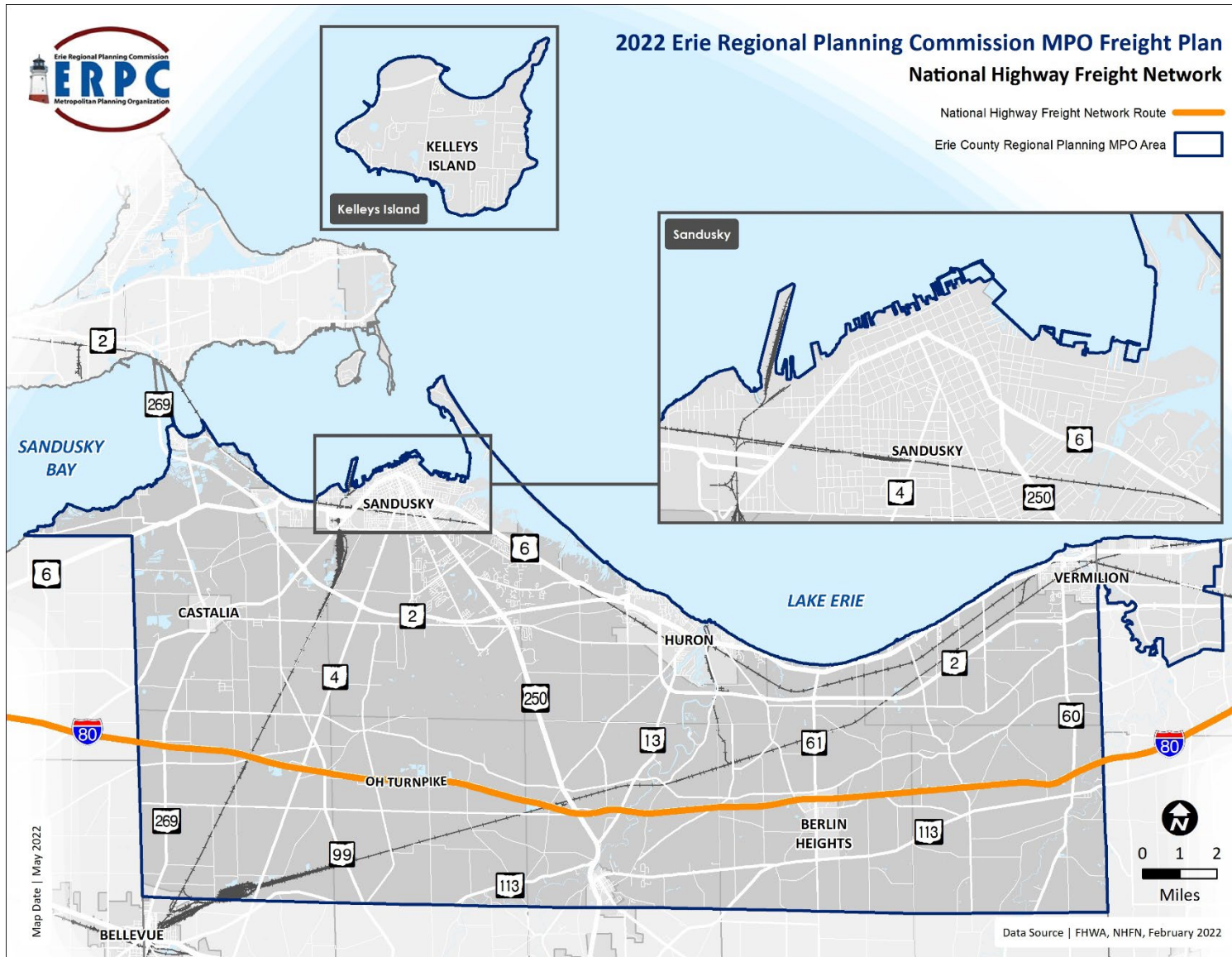


Figure 4-2: Ohio's State Freight System

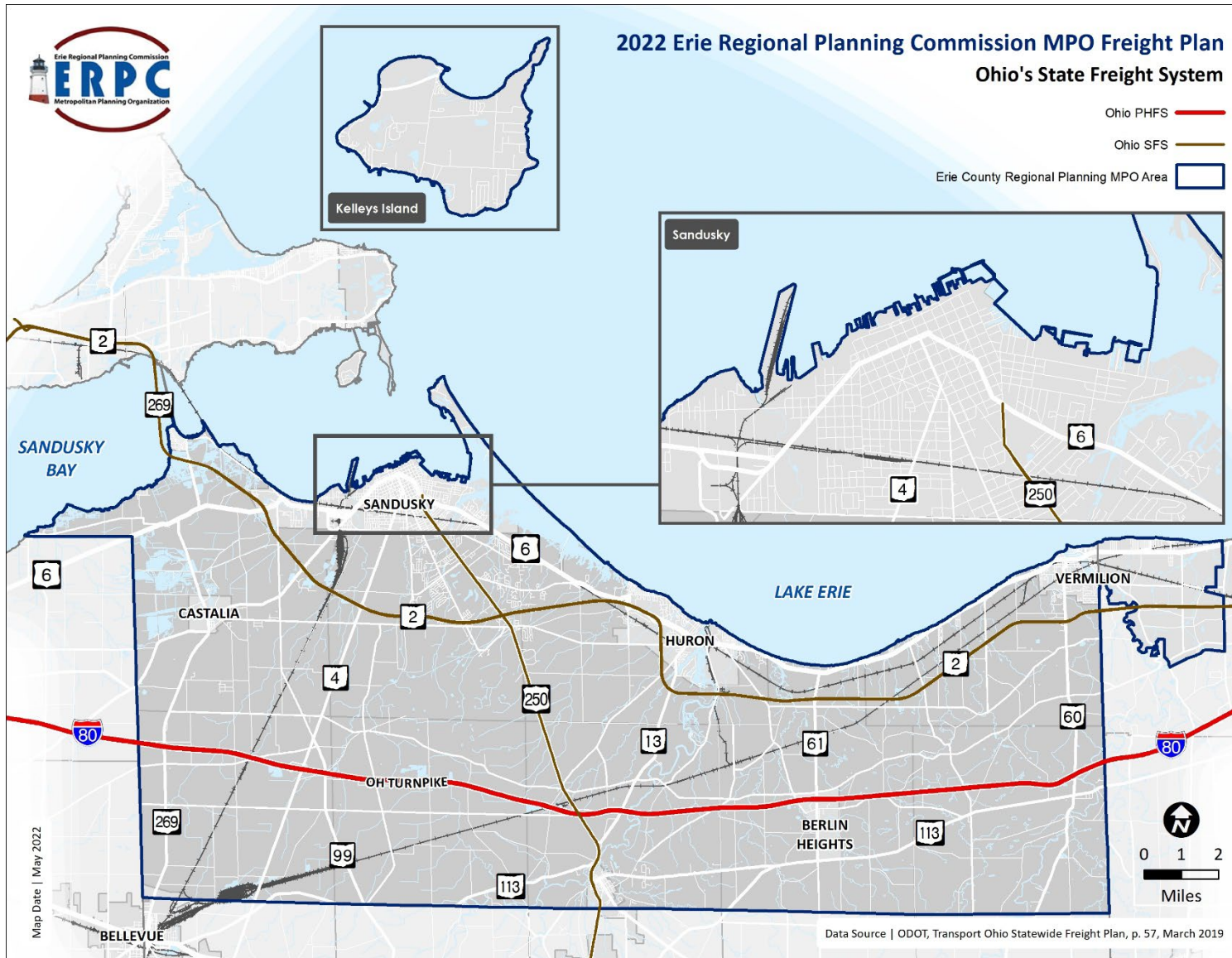


Figure 4-3: Roadways by Functional Classification

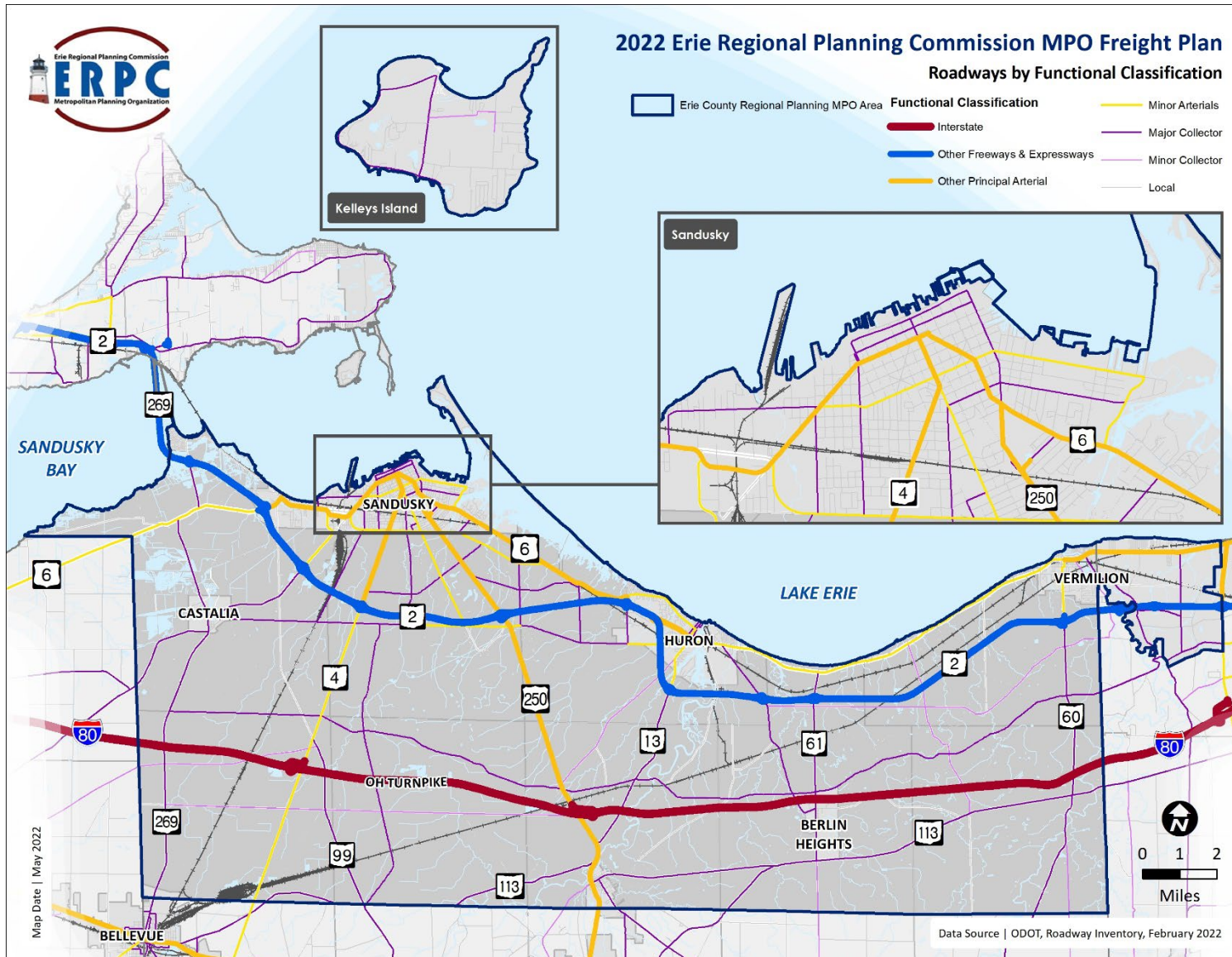
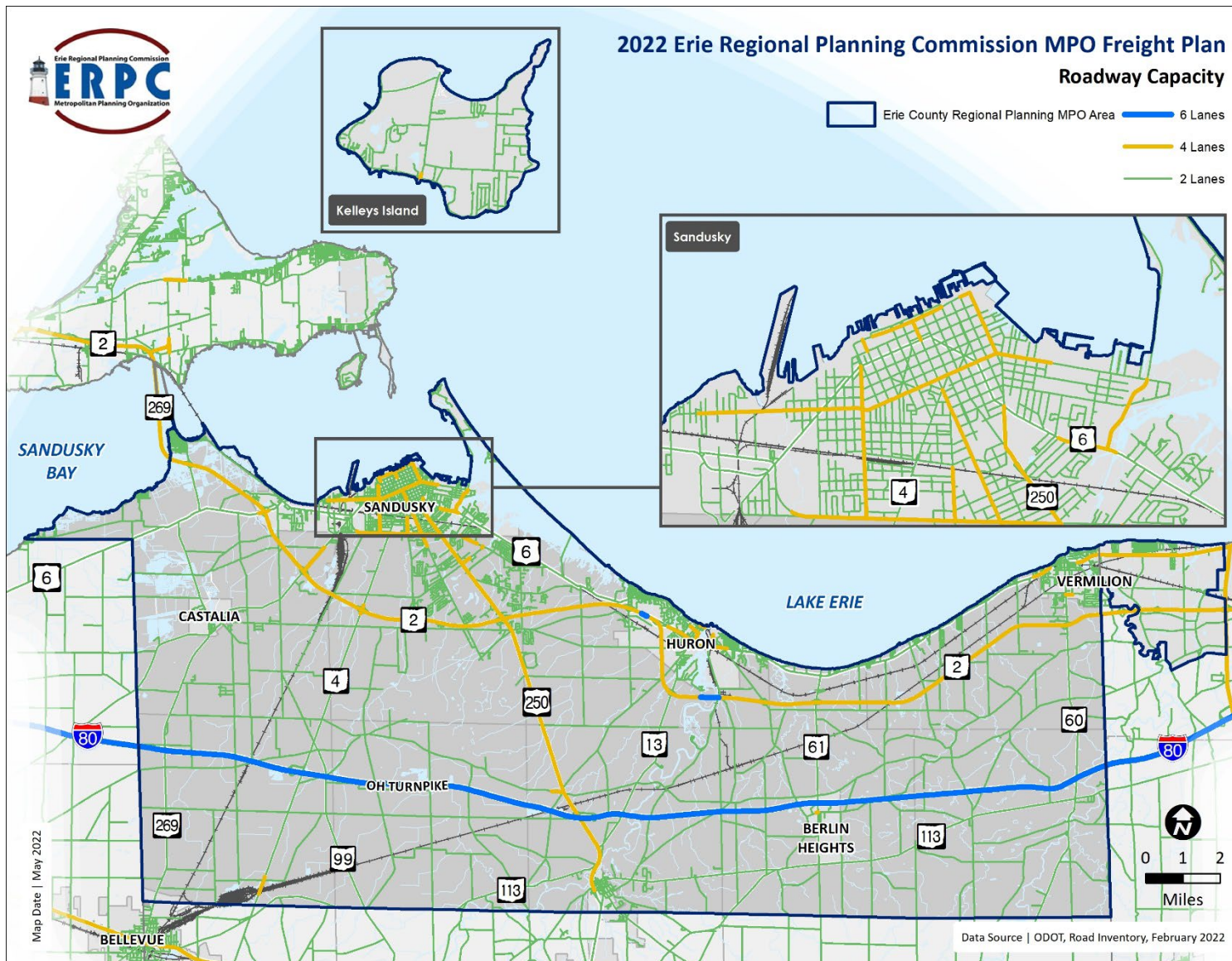


Figure 4-4: Number of Travel Lanes



Aside from US 250, Perkins Avenue, and Cedar Point Drive, all other roads in the City of Sandusky shown as 4-lane are 2-lane streets with paved shoulders.

Pavement Conditions

Pavement conditions for state roads are monitored by ODOT. Statewide data is reported in TIMS. The February 2022 pavement condition data set shows that of the 250.89 miles of state roads in the ERPC MPO area, 52 percent of total miles were rated in good condition; 43 percent in fair condition; and 5 percent in poor condition.

Figure 4-5 depicts existing highway pavement conditions across the ERPC MPO area in February 2022.

- The longest segment of roadway with poor pavement condition is located on US 6 east of downtown Vermilion (greater than three miles).
- Two multi-mile segments of SR 113 between US 250 and Berlin Heights (both greater than two miles and separated by less than two miles), a portion of SR 61 from the Ohio Turnpike south into Berlin Heights, and the segment of SR 269 north of US 6 and the segment through Castalia are also rated as poor. These segments of SR 113 and SR 61 were resurfaced in 2021, however the pavement condition data does not yet reflect improved conditions.
- All other segments rated as poor are less than one mile long.
- Roadway segments rated as poor are usually adjacent to segments in fair condition. Only in Castalia, Milan and Vermilion are these smaller segments tangent or proximate to longer corridors of poor pavement.

Bridges and Bridge Conditions

Bridge conditions, or ratings, in February 2022 as reported by ODOT to the National Bridge Inventory shows that of the 337 in the ERPC MPO area, 68 percent were rated in good condition; 30 percent in fair condition; and 2 percent in poor condition.

Figure 4-6 shows bridge conditions, which include posted load limits. Necessary load limits can also result in detours for trucks exceeding the posted weight, adding time and cost for operators, carriers, and ultimately consumers.

- Bridge conditions along the Ohio Turnpike are an approximate equal mix of good and fair conditions. There are no “poor” bridges on the Ohio Turnpike.
- Other major roadways, such as SR 2 and SR 113, have more fair bridge conditions than good bridge conditions.
- Six bridges in the ERPC MPO area are rated as “poor”; these are noted in relation to potential detours or weight restrictions impacting freight movement:
 - N&S RR over SR 4/Hayes Avenue, Sandusky, Erie County
 - Con Rail RR over US 6/SR 101/Tiffin Avenue, Sandusky, Erie County
 - Penn Central RR over US 6/SR 101/Tiffin Avenue, Sandusky, Erie County

- Harborview Dr., Huron, Erie County (Municipal bridge)
- Jerusalem Road over Brownhelm Creek, Vermilion, Lorain County (Municipal bridge)
- North Ridge Road over Brownhelm Creek, Vermilion, Lorain County (County bridge)

Figure 4-5: Pavement Conditions

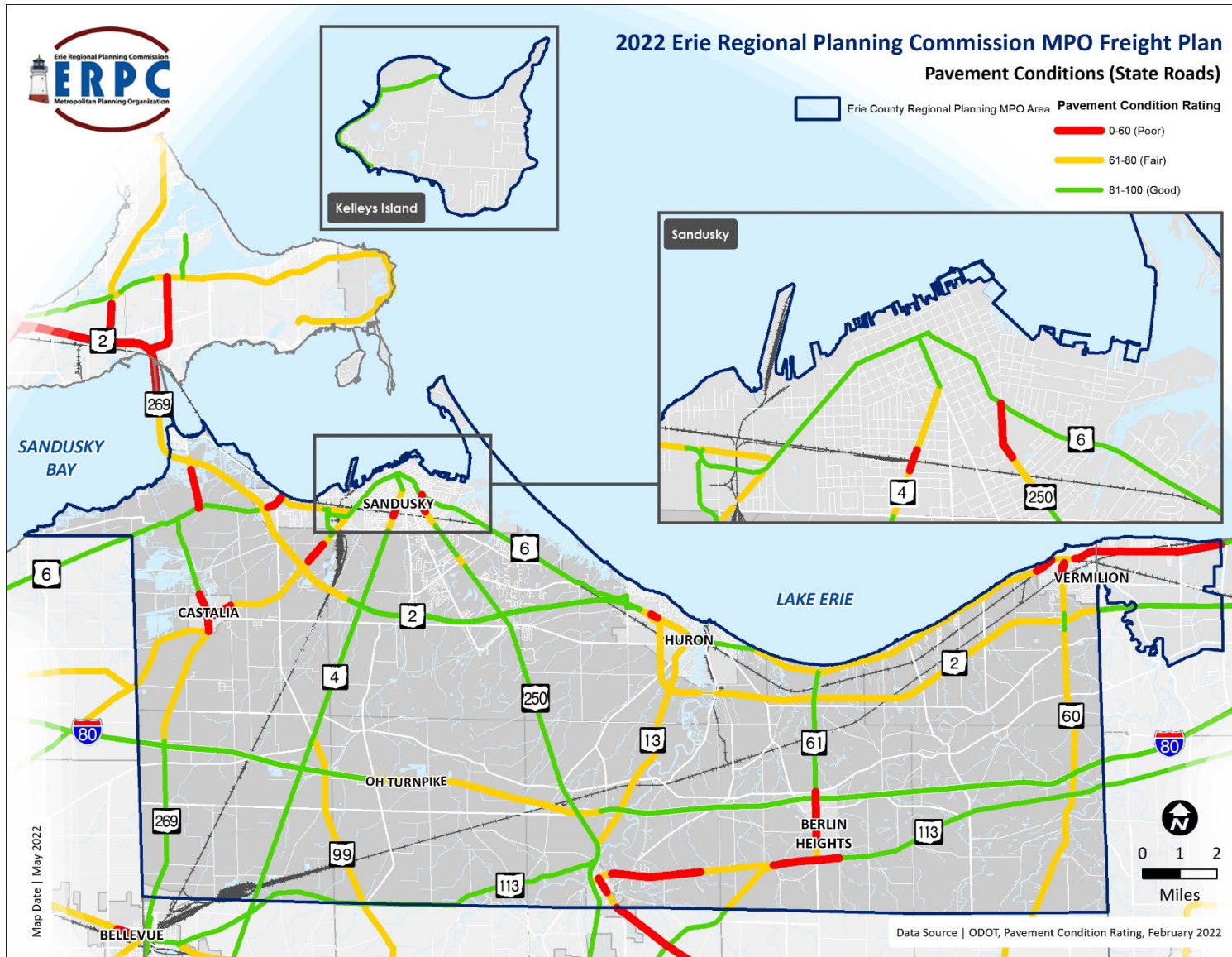
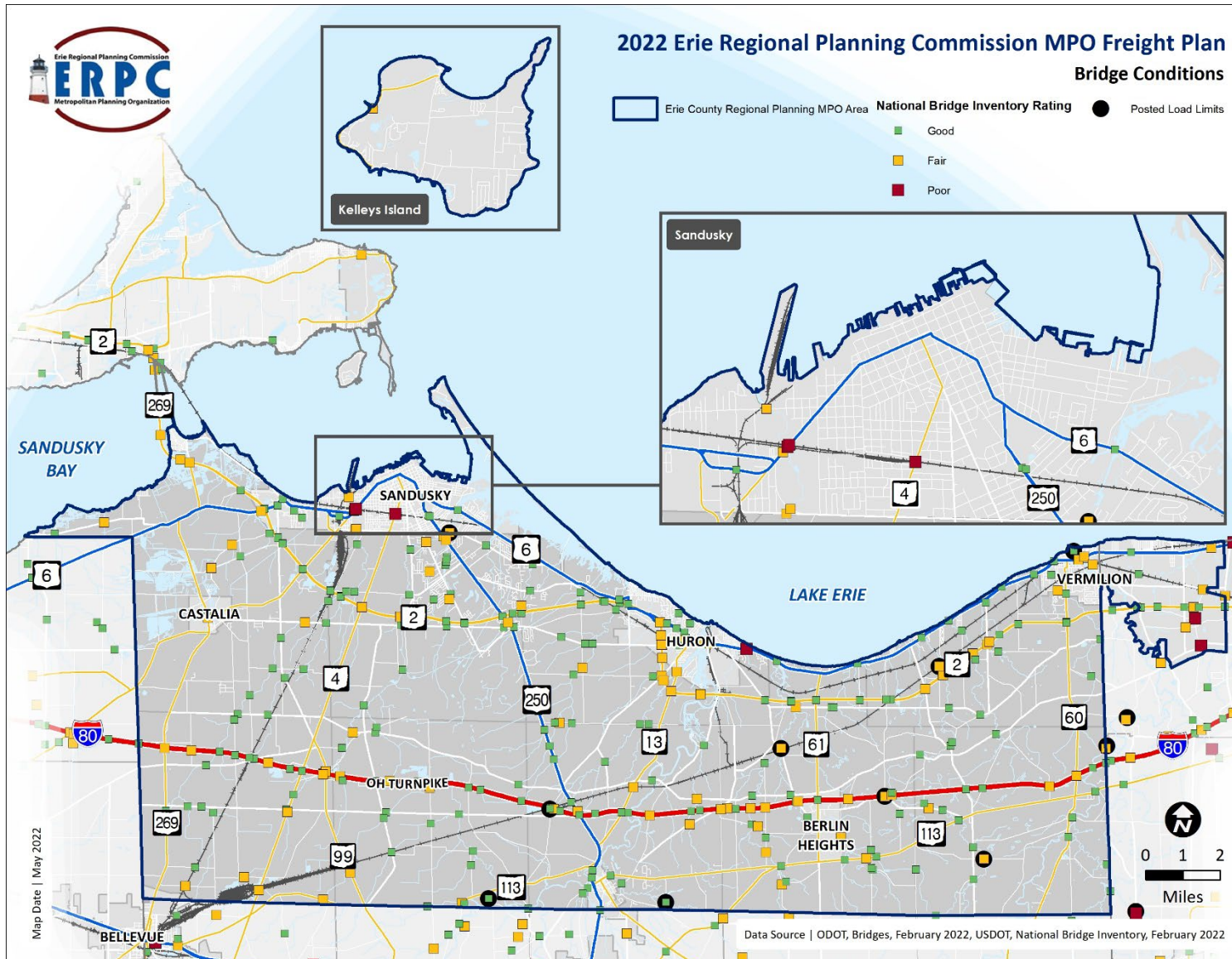


Figure 4-6: Freight Network Bridge Conditions



Traffic

Existing Traffic Volumes

Figure 4-7 depicts existing bi-directional traffic volumes on all major roadways in the ERPC MPO area.

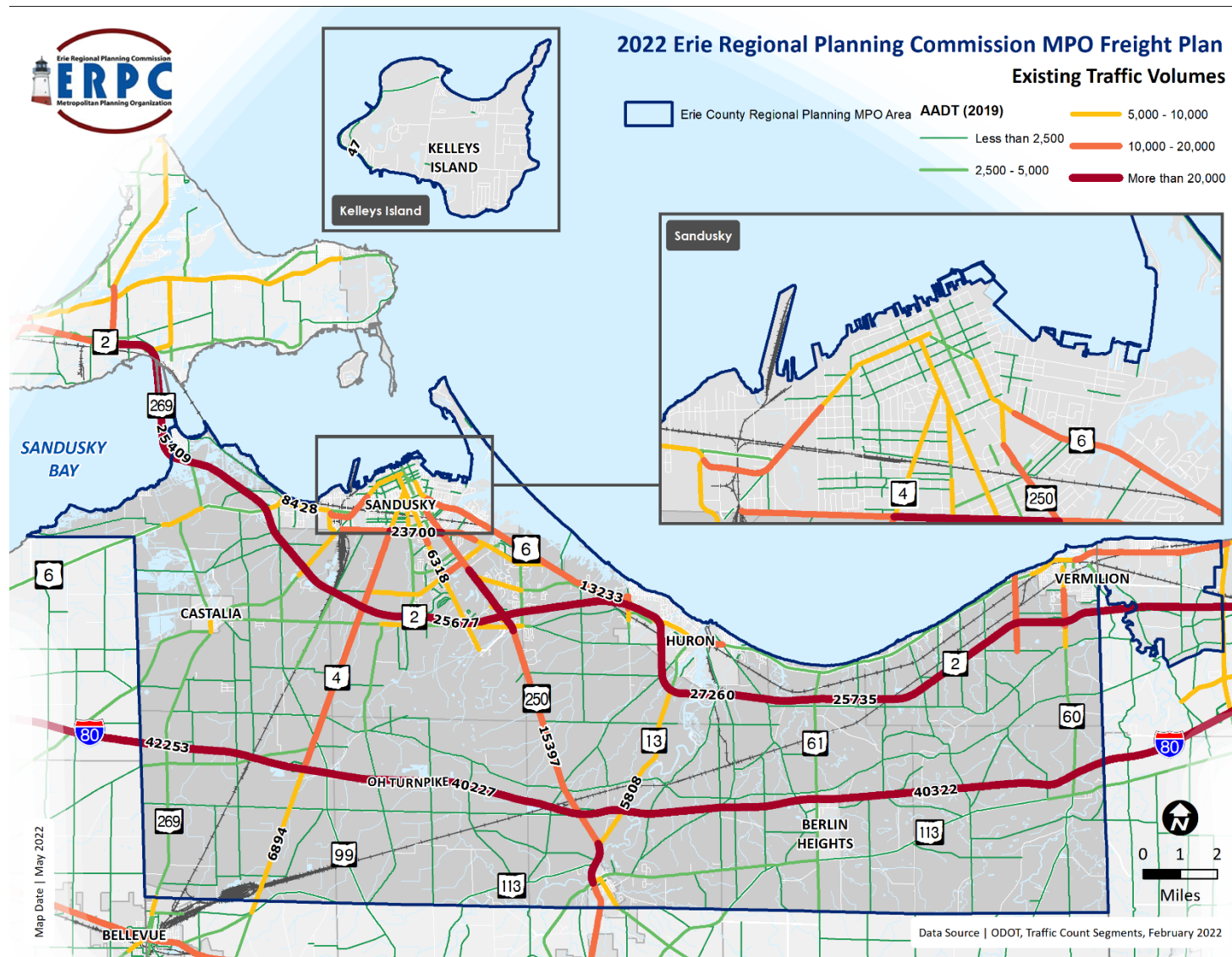
- Existing traffic volumes as shown in Figure 4-7 reflect year 2019 ODOT average annual daily traffic (AADT) estimates.
- I-80, SR 2, US 250, have the highest AADTs in the MPO area. The AADT on SR 2 is around 25,700 vehicles daily on certain segments, and the Ohio Turnpike boasts an average daily vehicle count of 42,300 near the western border of the MPO area.

Projected Traffic Volumes

Figure 4-8 depicts future 2040 traffic volumes on major roadways, according to the ERPC travel demand model. The model calculates bi-directional (two-way) traffic volumes for most roadways, however it treats SR 2 and the Ohio Turnpike as directional (one-way) routes. Therefore, the total projected traffic volumes along SR 2 and Ohio Turnpike are approximately 30,000 and 50,000, respectively - double what is shown in Figure 2-19.

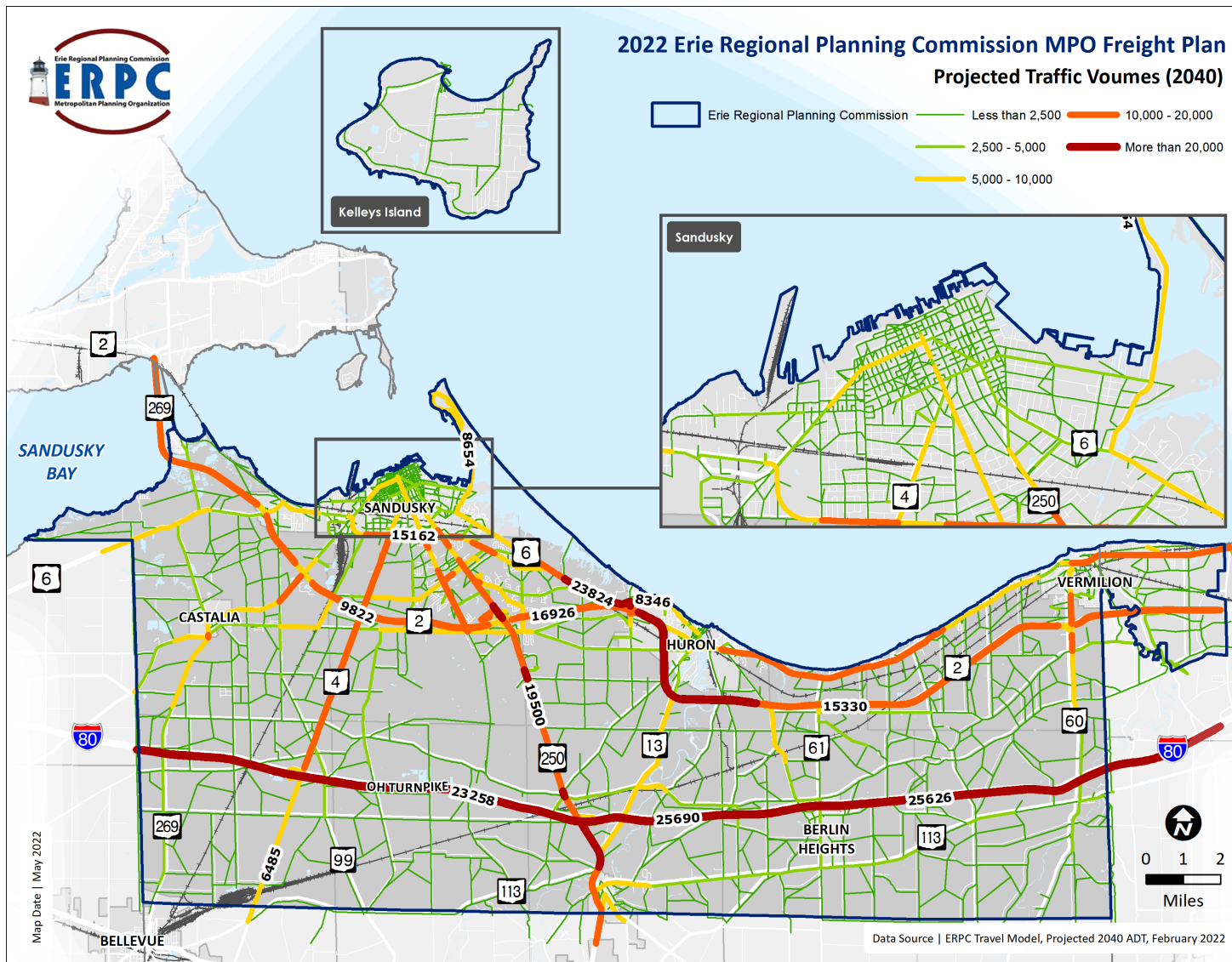
- There are significant traffic increases between the two analysis years on both SR 2 and the Ohio Turnpike when correcting for directional forecasts on these highways versus other roads. SR 2 traffic estimates increase by roughly 12,000 daily vehicles between 2019 and 2040 while the Ohio Turnpike is forecast to experience an increase of 21,000 over this same timeframe.
- Other corridors experiencing significant volume increases include sections of US 6 and US 250. Traffic along US 6 northwest of Huron is projected to increase from a range of 14,000-18,000 daily vehicles (2019) to 19,000-28,000 daily vehicles (2040)—an increase of 5,000-10,000 daily vehicles, depending on the specific segment. The busiest segments of US 250 are projected to increase from a range of 11,000-22,000 daily vehicles (2019) to 14,000-35,000 daily vehicles (2040)—an increase of 3,000-12,000 daily vehicles.
- Volumes are forecast to remain stable on Perkins Avenue near the southern border of Sandusky. According to ODOT, the AADT along Perkins Avenue from SR 4 to US 250 was in the range of 9,600 to 14,100 daily vehicles in 2010 (the base year for the ERPC Travel Model). According to the Year 2040 ERPC Travel Model, volumes are forecast to a range of 10,500-15,000 daily vehicles, with no increases exceeding 1,000 daily vehicles. It is noted that the 2019 traffic volumes are higher as shown in Figure 4-7.

Figure 4-7: Existing Traffic Volumes



Note: Traffic Count segments volumes represent a single line for both directions of traffic.

Figure 4-8: Projected Traffic Volumes



Note: ERPC Travel Model segments represent directional traffic on SR 2 and Ohio Turnpike; thus, projected bi-directional volumes are twice the amount shown.

Existing Truck Volumes and Percentages

Figure 4-9 depicts existing (2019) truck volumes on all major roadways in the ERPC MPO area, while Figure 4-10 displays existing truck percentages on these same roadways.

Table 2-6 provides existing and projected traffic and truck volumes on select corridors within the MPO area.

- Approximately 14,000 daily trucks traversed Erie County on the Ohio Turnpike in 2019. Trucks represent more than 20 percent of the overall Turnpike traffic volume in the MPO area, while SR 4 south of the Turnpike and SR 101 near the railyard in Perkins Township exhibit 15 to 20 percent truck traffic.
- Other roadways with truck traffic of at least 10 percent include sections of SR 99, SR 113, and US 250 west of Milan, and US 6 near Sandusky. While SR 2 exhibits high daily truck volumes around 2,000, the percent trucks exceed 10 percent only in Vermilion and on the Edison Bridge.

Table 4-1: Existing and Projected Traffic and Truck Volumes

Roadway	Existing Total Vehicle (2019) Volume	Projected Total Vehicle (2040) Volume	Projected Growth	Existing Truck Volume	Projected Truck Volume	Projected Truck Growth
US 6	13,232	22,771	+9,539	340	589	+249
SR 2 WB*	11,350	17,413	+6,063	1,101	1,890	+789
SR 2 EB*	11,350	17,666	+6,316	1,101	1,962	+861
Turnpike WB*	20,161	31,264	+11,103	7,016	9,523	+2,507
Turnpike EB*	20,161	31,284	+11,123	7,016	9,507	+2,491
SR 4	12,696	20,525	+7,829	1,116	2,752	+1,636
US 250	30,248	22,098	-8,150	2,203	2,273	+70
SR 13	5,808	8,205	+2,397	499	1,413	+914
SR 61	3,822	8,417	+4,595	370	276	-94
SR 60	3,546	11,974	+8,428	274	538	+264

Note: *Some existing Volumes were represented in database as bidirectional volumes on a single line. For analysis purposes, these volumes were split 50/50 in this table for comparison purposes with the Projected Volumes.

Source: ODOT Traffic Count Segments (2019), ERPC Travel Model (2040)

Projected Truck Volumes

Figure 4-11 depicts projected (2040) truck volumes on all major roadways, based on the ERPC model. Table 2-6 provides a summary of traffic and truck volumes on select corridors within the MPO area.

- Truck volumes within the region are anticipated to increase, between 2019 and 2040, on most area roadways.
- Future truck flows on the Turnpike in Erie County are projected to be about 19,000 by 2040.
- Future truck flows on SR 2 are projected to be 3,852 and on SR 4, 2,752 by 2040.
- The largest truck volume increases are expected on the Ohio Turnpike (an increase of about 2,500 trucks in each direction or 35.6 percent), SR 2 (an increase of about 800 trucks in each direction or more than 74.9 percent), and SR 4 (an increase of 1,636 trucks or 146.6 percent).

Existing 2019 LOS

Figure 4-12 depicts existing highway level-of-service (LOS) within the ERPC MPO area based on 2019 counts.

- Existing LOS is generally acceptable on most roadways within the ERPC MPO area. As expected, there is somewhat more congestion on roadway segments in and around Sandusky.
- There is congestion around each of the two Ohio Turnpike interchanges, SR 4 and US 250. Both interchanges operate at LOS F.
- LOS is also deficient on portions of SR 13 near Milan and SR 113 through Milan, as well as Lockwood Road.
- Roadways intersecting with SR 4 also show low LOS. These spot locations should be reviewed for freight impacts, if any, during freight plan development.

Projected 2040 LOS

Figure 4-13 depicts projected highway level-of-service (LOS) for 2040 within the ERPC MPO area based on highest hourly delay during the modeled summer weekday. The ERPC model projects no change in level-of-service conditions from 2019 to 2040. Congestion at the two Turnpike interchanges at SR 4 and US 250 remains at LOS F in 2040.

Figure 4-9: Existing Truck Volumes

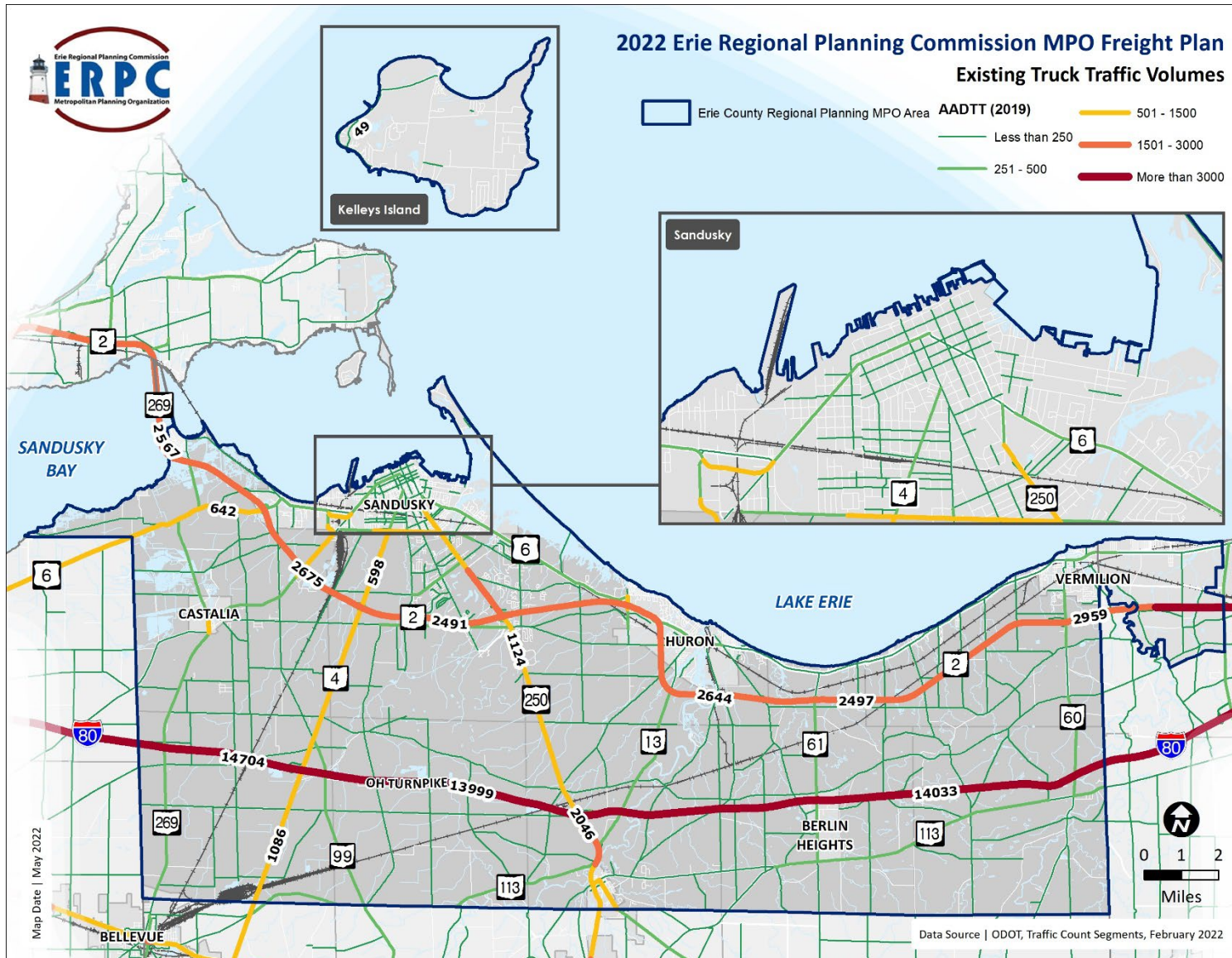


Figure 4-10: Existing Truck Percentage

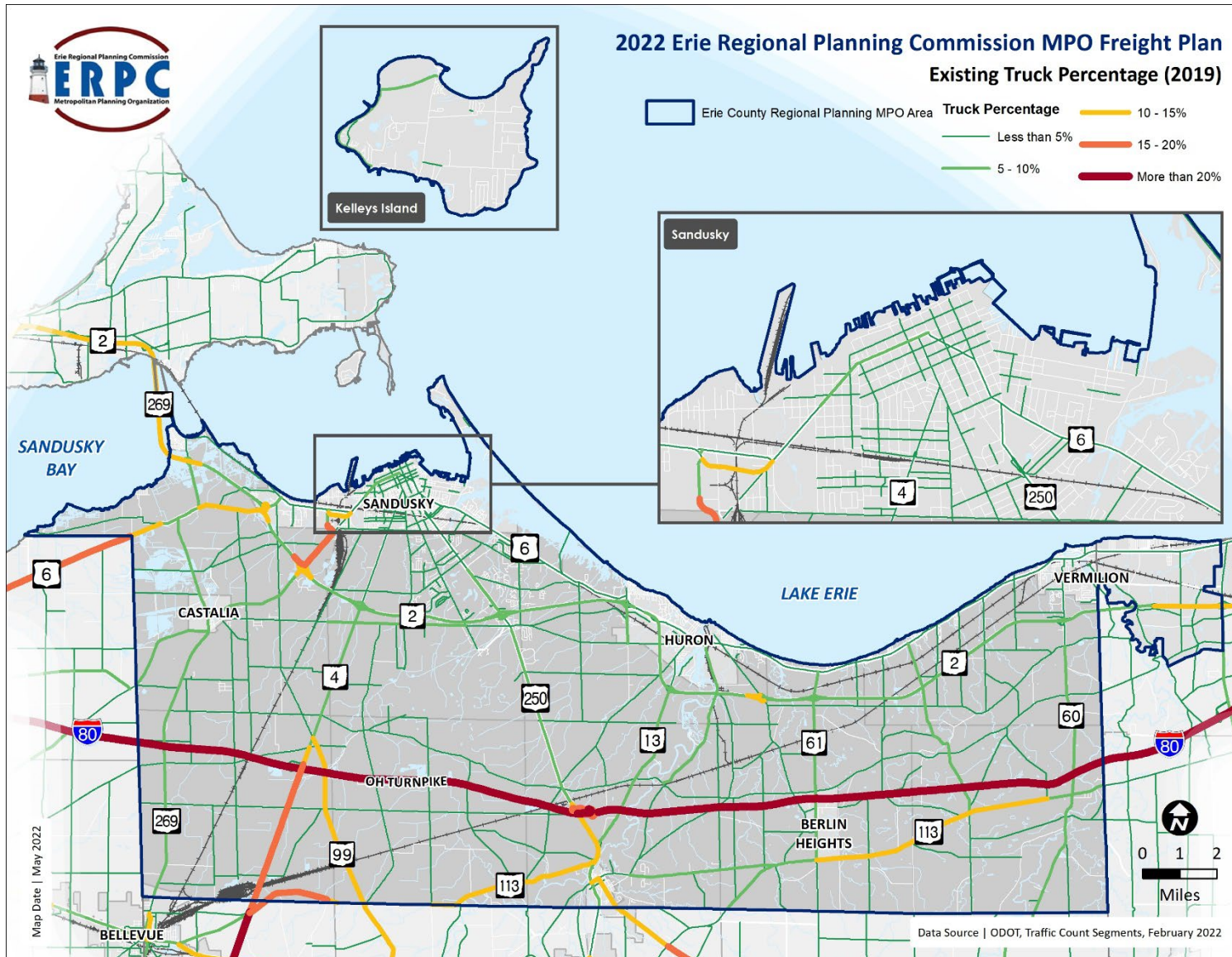
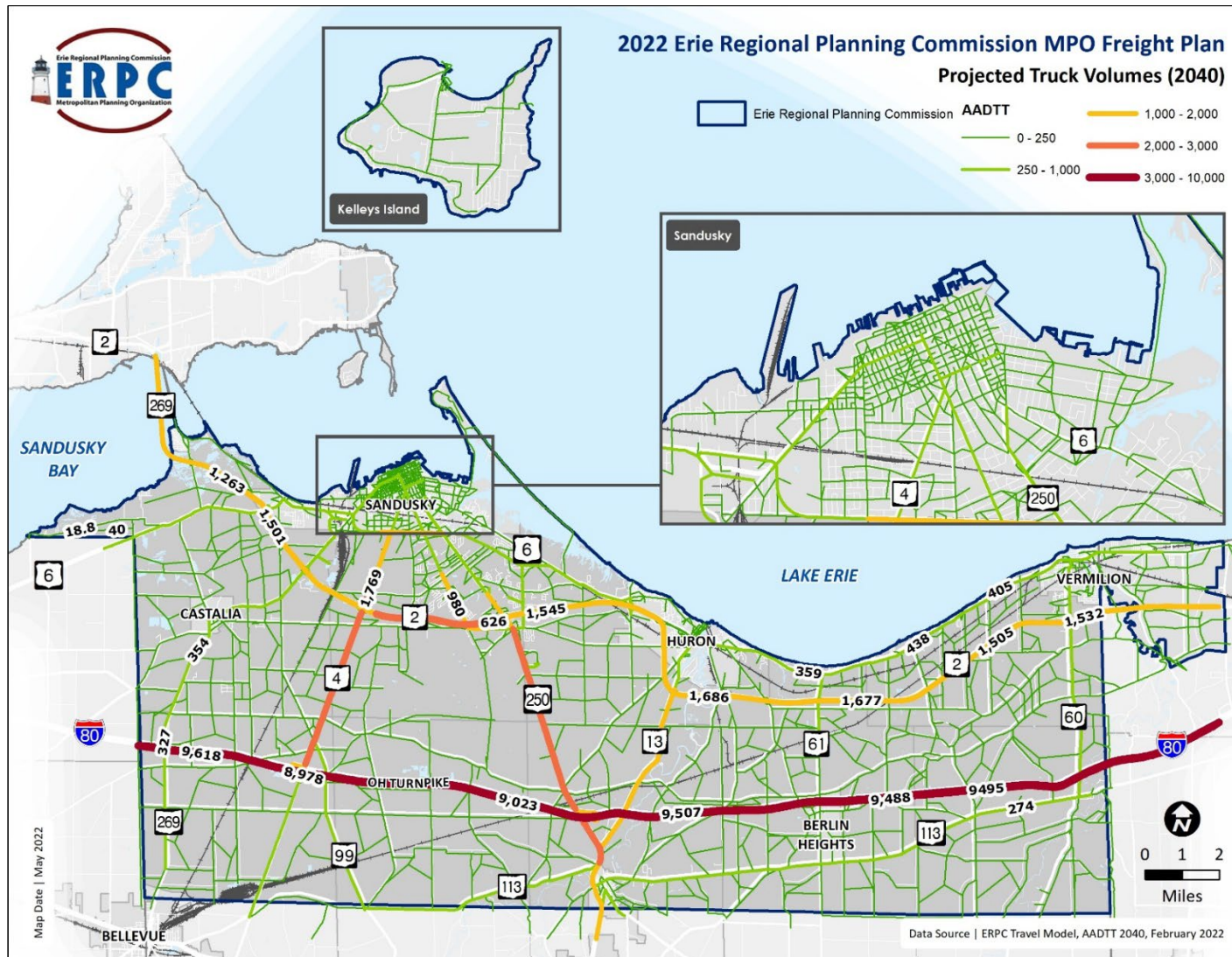


Figure 4-11: Projected Truck Volumes



Note: ERPC Travel Model segments represent directional traffic on SR 2 and Ohio Turnpike; thus, projected bi-directional volumes are twice the amount shown.

Figure 4-12: Existing LOS

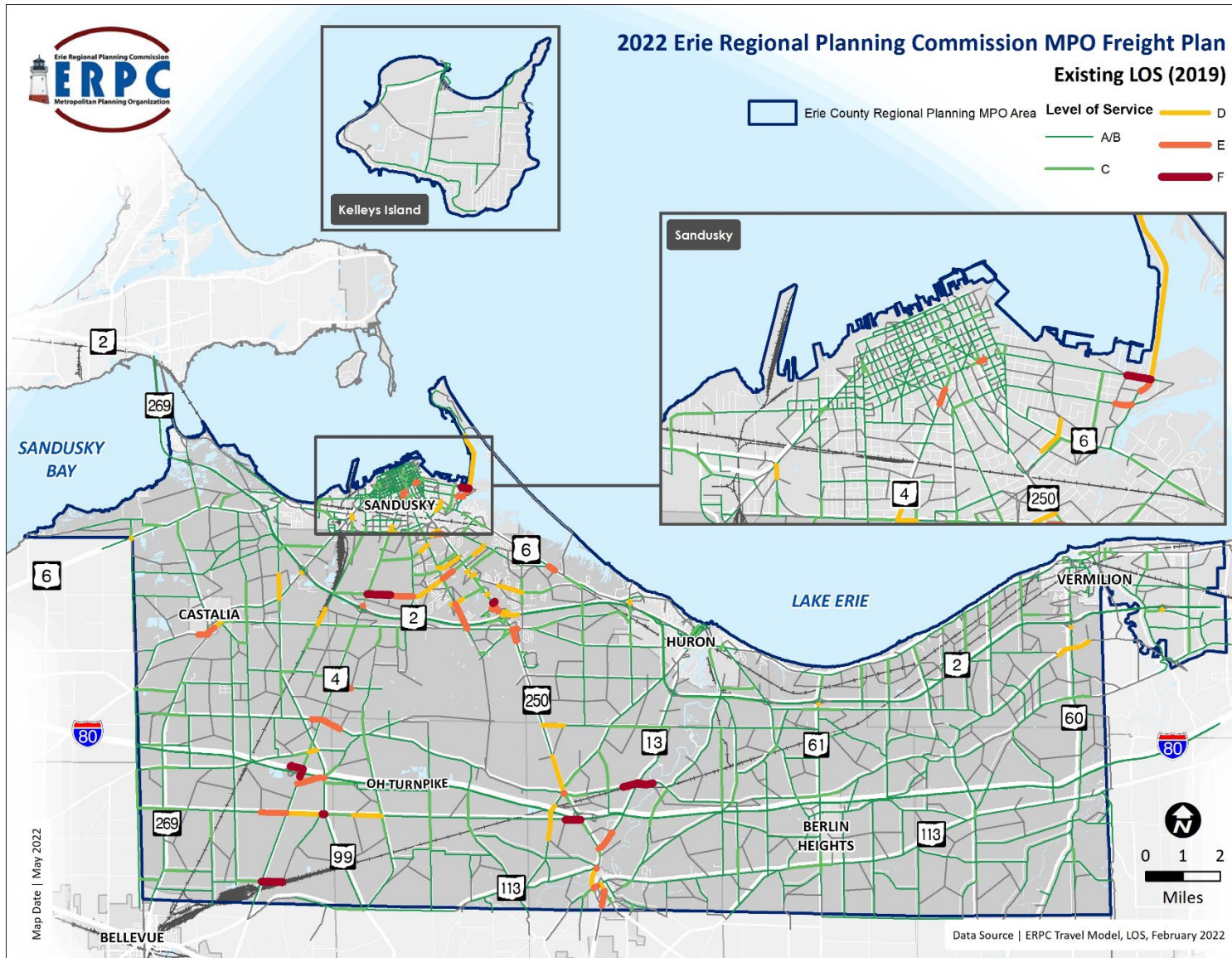
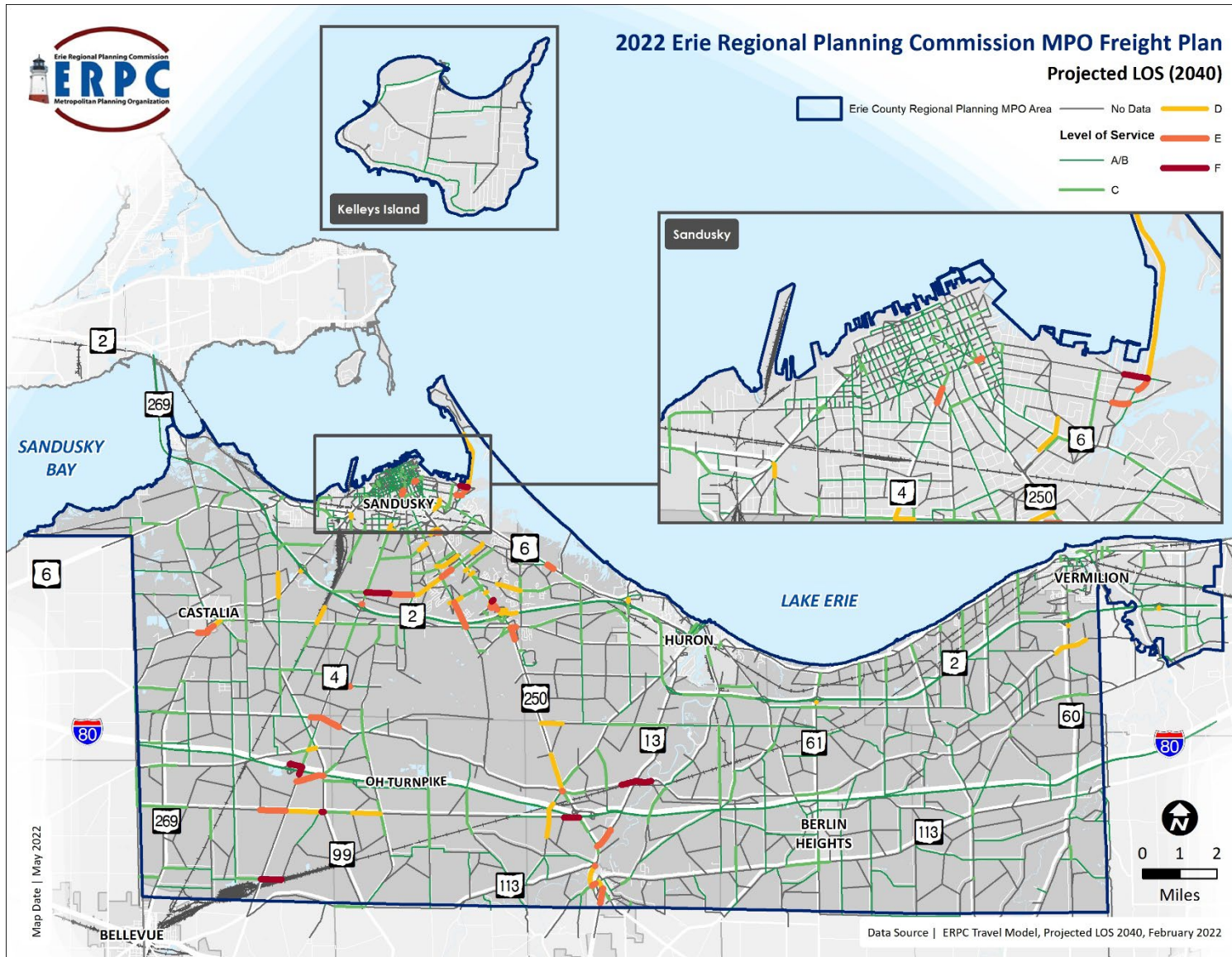


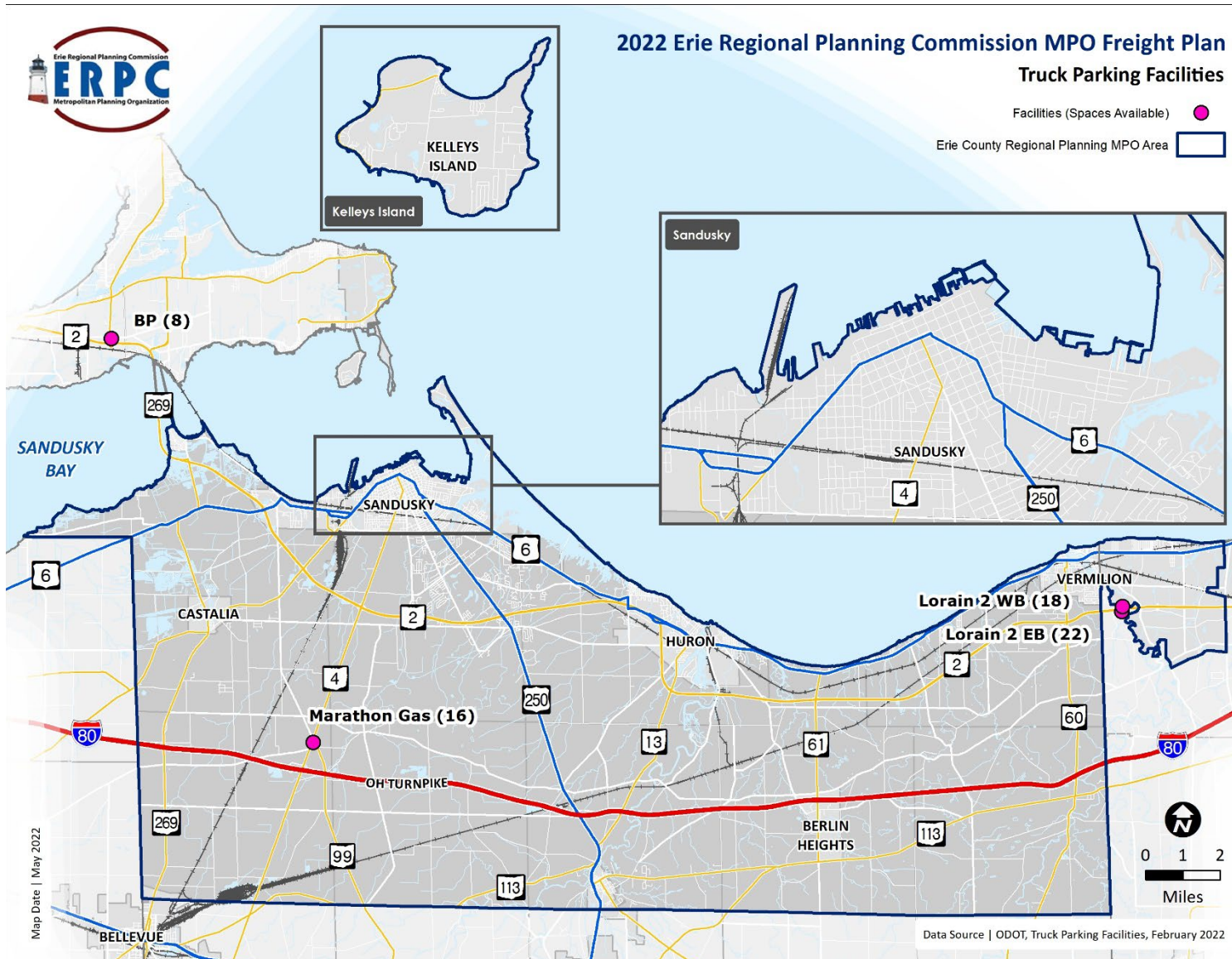
Figure 4-13: Projected LOS



Truck Parking Facilities

The ODOT Truck Parking Study identifies the location and availability of truck parking statewide. It establishes a process for truck parking issue prioritization that will be used as the framework for evaluating the ERPC freight issues in the development of the freight plan. This will consider potential capacity solutions, information technology solutions, and policies following the framework in the ODOT study. The ODOT Truck Parking Study can be found [here](#).

Figure 4-14: Truck Parking Facilities



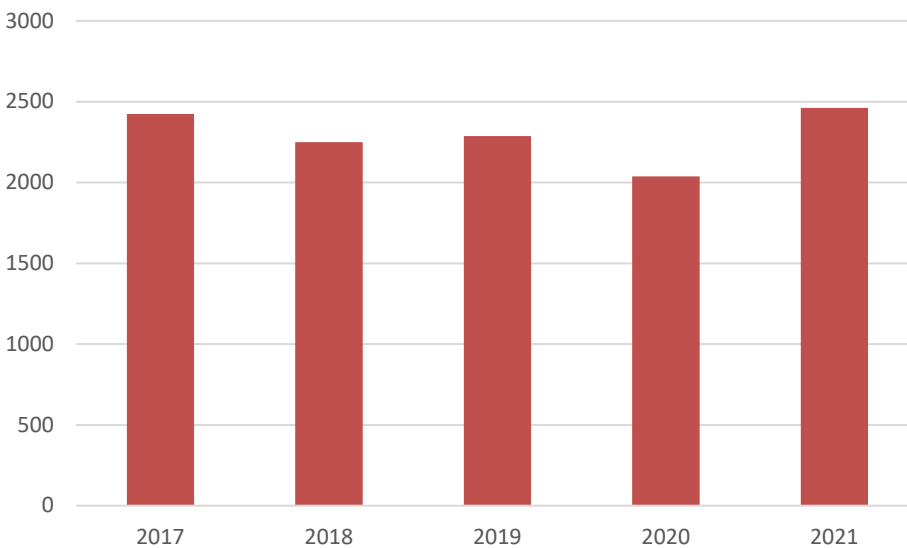
Safety

Safety data were collected from the ODOT GIS Crash Analysis Tool (GCAT) for the period 2017-2021 and mapped showing Crashes by Severity and Truck Crashes by Severity. Figure 4-15 shows all crash counts by year and Figure 4-16 maps all crash locations by severity. Figure 4-17 shows total truck crash counts by year and Figure 4-18 maps truck crash locations by severity.

All Crashes

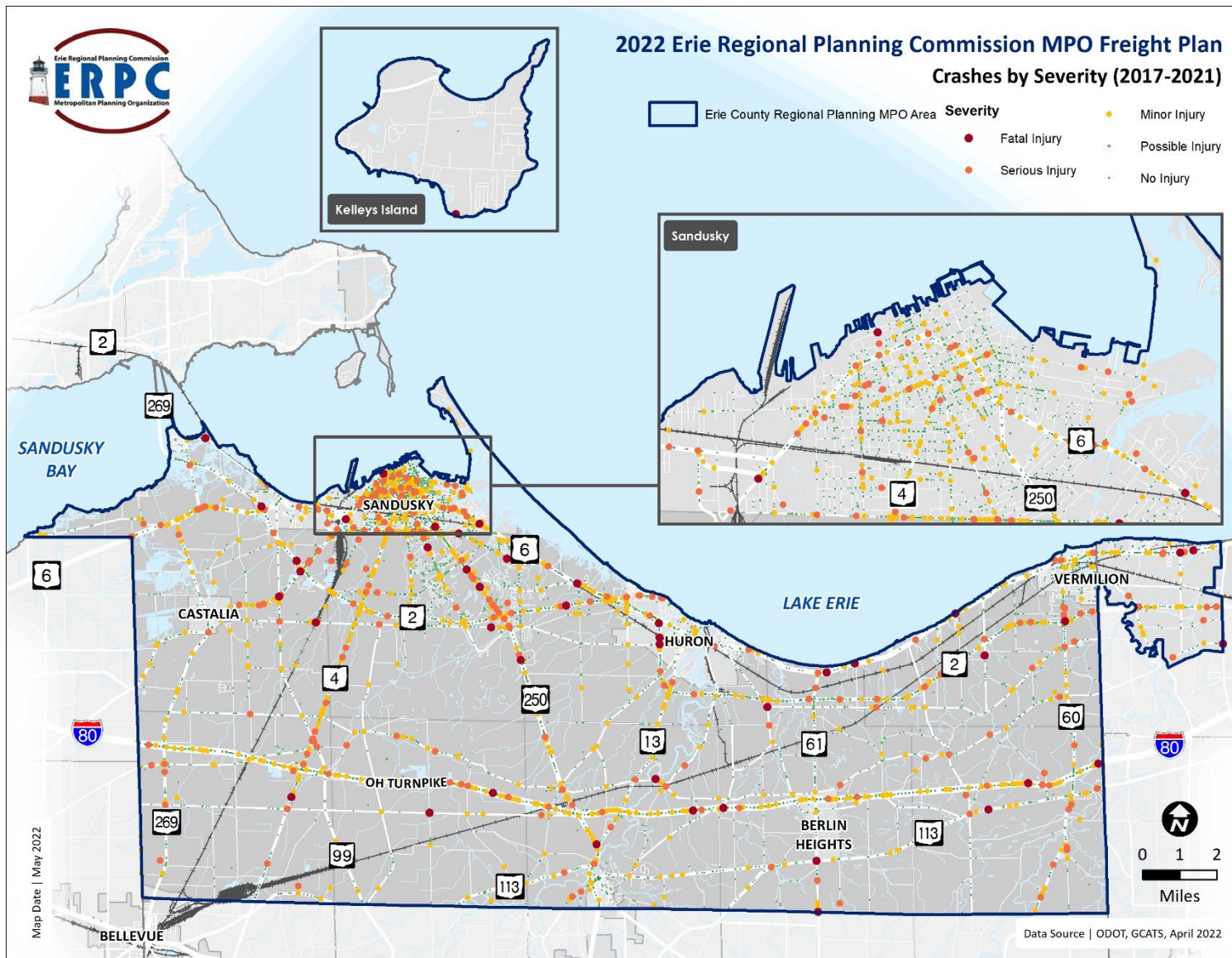
- Crash counts per year over the 5-year period ranged from approximately 2000 to 2500. The highest crash count was 2,461 in 2021. The lowest crash count was 2,038 in 2020, during the first year of the COVID-19 pandemic when overall traffic volumes dipped.
- Crash locations are more concentrated in the Sandusky area where the road network is denser.

Figure 4-15: Total Crashes, 2017-2021, ERPC MPO Area



Source: ODOT, GCAT, April 2022

Figure 4-16: Crashes by Severity



Truck Crashes

A total of 984 truck crashes occurred within a 5-year period in the ERPC MPO area.

Truck crash counts per year over the 5-year period ranged from approximately 160 to 210 per year. The highest truck crash count was 219 in 2018. The lowest crash count was 162 in 2020, during the COVID-19 pandemic when overall traffic volumes dipped. Truck crashes have increased as truck traffic has returned to pre-pandemic levels.

- Nearly half of all truck crashes (489 of 984 crashes; 49.7 percent) in the ERPC MPO area between 2017 and 2021 occurred on the Ohio Turnpike. There is no other significant concentration of truck crashes in the ERPC MPO area.
- There were seven truck crashes resulting in fatalities during this five-year period:
 - 2 truck crash fatalities on I-80.
 - 1 truck crash fatality on SR 2 near the rail crossing in Huron.
 - 1 truck crash fatality on SR 4.
 - 2 truck crash fatalities on US 6.
 - 1 truck crash fatality on US 250.
- There were fifteen truck crashes resulting in a serious injury during this five-year period:
 - 7 serious injury truck crashes on I-80.
 - 3 serious injury truck crashes on SR 4.
 - 1 serious injury truck crash on SR 2.
 - 1 serious injury truck crash on SR 60.
 - 1 serious injury truck crash on SR 264.
 - 1 serious injury truck crash on US 6.
 - 1 serious injury truck crash on US 250.

Figure 4-17: Truck Crashes, 2017-2021, ERPC MPO

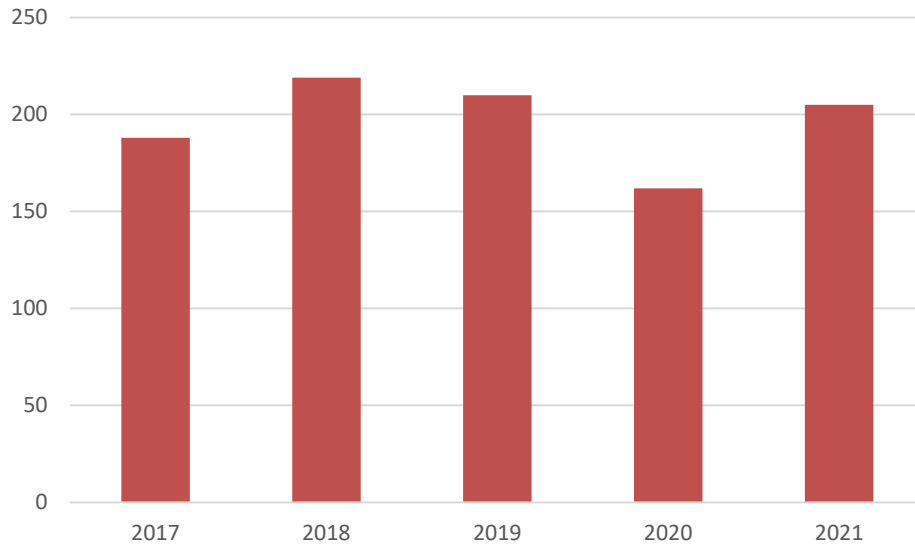
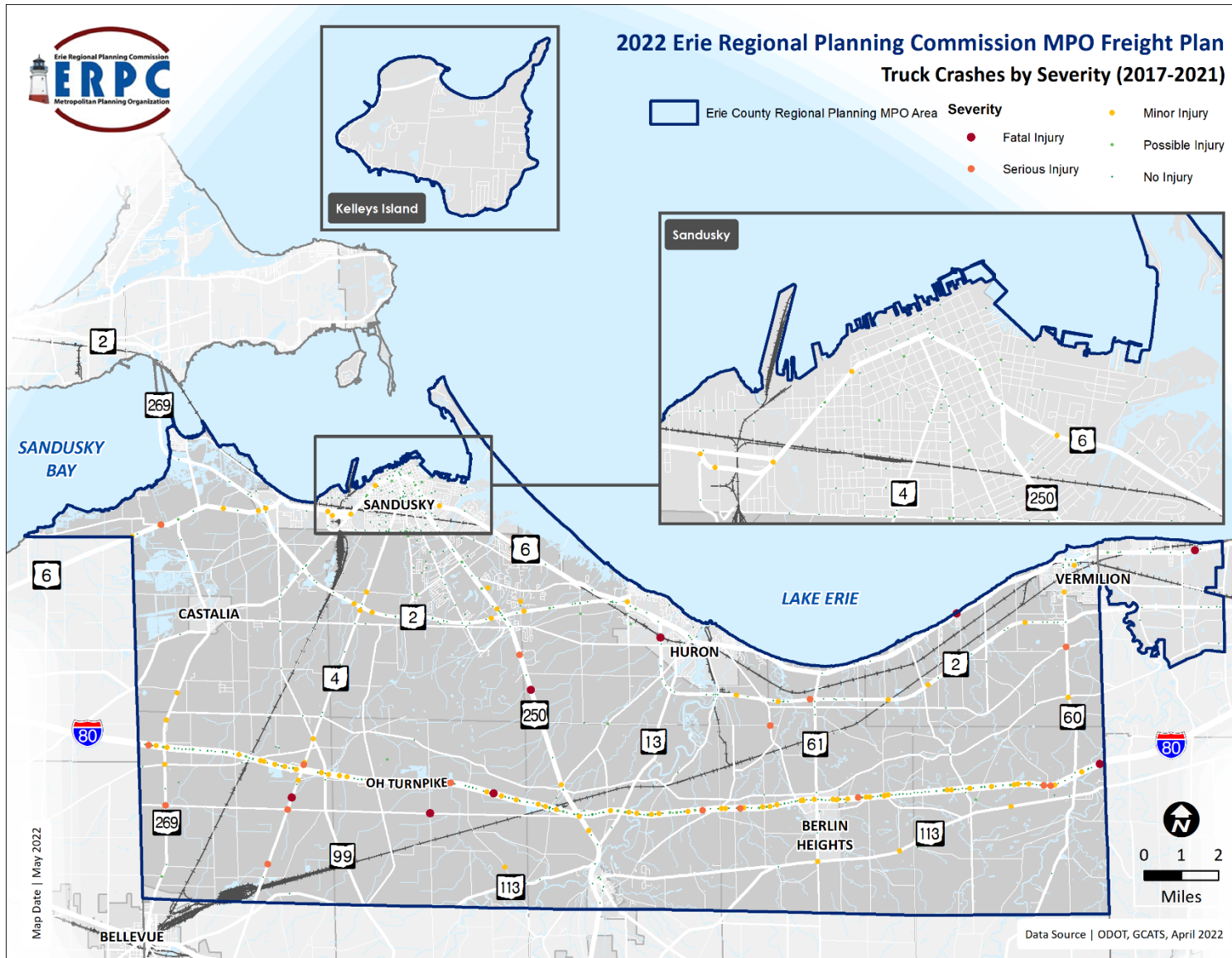


Figure 4-18: Truck Crashes by Severity



Freight Rail

Multiple rail lines crisscross much of the ERPC MPO area. Figure 4-19 depict rail lines, rail crossings and rail yards in the ERPC MPO area. As was identified in Table 3-3, the primary cargo carried by the rail lines in the ERPC MPO area are energy related materials. Other items being carried by rail include constructions materials and food and agriculture related items.

Rail Lines

There are approximately 355 miles of railroad track in the ERPC MPO area. Of those 355 miles, 294 miles (83 percent) are identified as capable of handling double-stack clearance requirements. The remaining 61 miles are identified as either single (container) or unknown as far as clearance required.

All rail lines in the MPO area are either part of the Norfolk Southern or Wheeling & Lake Erie systems. These rail lines run from east to west along the Lake Erie coastline, northeast to southwest (Vermilion to Bellevue just south of the ERPC), and from Bellevue north to Sandusky.

Amtrak's routes share track with Norfolk Southern in the ERPC MPO area.

Per the ODOT TIMS website³, the track running east-west along the shoreline facilitates 80 trains per day, while the track running from the southwest-northeast facilitates 35 trains per day. The tracks running from Sandusky to Bellevue facilitate 12 trains per day. Finally, the tracks from Huron south to the southwest-northeast line facilitate 1 train per day.

Rail Crossings

- Rail crossings are classified as at-grade and grade-separated crossings as shown in Figure 4-19 .
- There are 70 at-grade crossings and nine grade-separated crossings in the ERPC MPO area.
- FRA's Web Accident Prediction System (WBAPS) ranks 70 public highway-railroad intersections (crossings) in Erie County and the City of Vermilion by predicted collisions per year. Predicted collision are based on physical at operating conditions at the crossing and the five-year crash history at the crossing. The WBAPS report clearly states that ranking should not be interpreted as most to least dangerous. Instead, WBAPS is intended to highlight crossings for further evaluation.
 - WBAPS predicts a total of 1.78 collisions per year at all public highway railroad crossings in the ERPC MPO area.

³ <https://gis.dot.state.oh.us/tims/map?center=-82.5815544755257,41.35974208174891&level=11&visiblelayers=Roadway%20Information:-1%7CProjects:-1%7CEnvironmental:-1%7CBoundaries:-1%7CAssets:14>

- Sixty-six crossings are located in Erie County and the remaining four crossings, in the Lorain County portion of the City of Vermilion.
- The Perkins Avenue–Norfolk-Southern crossing in Sandusky has the highest predicted collision value at 0.20 collisions per year at this crossing, followed by the Vermilion Road–Norfolk-Southern crossing in Vermilion (0.09 collisions per year) and Ceylon Road–Norfolk-Southern crossing in Shinrock (0.08 collisions per year).
- Other crossings ranked among the top 10 include:
 - Williams Street–Norfolk-Southern crossing in Huron (0.08 collisions per year).
 - Mills Street–Norfolk-Southern crossing in Sandusky (0.07 collisions per year).
 - Bogart Road at Old Railroad Road–Norfolk-Southern crossing in Margareta Township (0.06 collisions per year).
 - River Road–Norfolk-Southern crossing in Huron (0.05 collisions per year).
 - Joppa Road–Norfolk-Southern crossing in Vermilion Township(0.04 collisions per year).
 - Main Street–Norfolk-Southern crossing in Huron (0.04 collisions per year).
 - Campbell Street–Norfolk-Southern crossing in Sandusky (0.04 collisions per year).

Rail Yards

- There are four rail yards in the ERPC MPO area:
 - The Triple Crown Rail Intermodal Facility is located along Tiffin Avenue and operated by Triple Crown Services, a subsidiary of Norfolk-Southern. Triple Crown Services moves freight via its RoadRailer® system—hybrid trailers that function both as a road trailer and a rail car.
 - One rail yard west of the Amtrak Station in Sandusky.
 - One rail yard along River Road in Huron.
 - Moorman (formerly Bellevue) Rail Yard along SR 4 occupies a 620-acre site along the border between Erie and Huron counties. The yard is used to classify and sort rail cars from five Norfolk-Southern routes serving Chicago, Kansas City, New Jersey, New England, Detroit, and Columbus, Ohio, and points south.

Water Ports

There are two commercial water ports located within the ERPC MPO area. The first of these is the Sandusky Port which includes the Sandusky Coal Port, located in Sandusky Bay at the tail end of the Norfolk Southern line running from Bellevue, and the Jackson Street Pier. The second port is where the Huron River meets Lake Erie, serves the Carmeuse Lime & Stone Mine, and includes two turning basins. Figure 4-20 depicts the locations of these ports as well as airports and marinas, including those near the Erie County line.

Navigable Waterways

The primary navigable waterways include Lake Erie, Sandusky Bay, the Huron River, and the Vermilion River.

Active Ports

As noted above, the ports in the ERPC MPO area are located in Huron and Sandusky. The latter is an intermodal point for coal shipments (rail to waterborne transport). The port in Huron transports limestone via truck with a nearby channel for waterborne transport.

According to worldportsource.com⁴, the Port of Sandusky, Pier 3 is used to ship coal via Norfolk Southern Railway, which has nearby tracks with capacity for up to 100 tons. In addition, there is a storage area nearby for up to 7,000 tons of coal. Additional information from the Norfolk Southern website indicates that the facility “accommodates a maximum vessel length of 1,000 feet and overall loading capacity of 50,000 net tons. Storage capacity of 875,000 tons is available with reclaimed coal and railcars loaded to vessel simultaneously. The facility has an annual throughput capacity of seven million tons.”⁵

According to worldportsource.com⁶, parts of the Port of Huron is owned by Norfolk Southern Corporation, which has nearby tracks and receives iron-ore and limestone shipments. Nearby storage areas can hold up to 500 thousand tons of iron-ore and 250 thousand tons of limestone.

⁴ http://www.worldportsource.com/ports/commerce/USA_OH_Port_of_Sandusky_3620.php

⁵ <http://www.nscorp.com/content/nscorp/en/shipping-options/coal/transload-facilities/sandusky-dock-sandusky-oh.html>

⁶ http://www.worldportsource.com/ports/commerce/USA_OH_Port_of_Huron_3588.php

Aviation

As depicted earlier in Figure 4-20, two small airports are located within the ERPC MPO area: Hinde Airport, just west of Huron, and Ortner Airport, located approximately 15 miles southeast of Huron.

Airports

Both Hinde and Ortner are small general aviation airports that are privately-owned, public-use facilities. According to data from the USDOT Bureau of Transportation Statistics⁷, no air cargo activity occurs at these facilities.

The Federal Aviation Administration's Form 5010 Airport Master Record reports that in a 12-month period from August 2019 to July 2020 Hinde Airport had 1,800 local aircraft operations and 550 itinerant aircraft operations.⁸

The Federal Aviation Administration's Form 5010 Airport Master Record also reports that in the same period, Ortner Airport had 10,000 local aircraft operations and 100 itinerant aircraft operations.⁹

Other nearby airports include Erie-Ottawa International Airport at Carl R. Keller Field (also known as Port Clinton Airport) and Huron County Airport. According to USDOT Bureau of Transportation Statistics, this site also does not have any commercial freight activity. However, a discussion with the director of the Erie-Ottawa International Airport revealed that Griffing Charters¹⁰ located at the airport does provide service to the islands of Lake Erie, including US Mail and some freight during the winter months. However, specific data is not available regarding tonnage and value.

The Federal Aviation Administration's Form 5010 Airport Master Record reports that in a 12-month period from November 2019 to October 2020 Erie-Ottawa International Airport had 25,000 local aircraft operations, 1,000 itinerant general aviation aircraft operations, and 14,000 air taxi/charter aircraft operations.¹¹

Kelleys Island Municipal Airport is owned and operated by the Village of Kelleys Island. It is a public use airport with a 2,200-foot-long runway. In a 12-month period from August 2020 to September 2021, the airport had about 25,000 aircraft operations.¹² The previously mentioned Griffing Charters also operates at the Kelleys Island providing local freight and mail services.

⁷ https://www.transtats.bts.gov/DL_SelectFields.aspx?gnoyr_VQ=FIM&QO_fu146_anzr=Nv4%20Pn44vr45

⁸ <https://www.airportiq5010.com/5010Web/dashboard/basedaircraft> (88D)

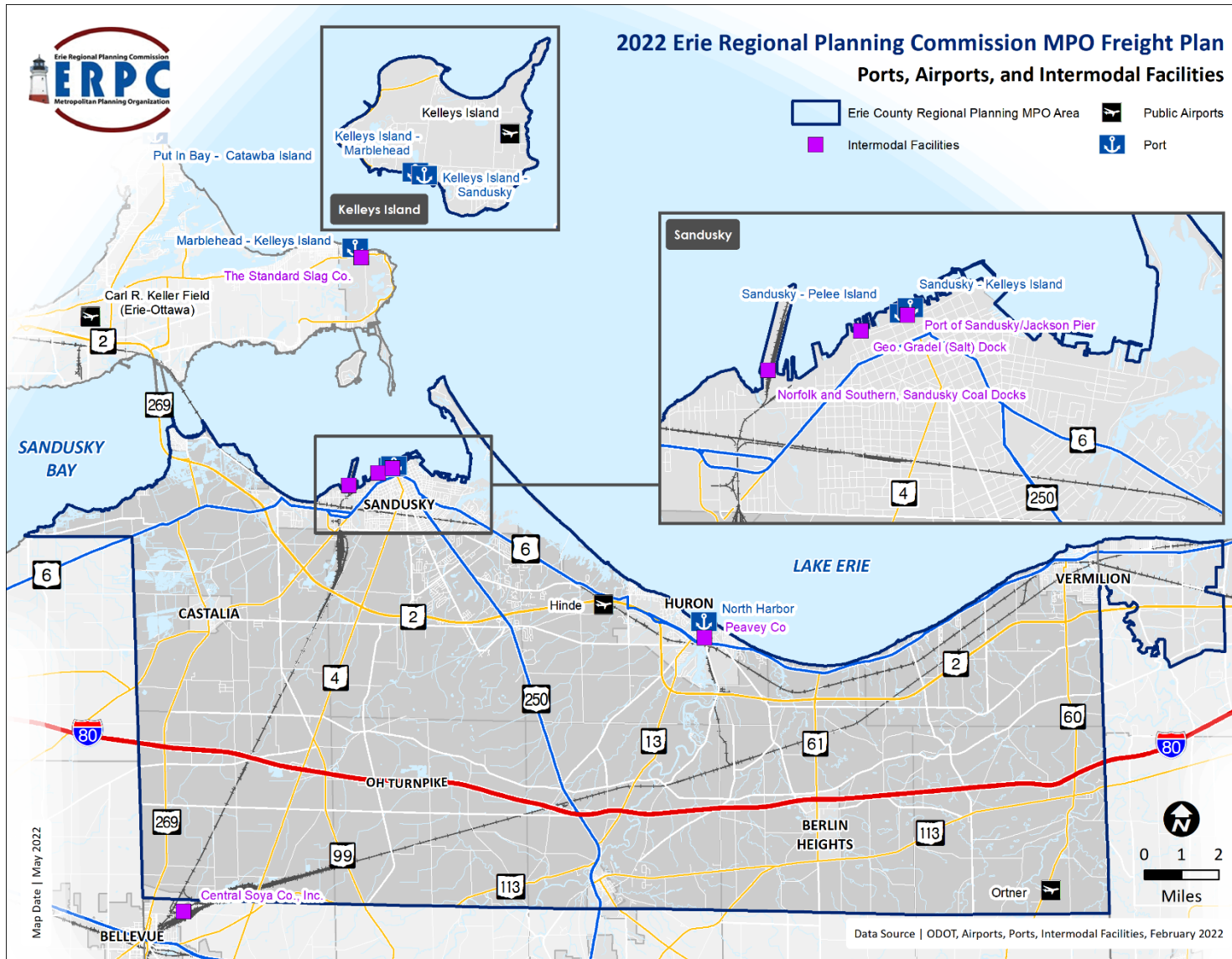
⁹ <https://www.airportiq5010.com/5010Web/dashboard/basedaircraft> (I64)

¹⁰ <https://www.flygriffing.com/charter>

¹¹ <https://www.airportiq5010.com/5010Web/dashboard/basedaircraft> (PCW)

¹²

Figure 4-20: Ports, Airports, and Intermodal Facilities



Multimodal and Intermodal Facilities

Multimodal facilities, such as the Port of Sandusky and the Port of Huron, are served by Norfolk Southern to move goods between port, rail, and trucks. In addition, the Triple Crown Intermodal Rail Yard moves goods from truck to rail and vice versa. There is minimal intermodal activity at the airports. Intermodal connections are an important focus for freight planning and will be further considered in the Plan development phase.

Planned and Programmed Projects

In the MPO’s 2045 Long Range Transportation Plan, adopted in 2020, there are 35 projects that will help freight mobility, as shown in Table 2 and Table 3. Table 2 shows 15 roadway expansion and Table 3 shows 20 roadway preservation projects. They include a range of projects including intersection improvements, roadway widening projects, safety improvements, roadway realignments, access management, and preservation projects. Timeframes identified range from short-term projects (within 10 years) to long-term projects (20+ years). Planning level cost estimates range from \$350,000 to approximately \$29 million. The majority of the projects are identified as planned, with the exception of the intersection improvements at West Strub Road (Table 3, No. 18) which has been completed, and the US 6 Corridor Improvements (Table 2, No. 13), SR 4 Safety Improvements (Table 3, No. 3), the roundabout at SR 4 at SR 99 (Table 3, No. 7), the Sunnyside Road preservation (Table 3, No. 14), the Water Street preservation and sidewalk project (Table 3, No. 16), and the Perkins Avenue project (Table 3, No. 19) which are all currently in design. These projects represent 75% of expansion projects and 50% of preservation projects identified within the ERPC MPO 2045 LRTP.

Table 2: Planned and Programmed Expansion Projects, ERPC MPO 2045 LRTP

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule (from Year 2020)	Planning Level Cost Estimate
1	Alternative roadway alignment to Cedar Point	From US250 to Cedar Point on a new alignment roughly parallel to and on the west side of Pipe Creek	New roadway alignment-Length = approximately 1.7 miles	Long-term project (20 + years)	N/A
2	3-lane roadway expansion (add middle turn lane)	Perkins Avenue	Between US250 and Mall Boulevard- Length = 0.5 miles	Long-term project (20 + years)	\$2,000,000
3	Addition of middle turn lane (5-lane roadway expansion)	Perkins Avenue	Between US250 and Old Railroad Road - Length = 2.1 miles	Long-term project (20 + years)	\$8,000,000
4	Ferry Service	Service from Sandusky, Vermilion, and Marblehead to Cedar Point and the Islands		Mid long-term project (15 to 20 years)	\$5,000,000

No.	Type of Roadway Expansion Project	Project Roadway	Project Limits and Length	Implementation Schedule (from Year 2020)	Planning Level Cost Estimate
5	3-lane roadway expansion	SR4	Between SR2 and I-80/90 - Length = 4.6 miles	Mid long-term project (15 to 20 years)	\$16,000,000
6	3-lane roadway expansion	SR4	Between I-80/90 and Erie/Huron County Line - Length = 4.1 miles	Long-term project (20 + years)	\$14,500,000
7	New East-West Road Connection	Near Quarry	Between US250 and Columbus Avenue - Length = approximately 0.8 miles	Long-term project (20 + years)	\$3,500,000
8	New East-West Road Connection	Across NASA Property, Plum Brook Research Station	Between US250 and SR4 - Length = approximately 5.0 miles	Short term project (within 10 years)	N/A
9	Grade Separation	At Bogart Road and railroad crossing in Margareta Township	Length = approximately 1,200 feet of structured roadway	long-term project (20 + years)	N/A
10	Grade Separation	At Mason Road and railroad crossing in Margareta/Groton Townships	Length = approximately 1,200 feet of structured roadway	long-term project (20 + years)	N/A
11	Grade Separation	At SR99 and railroad crossing in Oxford Township	Length = approximately 1,200 feet of structured roadway	long-term project (20 + years)	N/A
12	Grade Separation	At SR61 and railroad crossing Berlin Township	Length = approximately 1,200 feet of structured roadway	long-term project (20 + years)	N/A
13	Implementation of US 6 Corridor Study recommendations	US6	Between Sycamore Line Road and Rye Beach Road - Length = 6.0 miles	Midterm project (10 to 15 years)	\$28,925,830
14	3-lane roadway expansion	Perkins Avenue	Between US6 and Mall Boulevard - Length = 2.5 miles	Long-term project (20 + years)	\$6,500,000
15	New interchange on SR2	SR2	Between SR61 and SR60 - Length = 3,500 feet	long-term project (20 + years)	N/A

Table 3: Planned and Programmed Preservation Projects, ERPC MPO 2045 LRTP

No.	Type of Roadway Preservation Project	Project Roadway	Project Limits and Length	Implementation Schedule (from Year 2020)	Planning Level Cost Estimate (\$)
1	Intersection improvements	US 6/Cleveland Road at Center Street	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	500,000*
2	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)	1,100,000
3	SR 4 Safety Improvements	SR4	Between Perkins Avenue and Columbus Avenue - Length = 1.14 miles	Short term project (within 10 years)	1,540,300
4	Resolve roadway alignment issues	SR113	At Mason Road - Length = 1,000 feet from each leg of the intersection	Midterm project (10-15 years)	500,000
5	Resolve roadway alignment issues	SR113	At River Road/Berlin Street - Length = 1,000 feet from each leg of the intersection	Midterm project (10-15 years)	600,000
6	Resolve roadway alignment issues	SR113	At SR61 (South) - Length = 1,000 feet from each leg of the intersection	Mid-long-term project (15 - 20 years)	600,000
7	Intersection improvements - Roundabout	SR 4 at SR 99	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	2,300,000
8	Intersection improvements	SR 101 @ Bardshar Road	At intersection - Length = 1,000 feet from each leg of the intersection	Mid-long-term project (15 - 20 years)	600,000
9	Intersection improvements	W. Lucas Street at S. Washington Street in Castalia	At intersection - Length = 1,000 feet from each leg of the intersection	Mid-long-term project (15 - 20 years)	850,000

* Indicates the MPO contribution toward the US 6/Cleveland Road at Center Street Intersection Improvement project.

No.	Type of Roadway Preservation Project	Project Roadway	Project Limits and Length	Implementation Schedule (from Year 2020)	Planning Level Cost Estimate (\$)
10	Intersection improvements	Perkins Avenue and Caldwell Street	At intersection - Length = 1,000 feet from each leg of the intersection	Mid-long-term project (15 - 20 years)	600,000
11	Intersection improvements	US 250 at Huron Avery Road	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	600,000
12	Intersection improvements	Mason Road at Kelley Road	At intersection - Length = 1,000 feet from each leg of the intersection	Short term project (within 10 years)	600,000
13	Intersection improvements	SR 269 at Portland Road	At intersection - Length = 2,000 feet from each leg of the intersection	Midterm project (10-15 years)	600,000
14	Preservation of existing 2-lane road	Sunnyside Road	Liberty Avenue to North Ridge Road = approximately 2.7 miles	Short term project (within 10 years)	2,250,000
15	Preservation of existing 2-lane road	West River Road	Liberty Avenue (US 6) to Vermilion Corp. Line Length = 1.5 miles	Short term project (within 10 years)	900,000
16	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)	600,604
17	Preservation of existing 2-lane road and sidewalk repair/installation	Main Street in Castalia	From S. Washington St. to Lowell Street-Length = approximately 1,000 feet	Short term project (within 10 years)	350,000
18	Intersection improvements	W. Strub Road	Lengthen westbound left turn lane from US 250 Northbound	Short term project (within 10 years)	100,000
19	Preservation of existing 2 lane road and sidewalk installation	Perkins Avenue	From east of US 250 to Remington Avenue-Length = approximately 0.50 mile	Short term project (within 10 years)	837,844
20	Access Management Planning Study	Through downtown Milan into Huron County	Along SR 601 through Milan into Huron County - Length = 1.3 miles	Midterm project (10-15 years)	50,000



Appendix 2

Public Stakeholder Report Findings

November 2022

ERPC MPO Freight Plan

Public Sector Stakeholder Outreach

Prepared for:

Erie Regional Planning Commission
Metropolitan Planning Organization

Prepared by:



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Outreach Findings

During Phase 1 of the ERPC MPO Freight Plan, the consultant interviewed public sector stakeholders for an initial identification of freight planning issues and opportunities. Representatives of Erie County, City of Sandusky, Perkins Township, City of Huron, City of Vermilion, and Groton Township participated. Interviews were documented, as attached.

This report identifies the common themes or perspectives from the public sector interviews. The ideas have been organized into three categories:

- Identified Freight Problems and Issues in the Erie Region.
- Freight and Other Regional Opportunities.
- Potential Freight Related Projects in the Erie Region.

The results of the stakeholder interviews will be incorporated as a starting point into the freight plan's development during Phase 2 and considered along with the findings of the regional freight profile. Further analysis will be conducted to identify current freight planning issues and obstacles in the Erie Region as well as future opportunities. The private sector stakeholders will be engaged in a freight summit during Phase 2. The summit will help steer the plan, its goals and strategies, and recommendations, and identify opportunities for partnerships with the public sector.

Identified Freight Issues and Problems in the Region

Safety and Rail-Freight Connectivity, among all Modes of Transportation

- Safety concerns are related to blind curves and sight lines at intersections on roadways and rail crossways. Conflicts and crashes in the region are often related to driver performance.
- Improve northern and southern freight rail and truck connectivity and coordinate traffic flow.
- Clarify and designate freight routes along railways, highways, and waterways and designate transition areas.

Government Fragmentation and Economic Impacts within the Freight Industry

- The Chamber of Commerce and other economic development agencies need to be involved in rail freight planning initiatives through a common point of contact.
- Due to the pandemic, there are employee shortages and increasing fuel prices, which is impacting manufacturing and distribution activity.
- There are funding shortages in freight planning, a lack of truck drivers, and other employee shortages affecting projects and timely deliveries.

Public Sector Interviews

Erie County
City of Huron
City of Sandusky
City of Vermilion
Groton Township
Perkins Township

Inconsistent Land Uses and Needed Infrastructure Investments

- Land use planning/zoning and freight access to commercial and industrial areas are uncoordinated.
- Similarly, land use and freight access around waterways and ports needs to be compatible with economic, environmental, and recreational interests.
- There is no regional land use plan for locating manufacturing and distribution centers along freight corridors and serving the corridors with reliable water and sewer infrastructure.

Freight and Other Regional Opportunities in the Region

Designate Growth Areas and Consistent Land Uses along Freight Corridors and Target Economic Development

- Support opportunities for growth through better access to designated areas. Coordinate the land use controls for preferred types of development at specific locations. Incorporate environmentally sensitive guidelines and design standards.
- Target water and sewer infrastructure improvements to designated growth areas that are designated for freight economic development.
- Consider the feasibility of designating quiet zones in neighborhoods, cities, and towns that have rail or truck freight traffic.
- Foster public-private partnerships in the freight industry and look for opportunities for coordination between government agencies and private industries.
- Develop methods to share information among freight planning agencies and private companies in support of informed and equitable decisions.
- Integrate and communicate freight planning initiatives with rural communities to support economic development.

Encourage Smart Transportation Improvements and Investments

- Synchronize freight deliveries to help minimize traffic and to be more efficient and improve real data sharing and technology between agency partners.
- Improve multi-modal connectivity at targeted locations to help with coordinated freight traffic flow.
- There is interest in exploring the value of a congestion management system and intelligent transportation system for freight and coordinate with all modes of transportation.

Potential Freight-related Projects in the Region

Listed by mode but not necessarily exclusive

Rail

- Vermilion's freight train loop detector systems sometimes fail due to cold temperatures and other issues. When the loop system breaks, it blocks rail traffic as well as vehicular traffic in

town. There is interest in converting the loop system to a radar system to be more efficient, safer, and quieter.

- There is a rail connector for the northern and southern tracks west of the City of Vermilion. At the connector area, there is often confusion and lack of coordination causing a backlog of rail traffic. As a result, the rail cars block the vehicular traffic at the crossways.
- Coordinate the different rail lines and traffic flow, specifically at the connector area west of the City of Vermilion.
- There are railroad crossing delays on SR 99 just south of SR 113. There is a need for a warning light and advance travel notifications when the gates are down at the crossway.

Trucks/Roads

- The location of the two Ohio Turnpike interchanges limits access and connectivity to the City of Cleveland.
- At the Sunnyside Exit on Highway 90, there is only a southbound exit. A northbound exit is needed for easier access to Vermilion.
- Assess traffic volumes on SR 4 North of Perkins Avenue in Sandusky and identify an alternative freight route(s).
- Butler Street and Superior Street are the most heavily traveled truck routes in Sandusky and are in poor condition. They need to be improved.
- Widen SR 98 to three lanes to give Erie County a solid north/south truck route.
- Assess and improve roadway intersections.
 - Widen SR 4 at various intersections, particularly between Perkins Avenue and Bucyrus.
 - Improvements are needed at the intersection of SR 4 and SR 99. Many crashes have occurred at this location. A traffic circle is planned for this location.
 - Improve sight lines at the intersection of SR 4 and SR 113. There are road pitches and obtuse angles impeding sight lines.
 - Improve sight lines at the intersection of SR 269 and Strecker Road. There is a steep elevation in the road with high-speed traffic and it is a safety concern.
 - The SR 269 and Portland Road intersection has visibility concerns.
 - The intersection of SR 99 and Harris Road is a problem location near the turnpike overpass.
 - The intersection of SR 99 and Wood Road has a lot of agricultural traffic. There are deep ditches on the sides of the roads.
 - The intersection of SR 99 and Strecker Road is narrow, which creates difficult turning radii for trucks.
 - The trucks often run through the stop sign at the intersection of SR 269 and Strecker Road, which is a freight route.
- Drivers are blindly using GPS.
- Designate connectors to major arterial roadways to aid in access management.

Ports

- Improve private shipping and intermodal connectivity at the Port in Sandusky Bay.
- Designate land uses clearly along the waterfront near Sandusky and other waterfront areas and incorporate environmentally sensitive standards as well as aesthetic and design standards.
- Create clear and safe wayfinding signage for freight traffic and identify the port areas that would benefit from good signage. Make sure land uses are consistent and coordinated.
- The City of Sandusky has two unused docks; they need to be upgraded to safely accommodate active freight service, e.g., for coal and salt.

Intermodal

- The Former Triple Crown Intermodal area is unused, and there is an opportunity for a new multi-modal facility at this location. This could provide greater connectivity between Ohio, Canada, and New York.
- Create a new intermodal facility near Lake Erie providing better access to Columbus.

Stakeholder Perspectives

What perspectives or ideas would you like to be considered through the freight plan's development?

"Greater allocation of funds specific to repairing truck routes and industrial park drives, as road damage from truck traffic is far greater than passenger vehicles." Josh Snyder, City of Sandusky

What do you see as the major freight transportation problems and opportunities for our region?

"There is a lot of noise going through the City of Huron due to freight transportation. Consider Railroad Quiet Zones through the neighborhoods, towns, and smaller cities." Erik Engle, City of Huron

What are the critical issues and trends impacting freight transportation now and into the future?

"Some of the issues impacting freight transportation include supply shortages, energy and sustainability concerns, congestion, public health and safety, system performance and management, funding shortfalls, resiliency and security threats and decreasing rail freight." Erik Engle, City of Huron

What transportation improvements do you think would most benefit our region and why?

"There is a north track and a southern track that runs through Vermilion and a connector west of the City. There is some confusion between the two rail lines at the connector area, which causes blocking, slows train traffic, and blocks the rail crossways." Tony Valerius, City of Vermilion

"The price of fuel is the major impacting issue now in our economy." Tony Valerius, City of Vermilion

Implications for the Freight Plan

Freight Infrastructure

- Retailers, manufacturing companies, and freight industries are seeking safe, quick, and quality freight transportation movement from one destination to another, especially as e-commerce continues to grow, requiring close coordination and communication.
- The trucking industry requires reliable highway travel, clearly designated routes, and intermodal connections to transport goods from one mode to another. Clearly defined routes and signage are needed to create safer routes of travel, including to ports.
- Information sharing through technology and congestion management integrated within the freight industry will enhance and support efficient and safe transport of freight goods.
- Federal, state, and local funding sources and other resources are needed to assist in implementing the region's freight plan, projects, and strategies.

Freight-oriented Economic Development

- The ERPC MPO region is geographically located to support logistics coordination, freight industries, and intermodal movement of goods between Canada, the United States, Cleveland, Columbus, and Pittsburgh.
- Collaborative strategies among the public and private sectors are needed to effectively develop manufacturing and other industrial opportunities.
- Community land use and environmental regulations should be coordinated for infrastructure ready sites along freight corridors.

Attachments – Public Sector Interviews

Erie County Engineer's Office

City of Huron

City of Sandusky

City of Vermilion

Groton Township

Perkins Township

Erie County Engineer's Office

Matt Rogers, Project Engineer

March 16, 2022

1. What do you see as the major freight transportation problems and opportunities for our region?

- County highway system engineers and townships too
- Little involvement in freight transportation
- Consider truck traffic as bridge design etc.
- Uniquely placed viz Ohio turnpike and the two interchanges
- Route 2 also as major limited access with connections to CLE and beyond
- Opportunity to foster growth through easy access
- Plenty of land for development (notwithstanding land use preferences)
- Government private sector relations need to improve especially from the perspective of the private sector perceptions (relationship building to get beyond the broad-brush perceptions)
- Easy to fall into trap of thinking of area as tourism only or to an extent of not focusing on other sectors for growth and opportunities for growth (Cedar Point, etc. including greater awareness of how destinations like Cedar Point get their deliveries)
- Fragmentation of government viz townships, County and the varied functions, regional planning, hurdles to overcome potential for one stop points of contact and to have all players sit around the table

2. What transportation improvements do you think would most benefit our region and why?

- Coordination of infrastructure and interchange improvements
- Greater dialogue and exchange among infrastructure planners and providers
- Sanitary sewers and facilities to some of the locations for increased growth in freight industry, Route 4 for example
- Roads throughout the county should be able to serve freight well local all the way up to state

3. What are the critical issues and trends impacting freight transportation now and into the future?

- Truck drivers related topics
- Crashes as related to the driver performance
- Drivers more “blindly” relying on GPS (overreliance)
- Bridge that gets hit that is GPS directed
- The need for trucking and rail counterparts needs to come to the table

4. In what ways can freight mobility be improved through greater collaboration between the freight industry and the public sector, specifically transportation planning agencies?

- Promote the willingness to communicate
- Communicate the value of doing so

- Possible role for the Chambers and other business associations to promote collaboration, compare plans, discuss how regional planning can support these efforts, how to earmark some areas for development
- Information sharing

5. What other perspectives or ideas would you like to be considered through the freight plan's development?

- Not discussed/no notable response

City of Huron

Erik Engle, Planning Director; Russ Critelli, Engineer

March 30, 2022

1. What do you see as the major freight transportation problems and opportunities for our region?

- There is a lot of noise going through the City of Huron due to freight transportation. Consider Railroad Quiet Zones through the neighborhoods/smaller cities. There needs to be better coordination of incoming and outgoing rail freight and consideration of pedestrian connectivity and crossings. Sometimes there are bottle neck situations with both incoming and outgoing rail freight running simultaneously.
- Lack of direct North/South freight connectivity and limited access for trucks; only served by Rt. 4/250 as direct connection.

2. What transportation improvements do you think would most benefit our region and why?

- These are some smart transportation improvements that are needed in the Erie Region. Many coordinated infrastructure improvements should be considered including bridges, sidewalks, and pedestrian crossings over railroad right of ways incorporating pedestrian crossing guard gates.
- Connectors to major arterials to aid in access management.

3. What are the critical issues and trends impacting freight transportation now and into the future?

- Some of the issues impacting freight transportation include supply shortages, energy and sustainability concerns, congestion, public health/safety, system performance and management, funding shortfalls, resiliency/security threats, and decreasing rail freight. Some of the current trends in rail freight include: innovation in AV/drone technology, energy innovations, integrated seamless travel, street design and aesthetic enhancements, and intelligent transport systems considerations for congestion management.
- Transportation hub connections/Transit oriented development (better consideration of land use planning with mobility/freight); connected vehicle technology.

4. **In what ways can freight mobility be improved through greater collaboration between the freight industry and the public sector, specifically transportation planning agencies?**
 - There should be increased transparency with data sharing where feasible to make better informed decisions especially from a qualitative and equity perspective. The region needs to improve integration of safety through data collaboration and outreach initiatives. The region needs to expand and integrate the needs of rural communities through collaboration with the freight industry. Agencies should incorporate best outreach and public involvement strategies in planning initiatives with the freight industry and be transparent with their contacts.
 - Improvement of real time data sharing; better usage of tech/data between partners.
5. **What other perspectives or ideas would you like to be considered through the freight plan's development?**
 - Most has been covered in the Erie Region LRTP. A challenge or negative in our region is a shortage of truck drivers due to the pandemic and other economic issues.

City of Sandusky

Josh Snyder, City Engineer

March 25, 2022

1. **What do you see as the major freight transportation problems and opportunities for our region?**
 - Former (Triple Crown truck) Inter-modal on Old Railroad Road is unused, unsure why. Inter-modal from Lake Erie would seem to be an opportunity, like activating a new multi-modal facility location on the lake. This could open the area up for transporting bulk products to and from Canada, and New York. Currently we have Coal and Road (rock) Salt dedicated docks, nothing otherwise.
 - Two unused docks are adjacent to the active coal dock, overgrown but acceptable with roadways that need to be upgraded.
 - Coal is brought in and distributed via train car.
 - The City of Sandusky is the landowner.
2. **What transportation improvements do you think would most benefit our region and why?**
 - SR 4 widening at intersections, the entire length from Perkins Ave. to Bucyrus.
 - SR 98 with 3-lanes to give Erie County a solid North/South truck route. Inter-modal from Lake Erie. Activating a new multi-modal facility location on the lake. Columbus – Sandusky North South Corridor, direct route.
 - Deep open ditches apply to SR 4, rural in many areas—ditches need to be filled, widening for quicker routes, faster speeds to expedite moves north and south and from Erie County to Columbus.

3. What are the critical issues and trends impacting freight transportation now and into the future?

- Not “critical,” but in the city, we have poorly conditioned industrial park roads and truck routes.
 - Superior Street
 - Other dead end cul-de-sac concrete streets, hard to justify
- The conditions of these roads deter businesses from using them and they end up driving on non-truck routes or looking to move to invest in properties and Cities with better roads.
- Funding for industrial roads is costly with concrete roads, etc. Reconstruction is expensive with removal and rebuilding from the surface.
- Keep a focus on the condition of the industrial routes or else trucks will be using residential streets. Keep industrial roads in good condition and identify a funding source to upgrade this road.
- Huron had a proposed tenant if the road were to be upgraded. They were viewed favorably because Erie County Development Corporation supported this proposal because of approximately 100 proposed jobs in the region.

4. In what ways can freight mobility be improved through greater collaboration between the freight industry and the public sector, specifically transportation planning agencies?

- Address public relations for designated truck routes and advertising of designated truck routes county-wide. For the benefit of truck drivers and the trucking industry.
- There is a greater understanding of the impacts of truck weights and their impacts for elected officials.

5. What other perspectives or ideas would you like to be considered through the freight plan’s development?

- Allocation of funds specific to repair truck routes and industrial park drives, as road damage from truck traffic is far greater than passenger vehicles. This requires beefier pavement designs and more costly construction.
- We have Butler Street and Superior Street here, both heavily truck travelled and our roughest riding and poorest condition concrete roadways by far.

City of Vermilion

Tony Valerius, Services Director

April 5, 2022

1. What do you see as the major freight transportation problems and opportunities for our region?

- The main freight transportation problems we see in the City of Vermilion deals with the two sets of tracks that run directly through the city. The northern most tracks service approximately over 150 trains daily. The southern tracks are estimated at nearly half that. Just west of the city there is a connector between the two tracks which can cause slowing of the trains, backups and delays. These issues ultimately result in stopped trains on the tracks which closes railway crossings, sometimes for hours.
- The City of Vermilion has designated quiet zones which are controlled by loop detectors that run under the asphalt near the tracks. Loop detectors are vulnerable to damage whenever the railroad maintains their crossings. If a loop detector is hit it is the City of Vermilion's responsibility to repair the damage in order to maintain the quiet zone. We also experience loop detector problems if the outside temperature falls below freezing. These issues could be avoided if the city was able to leverage the funding to convert the three loop detectors at the crossings to radar detectors.

2. What transportation improvements do you think would most benefit our region and why?

- If the railroad would keep the trains moving through town and not stopping for hours blocking railroad crossings, it would not only improve vehicular traffic but also freight moving into the city via trucks.

3. What are the critical issues and trends impacting freight transportation now and into the future?

- Fuel prices.
- Labor shortages.
- Vermilion's Sunnyside Road exit off State Route 90 only has a southbound exit off the ramp. To provide easier access to the downtown area, adding a northbound roadway would allow freight to travel directly into the city off the highway.

4. In what ways can freight mobility be improved through greater collaboration between the freight industry and the public sector, specifically transportation planning agencies?

- Vermilion is a small city and does not have a freight planning committee. The largest issue is rail freight just passes through the City, as there are no major manufacturing plants located there. (Ford closed years ago).

5. What other perspectives or ideas would you like to be considered through the freight plan's development?

- Radar detectors would be a great improvement to the city's railroad crossings. The Radar detectors require less maintenance than loop detectors which often malfunction and block railroad crossings causing freight delays.
- It would also be helpful to add a northern ramp at the Sunnyside exit which would help the city economically.

Groton Township

Dennis Schreiner, Township Trustee

March 18, 2022

1. What do you see as the major freight transportation problems and opportunities for our region?

- Railroad crossing delays on SR 99 just south of SR113. – trains for more than 20 minutes, heading s on 99 once passed Streaker Rod ½ mile down 99 traffic has long back -ups with no turn around option – need for a light or warning that RR gates are down, advance travel information to detour. Warning device in enough time to detour.
- Intersection of SR 269 and Portland Road—elevation in the road with high-speed traffic, major problem of sight lines
- Intersection of SR 269 and Strecker Road—stop sign running on Strecker and do not see traffic –269 is a freight route out of Bellevue to Castalia—Ag traffic to grain mills and packing houses
- Intersection of SR 4 and SR 113 (in Huron County, Lyme Township) just south of the Groton Twp Line—road headed south near Erie County line, road pitches at obtuse angles, tilted road, turns of less than 90 degrees accelerating down the abyss. Sight line issues...not many fatalities – near Erie County line
- Intersection of SR 4 and Strecker Road—stop sign running with bad crashes – mostly trucks that can't stop when there is a car running
- Intersection of SR 4 and SR 99 (Traffic Circle planned for 2023 start)—obtuse angle, crashes, and T-bones, and head-ons. Slow crashes at bad intersections, Truck can't make turn and fall off road. Traffic circle planned to start at end of 23. Dennis lives about a mile from it.
- Intersection of SR 99 and Harris Road (both north and south of the Turnpike Overpass)—major problem, Harris Road intersects with 99 n and s of the turnpike overpass. Turnpike is elevated about 25 feet, very narrow overpass. Traffic sight line problems with stone trucks from the Quarry and stopping problems for the trucks. Lifeline helicopters frequent landings.
- Intersection of SR 99 and Wood Road—at other end of Wood Road, Agricultural supplies business, Ag traffic, farmers picking up at Wensic Farm and difficulty negotiating the narrow intersections with deep ditches on 3 of the sides, with traffic stoppages. Head on including semis.

- Intersection of SR 99 and Strecker—similar narrow intersection difficult to negotiate the intersection, stopped at RR crossing, left and right turn problems with tight intersections.
 - Amount of traffic on SR 4—volume of traffic on SR 4 with Cedar Point North of Sandusky—turnpike Traffic accessing Cedar Point—4 as an alternative to traffic to SR 250 (which is an awesome road).
- 2. What transportation improvements do you think would most benefit our region and why?**
- Widen SR 4 – entire length between turnpike and SR 2 – 5 miles
 - Short term—widen intersections 113 and 4 and Strecker Road and SR 4
 - Problem intersections with multiple stop signs and some stop lights with visibility problems – 269 and Portland (shave the elevation north of 269 or elevate the intersection)
- 3. What are the critical issues and trends impacting freight transportation now and into the future?**
- Zoning and widening of Portland Road and SR 4 has occurred as a big help with light and turn lanes—helps big stone trucks
- 4. In what ways can freight mobility be improved through greater collaboration between the freight industry and the public sector, specifically transportation planning agencies?**
- Not discussed/no notable response
- 5. What other perspectives or ideas would you like to be considered through the freight plan’s development?**
- Not discussed/no notable response

Perkins Township

Angela Byington, Community Development Director

March 22, 2022

- 1. What do you see as the major freight transportation problems and opportunities for our region?**
- Making sure freight has access to commercial corridors/big box outlets
 - 250, Perkins Ave
 - Route 4
 - All as important freight assets
 - Location opportunity yet no present freight issues
- 2. What transportation improvements do you think would most benefit our region and why?**
- Route 4 as a possibility for more improvements, ditches and utilities, capacity may be ok
 - Reduction of other traffic to keep highway open

- No seen need for capacity adds now such as interchanges, etc.
 - If rail increases and Old RR would get greater use, it might need to be improved
3. **What are the critical issues and trends impacting freight transportation now and into the future?**
- Employee shortages and associated backlogs impact on companies manufacturing and distribution activity
 - Post Covid and full capacity may have impacts to monitor
4. **In what ways can freight mobility be improved through greater collaboration between the freight industry and the public sector, specifically transportation planning agencies?**
- Local – private shipping through port at Sandusky Bay—associated routing for local jurisdictions to more accommodating
 - Drop off back to highway location, signing, etc.
 - Understanding the routes and possibility for better routing
 - Land use issues on the water, may be different locations for storing coal, etc. To continue to redevelop the waterfront in Sandusky
5. **What other perspectives or ideas would you like to be considered through the freight plan's development?**
- Overall, no issues, logistics seem to be working well in Perkins or traffic issues, etc.



Appendix 3

Freight Planning Workshop Report

February 2023

Erie Regional Planning Commission Regional Freight Planning Workshop Report

Prepared for:

**Erie Regional Planning Commission
Metropolitan Planning Organization**

In association with

**Erie County Chamber of Commerce
Greater Sandusky Partnership**

Prepared by:



February 2023

Workshop Purpose

The Erie Regional Planning Commission (ERPC) and Metropolitan Planning Organization (MPO) hosted a freight planning workshop on February 9, 2023 to solicit input on its upcoming regional freight plan. The Greater Sandusky Partnership and Erie County Chamber of Commerce co-hosted the workshop at the Erie County Office Building in downtown Sandusky.

Stakeholders from the public and private sectors were invited via email. Efforts were made to leverage professional networks within the Chamber. Attendees primarily represented public sectors organizations.

Report Organization and Use

This report documents the major discussion points following the Freight Data Briefing (available on the ERPC website) and perspectives shared by attendees during the Stakeholder Input portion of the workshop agenda:

- Framing a Freight Policy (Vision, Priority Goals, Strategic Objectives)
- Identifying Potential Freight Priority Investments (Projects)
- Developing an Implementation Approach
- Who Else Should be Involved

Further input from workshop attendees and others is welcome. Attendees are encouraged to share the report with their professional networks who work in freight movement. Space is provided after section of results for typed or handwritten feedback. Email the file or a scanned page of hand-written notes to Michelle Brummer of our consultant team at mbrummer@gfnet.com by March 17, 2023 for the planning team's consideration.

Attendees

Tim King, Director, Erie Regional Planning Commission and Metropolitan Planning Organization

Joe Roman, GSP and Chamber, jroman@eriecounty.com

Keith Chase, Strategic Planner/Facilitator, Gannett Fleming, Inc.

Scott Ockunzzi, ODOT District 3, scott.ockunzzi@dot.ohio.gov

Randy Lane, ODOT Central Office, randy.lane@ohio.gov

Nate Vogt, ODOT Central Office nathaniel.vogt@dot.ohio.gov

Abbey Bemis, Executive Director, Erie County Economic Development Corporation, director@eriecountyEDC.org

Carrie Beier, Superintendent, Erie County Board of Development Disabilities , cbeier@eriecbdd.org

James Stacey, System Administrator, Sandusky Transit System, jstacey@cityofsandusky.com

Arin Blair, Chief Planner, City of Sandusky, ablaire@cityofsandusky.com

Steve Poggiali, City of Sandusky, s.poggiali@ci.sandusky.oh.us

Tony Valerius, City of Vermilion, tonyvalerius@vermilion.net

Kevin Chambers, Managing Director of Logistics and Distribution, Jobs Ohio, chambers@jobsOhio.com

Tim Derickson, Jobs Ohio, derickson@jobsOhio.com

Nick Katsaros, Regional External Affairs, Ohio Edison, A First Energy Corporation



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Framing a Freight Policy (Vision, Priority Goals, Strategic Objectives)

Transportation plans are built on policies or strategic directions to manage systems at a high level and capital improvements to improve the system. We'll discuss policy priorities first. **What policies should the Erie County Freight Plan include or emphasize?**

The results will provide an initial idea as to what topics are key a strategic direction for the freight plan. These perspectives are invaluable for framing draft goals and objectives for further vetting.

Attendees were asked to review the listed policy topics; suggest other policy priorities; rank all policy topics from 1 to 9 (or more); and comment on the potential positive and/or negative impacts of such a policy.

Results in Brief

Policy Topics/Emphasis	Average Rank; 1, most important	Potential Impacts
Promote improved land use and freight transportation planning/coordination.	2.4	Best for regional collaboration, economic development, best outcomes
Promote (the region's) multimodal and intermodal capabilities.	2.8	Unique in the region (part of the state) with lots of intermodal balance
Identify and program freight capacity/congestion relief improvements.	3.0	Poor outcome for walk/bike mobility
Identify, prioritize, and implement freight safety improvements.	3.4	Win-Win! (all stakeholders, including the public, of course)
Promote information technology applications for freight movement.	4.1	Need more information to understand impact
Integrate/Communicate freight planning initiatives and status.	4.7	Regional collaboration
Collaborate and share information (as appropriate) among freight planning agencies and freight industry (shippers and carriers) in support of informed decisions.	4.8	Needed communication presently lacking, public education will serve this purpose
Expand public understanding of freight movement, benefits, etc.	5.4	For all audience including private and public

Policy Topics/Emphasis	Average Rank; 1, most important	Potential Impacts
Develop locations for additional truck parking.	5.5	Poor land use, economic development

Participants suggested additional policy priorities that will be considered in shaping draft goals and objectives (or strategic initiatives):

1. Technical assistance for freight plan production (i.e. help the airport create a freight strategy plan)
2. Increase warehouse capabilities in the county
3. Refine stakeholder groups to ensure optimum participation
4. Establish more partnerships with private entities
5. Increase economic development investment in freight-related companies

Expand our shared understanding with additions and comments:

-
-
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Identifying Potential Freight Priority Investments (Projects)

Freight movement can become more efficient and safer through infrastructure and operations improvements. This list of proposed improvements and improvement ideas, organized by mode, was drawn from the limited stakeholder input received in 2022. **What improvements to infrastructure or policy would help freight flow more efficiently throughout Erie County?**

Results in Brief

Of the six subcategories, intermodal facilities are identified as the most needed freight priority investment. Rail and port-related projects also received a lot of attention.

Rail	Results
R-1. Convert the freight train loop detector system to a radar system to be more efficient, safer, and quieter.	Coordinating rail and vehicular traffic, specifically at the connector area west of the City of Vermilion to reduce rail traffic backlog and blocked vehicular traffic (R-2), is considered the #1 rail improvement need.
R-2. Coordinate the different rail lines and traffic flow, specifically at the connector area west of the City	



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of Vermilion to reduce rail traffic backlog and blocked vehicular traffic	Two participants expressed confusion regarding the terminology “freight train loop detector system”. In addition to the listed improvements, participants also suggested project needs such as blocked crossings and intersections (especially SR99) and solutions such as grade separation.
R-3. Add warning light and advance travel notifications at the railroad crossing on SR 99 just south of SR 113.	
Ports	Results
P-1. Improve private shipping and intermodal connectivity at the Port in Sandusky Bay.	Improving private shipping and intermodal connectivity at the Port of Sandusky Bay (P-1) was ranked as the most needed port improvement project. Designating land uses clearly along the waterfront near Sandusky and other waterfront areas; incorporating environmentally sensitive standards as well as aesthetic and design standards (P-2); and upgrading the two unused docks in the City of Sandusky to safely accommodate active freight service, e.g., for coal and salt (P-4) were also popular improvement projects. For P-2, the benefits should include regional stability and overall economic growth. One participant pointed out that it’s critical to secure as much waterfront for public access as possible. When considering wayfinding signage (P-3), additional efforts should be made to update GPS and other in-vehicle wayfinding devices. Participants also suggested that deep water ports and dredging are also pertinent topics to consider, as well as port modernization. Two participants specifically pointed out the need to coordinate with the Ohio Maritime Plan. In addition, we should look deeper into the current state of Carmuse Huron Port.
P-2. Designate land uses clearly along the waterfront near Sandusky and other waterfront areas. Incorporate environmentally sensitive standards as well as aesthetic and design standards.	
P-3. Create clear and safe wayfinding signage for freight traffic. Identify the port areas that would benefit from good signage.	
P-4. Upgrade the two unused docks in the City of Sandusky to safely accommodate active freight service, e.g., for coal and salt.	
Trucks/Highways, Roads, & Streets	Results
H-1. Improve access and connectivity to the City of Cleveland. The location of the two Ohio Turnpike interchanges is limiting.	Half of participants gave a high rank to designating connectors between major



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<p>H-2. Add a northbound exit at the Sunnyside Exit on Highway 90 for easier access to Vermilion.</p>	<p>arterial roadways to improve access management (H-8). This improvement has the potential to benefit all users, according to one participant.</p> <p>In addition to the listed projects, two participants mentioned EV charging facilities and EV infrastructure in general. Additionally, they would like to greater connectivity between Sandusky and Columbus via US 23 and a solution to the railroad overpass problem at Cleveland Road.</p> <p>Improving Butler Street and Superior Street (H-4)—both heavily traveled truck routes in Sandusky—from their current poor condition is the highway, road, or street improvement with multiple supporters. Widening SR 4 at various intersections, particularly between Perkins Avenue and Bucyrus Avenue (H-6 a.) also received some attention. For the intersection of SR 4 and SR 99 (H-6 b.) and the intersection of SR 4 and SR 113 (H-6 c.), one participant stated that roundabouts are planned. Another participant suggested that land use at the intersection of SR 4 and SR 99 (H-6 b.) be planned for maximum outcomes.</p>
<p>H-3. Assess traffic volumes on SR 4 North of Perkins Avenue in Sandusky and identify an alternative freight route(s). <i>(current ODOT D3 project has bike-ped focus)</i></p>	
<p>H-4. Improve Butler Street and Superior Street; these are the most heavily traveled truck routes in Sandusky and are in poor condition.</p>	
<p>H-5. Widen SR 99 to three lanes to give Erie County a solid north/south truck route. <i>(3 lanes not needed per ODOT D3)</i></p>	
<p>H-6. Assess and improve roadway intersections.</p>	
<p>a. Widen SR 4 at various intersections, particularly between Perkins Avenue and Bucyrus.</p>	
<p>b. Improve the intersection of SR 4 and SR 99. Many crashes have occurred at this location. A roundabout is programmed in 2023.</p>	
<p>c. Improve sight lines at the intersection of SR 4 and SR 113. There are road pitches and obtuse angles impeding sight lines. A traffic circle is planned for this location in 2027.</p>	
<p>d. Improve sight lines at the intersection of SR 269 and Strecker Road. There is a steep elevation in the road with high-speed traffic and it is a safety concern.</p>	
<p>e. Improve sight lines at the SR 269 and Portland Road intersection.</p>	
<p>f. Improve the intersection of SR 99 and Harris Road (near the turnpike overpass). <i>(Turnpike bridge deck to be replaced; no further improvement.)</i></p>	
<p>g. The intersection of SR 99 and Wood Road has a lot of agricultural traffic. There are deep ditches on the sides of the roads.</p>	

h. Improve turning radii for trucks at the intersection of SR 99 and Strecker Road.	
i. Improve enforcement. The trucks often run through the stop sign at the intersection of SR 269 and Strecker Road, which is a freight route.	
H-7. Install truck route signing improvements especially for those routes where commercial vehicle operators are misdirected even with GPS.	
H-8. Designate connectors between major arterial roadways to improve access management.	
Intermodal Facilities	Results
I-1. Redevelop the former Triple Crown Intermodal area as a new multi-modal facility. This could provide greater connectivity between Ohio, Canada, and New York.	Create a new intermodal facility near Lake Erie providing better access to Columbus (I-2) received high ranks from eight participants.
I-2. Create a new intermodal facility near Lake Erie providing better access to Columbus.	Redevelop the former Triple Crown Intermodal area as a new multi-modal facility (I-1) received four high ranks and was noted to provide enhanced connectivity between Ohio, Canada, and New York. No additional projects were added to this category.
Miscellaneous	Results
	Three comments were made in this category. Another asked for a follow-up regarding the opportunity in Detroit where the upcoming bridge to Canada will offer connections. Additionally, participants mentioned how EV charging stations should integrate with truck parking projects.

Expand our understanding with additions and comments:

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Developing an Implementation Approach

The Erie Regional Freight Plan is being developed with a strong focus on implementation. The table below lists some of the key elements associated with an effective and comprehensive approach for plan implementation. **What implementation efforts are important to you?**

Attendees were asked to review the listed implementation activities; suggest other activities; rank all activities; and comment on the potential positive and/or negative impacts.

Results in Brief

Implementation Element	Average Rank; 1, most important	Comments, Suggestions
Public-Private Freight Committee. Form a private-public Freight Committee to advise Erie County on freight needs	1.2; 5 of 10 ranked this #1	Test a forum idea. Which gets you better results? (Both may be advisable and complimentary.)
Project Programming. Incorporate freight considerations into the prioritization of projects for the ECRPC Transportation Improvement Program, ODOT District 3 Maintenance work programs, etc.	2.6	Aligned projects = great wins; collaboration = better outcomes for all modes
Benchmarking. Scan national best practices in regional freight planning for Erie County consideration (i.e., adoption or adaptation).	3.2	Look outside for best practices to adopt or adapt
Regional Freight Forums. Hold a regional freight forum annually or bi-annually to share and discuss implementation updates, federal and state policy, and to network	4.0	Neutral setting might lead to good conversations. Test/explore in committee.
Public Information. Provide information to the public to increase awareness for the importance of freight/freight planning to the regional economy, and related topics	4.3	Benefits all audiences
Status Reporting. Publish concise reporting on a TBD-frequency on plan implementation activities, investments, performance measures, etc.	4.6	Need this for best communications; collaborate.
Facility Tours. Conduct learning tours of regional freight facilities—shippers, carriers, infrastructure.	5.4	Foster public/private relationships; leads to more specific and accurate improvement plans

Expand our understanding with additions and comments:

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-

Expanding Stakeholder Involvement

Participants were asked to identify other stakeholders to be involved in freight planning and freight plan implementation for the future. The depth and breadth of the public-private collaboration around freight is key to the success of the freight plan.

Several organizations were identified. **Individual names and contact information are still needed or useful to confirm our limited information.**

Name	Organization; freight plan interest	Contact Info
	Amtrak	
	Great Lakes Metro Chamber	
	Ohio Turnpike Commission	
	Business/Industry, especially high-volume freight industries	
	Rail Industry	
	Ports/Port Authorities	
	Freight Carriers	
	Airport Directors	
	Ohio Truckers Association	
	Union Representatives	
	Logistics Professionals	
	Shipping Captains	
	Hanson	
	Mucci Farms	
	R&L	
	Army Corps	
	Erie-Ottawa Airport	
	Cleveland-Toledo Input	
	Plover	

Expand our list with additions:

-
-
-



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Appendix 4

Freight Plan Briefing Report

May 2023

Welcome to the Freight Plan Briefing



Wednesday, May 24, 2023
2:00pm to 3:00pm

Presented by the
Erie Regional Planning Commission
& MPO



1

Briefing Overview

1. Welcome – Tim King
2. Core Elements of the Freight Plan – Keith Chase, Michelle Brummer
3. Participant Input – prompts throughout
4. Next Steps: Review, Adoption, and Implementation

Attendees

ERPC – Tim King, Kevin Cannon

Gannett Fleming – Keith Chase, Michelle Brummer

Larren Wikel, Erie Blacktop

*Nico Samaniego, Business Coordinator at Erie County
Econ Development Corporation*

Megan Stookey, City of Sandusky, for City Engineer

Nate Vogt, ODOT Statewide Planning

Sam Granato, ODOT/Traffic

Connie Ward, Mayor, Berlin Heights

Presentation

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Why a Freight Plan?

- “To improve the condition and performance of the national freight network to ensure that the national freight network provides the foundation for the United States to compete in the global economy.”

23 U.S.C. §167. National Highway Freight Program

- Or state/Ohio...
- Or Erie County region...



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Stakeholder Value:

Why Public and Private Input is Critical

1. Private activity, moving across primarily public infrastructure
2. Collaborative/complementary problem solving
3. Pace of industry and technological change
4. Positioning for technology advances
5. Improved targeting of investments—some are increasingly competitive

Freight knows no borders or organizational siloes—unless we impose them.

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Who has joined us today?

Kindly type your name and organization into the chat.

*What difference do you think a freight plan should make in the region?
Add your response to the chat.*

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Core Plan Elements

Goals

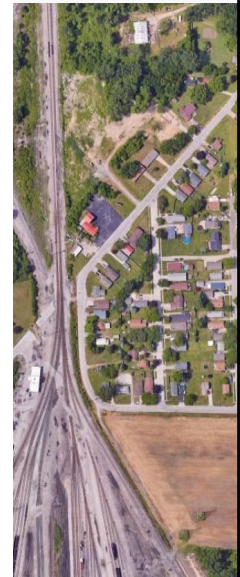
- A Core Freight Network
- Freight Planning and Programming
- A Freight Advisory Committee

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Goals

1. Implement an integrated land use and freight transportation planning process.

- A. Establish/refine a core freight network as a tool for discussing freight needs and improvement priorities.
- B. Promote improved land use and freight transportation planning and coordination around the core freight network.
- C. Identify land use-freight coordination practices in other regions for potential use and adaptation.



If the goal or any initiatives are especially important to you, type the goal # and initiative letter into the chat.

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Goals

2. Invest in and promote the region's multimodal and intermodal capabilities.

- A. Improve and promote the region's multimodal and intermodal capabilities.
- B. Identify freight needs for economic development and performance.
- C. Establish and maintain an inventory of candidate freight projects for consideration in LRTP and TIP updates.
- D. Advance freight capacity/congestion relief improvements through the LRTP and TIP.



If the goal or any initiatives are especially important to you, type the goal # and initiative letter into the chat.

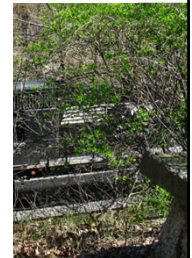
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Goals

3. Improve freight mobility, safety, and operations.

- A. Identify, prioritize, and implement freight safety improvements and initiatives.
- B. Develop locations for potential truck parking additions and expansions.
- C. Promote information technology applications for efficient freight operations.

If the goal or any initiatives are especially important to you, type the goal # and initiative letter into the chat.

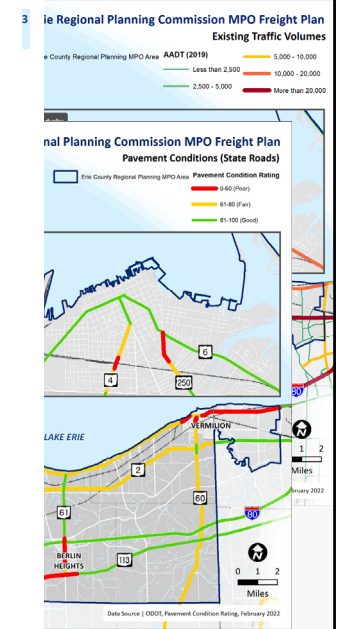


Goals

4. Expand regional freight planning capabilities.

- A. Share freight trends and data among transportation and freight planning agencies in support of data-driven decisions.
- B. Identify the activities and capabilities in freight planning in comparable regions for potential use and adaptation.
- C. Consider establish freight planning internships at ERPC as a means of staff support in implementation years (1-3).

If the goal or any initiatives are especially important to you, type the goal # and initiative letter into the chat.

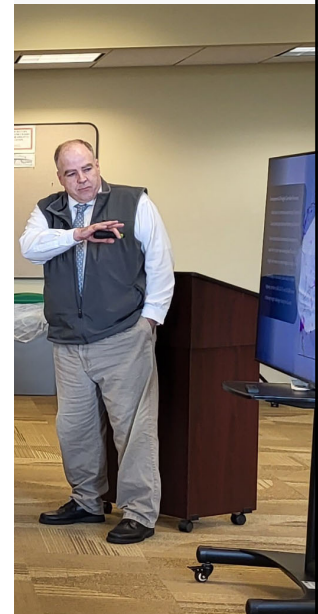


Goals

5. Establish an ongoing program for increasing freight education and awareness among all stakeholders.

- A. Communicate freight planning initiatives, general interest topics, and plan status on a regular basis, e.g., press release or ERPC website news item 2-3 times per year.
- B. Expand public understanding of freight movement, benefits, etc.

If the goal or any initiatives are especially important to you, type the goal # and initiative letter into the chat.



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Goals

6. Foster strategic partnerships and strategic alliances for public-private regional freight collaboration.

- A. Establish and leverage a Freight Advisory Committee (FAC) to advance the freight plan and to collaborate on the accomplishment of its goals. The FAC should have diverse membership including representatives from the region's private sector and state and federal modal agencies.
- B. In years 1 or 2, determine areas of focus for the FAC in addition to its role in implementing the freight plan.

If the goal or any initiatives are especially important to you, type the goal # and initiative letter into the chat.



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An ERPC Core Freight Network



The Core Freight Network...

- Identifies the core multimodal facilities for freight movement within the county and key connections beyond the county.
- Is a tool for
 1. planning and programming projects – identifying freight needs and advancing projects with real freight benefits.
 2. public private collaboration especially through the Freight Advisory Committee.
 3. consideration of freight transportation in relation to dynamic land use and economic development conditions.
 4. coordination with neighboring regions and statewide freight planning.

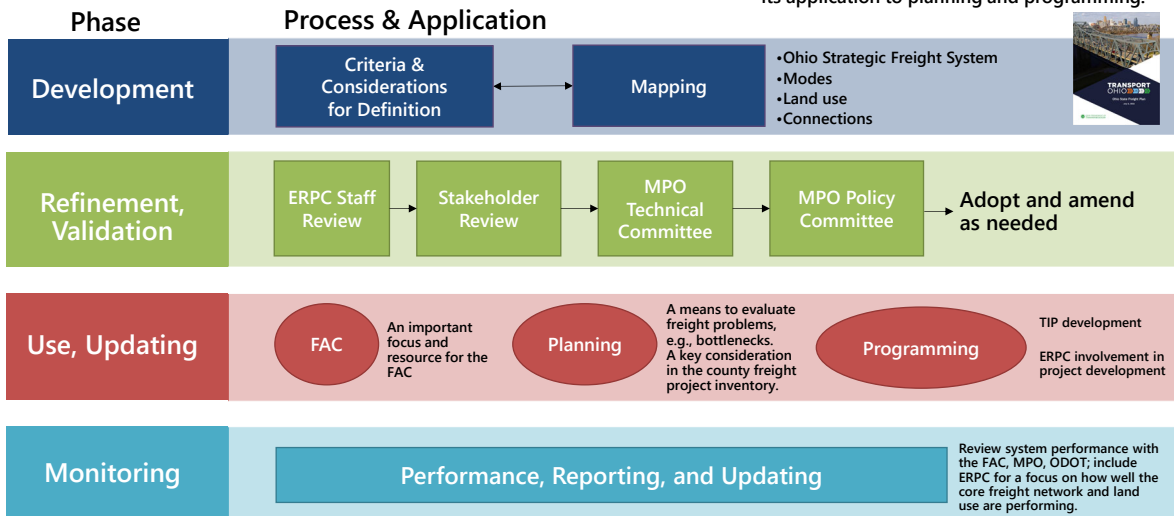
The Core Freight Network is not...

- A plan for an exclusive freight system
- A static set of facilities; additions and extensions—consistent with county growth management—should be made.

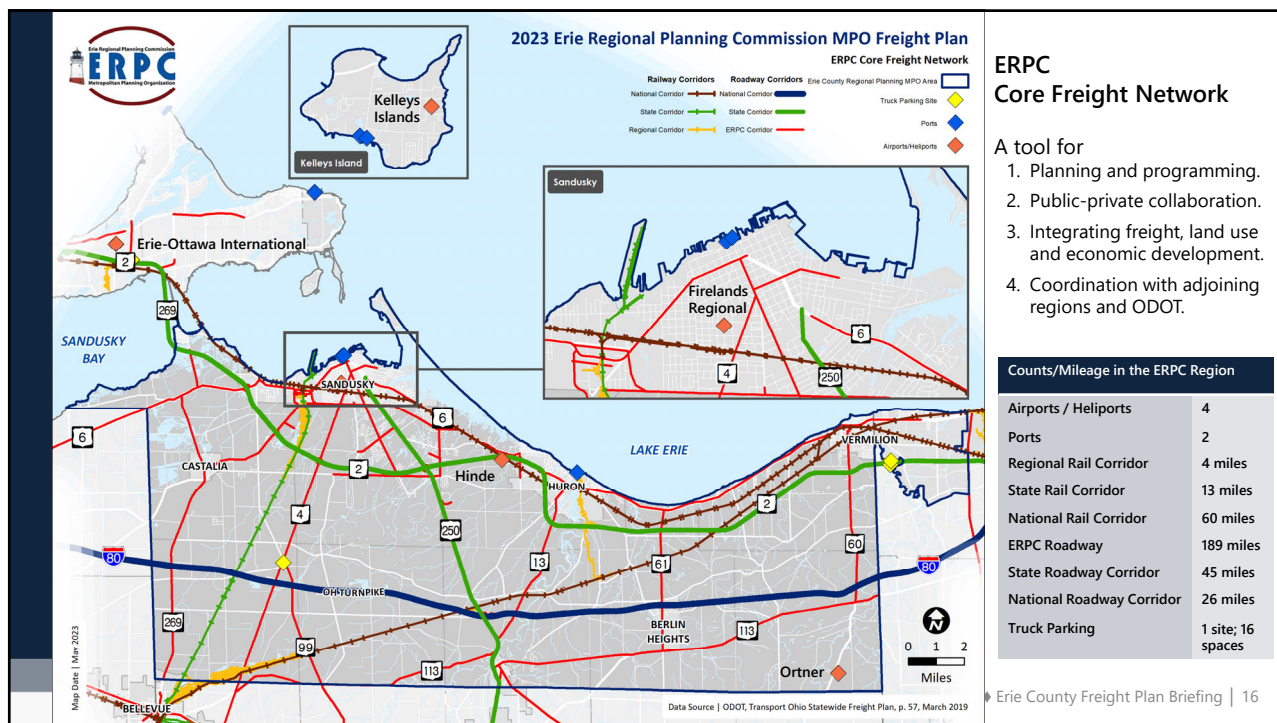
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CORE FREIGHT NETWORK

This graphic summarizes the development and ongoing use of the Core Freight Network, noting its application to planning and programming.

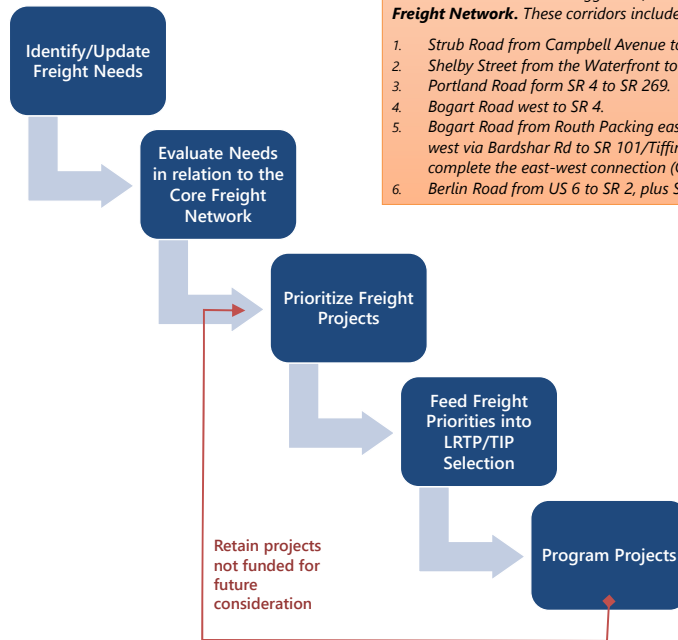


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Freight Planning and Programming

Freight Plan Goals



Additional corridors were suggested for the Core Freight Network. These corridors included:

1. Strub Road from Campbell Avenue to SR 4.
2. Shelby Street from the Waterfront to US 6.
3. Portland Road from SR 4 to SR 269.
4. Bogart Road west to SR 4.
5. Bogart Road from Routh Packing east to SR 4; and west via Bardshar Rd to SR 101/Tiffin Ave to complete the east-west connection (GF).
6. Berlin Road from US 6 to SR 2, plus Sprowl Road.

Freight Advisory Committee

Formation

- Year 1, quarterly meetings to organize, educate;
- Year 2, meetings to begin to advise; frequency-TBD

Governance Structure—two co-chairs, one from the public sector and one from the private sector

Activities

- 1) guest speakers
- 2) freight and industry field views
- 3) freight need/project inventory, evaluation, and prioritization assistance
- 4) representation in statewide freight planning

Would you consider a seat at the FAC table, to share and discuss freight issues once a quarter? Let us know in the chat.

Composition—a cross section of public and private sector members, including

- freight carriers—trucking, railroads, and air cargo handlers
- freight-related industry—major manufacturing, warehousing, and wholesale trade, and agriculture
- key associations—e.g., Greater Sandusky Partnership
- liaisons to MPO Technical Advisory and Policy Committees

Implementation Approach

Year 1 and 2 Activities

1. Prepare and Implement an Annual Action Plan—a few actions to advance one or more strategic initiatives
2. Track and Report Plan Implementation Progress—report progress of strategic initiatives toward goals and advancement of freight projects
3. Integrate Freight with LRTP Planning and TIP Programming
4. Consider New and Emerging Data, Trends, and Practices
5. Continue to Develop Freight Knowledge, Skills, and Abilities
6. Industry Outreach
7. Public Information and Awareness

Of these 7 activities, or one of your own, what will be most effective in raising awareness for freight? Tell us in the chat.

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Measuring Plan Progress & System Performance

- One required federally system performance measure:

Level of Truck Travel Time Reliability (LOTTTR) defined as the percent of truck-miles on the Interstate System that are reliable. LOTTTR is calculated as the ratio of the longer travel times (95th percentile) to a “normal” travel time (50th percentile), using National Performance Management Research Data Set (NPMRDS; federal data) or equivalent data.

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Measuring Plan Progress & System Performance

1. Rating of freight-land use compatibility.
2. Core freight network incorporated with LRTP and TIP.
3. Multi-modal freight capabilities incorporated in economic development and marketing.
4. Growth in freight-reliant businesses and jobs.
5. Freight project inventory maintained.
6. Trends in freight volumes by mode analyzed.
7. # of freight projects programmed.
8. # of improvements to the core freight network.
9. Increase in # of truck parking spaces.
10. Level of Truck Travel Time Reliability (federal PM)
11. Increase in freight knowledge, skills, and tools acquired through Freight Advisory Committee, training, and conferences.
12. # of annual freight information items for the public.
13. # of public inquiries and ERPC responses about freight.
14. Formation of FAC
15. Diversity and number of members
16. # of meetings, annually
17. Value and impact rating of FAC over time

Which measure(s) will be most effectively convey progress? List 3 numbers in the chat.

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Final Steps

- Presentation to the MPO
- Review Period
- MPO Adoption – anticipated July 27, 2023
- Freight Advisory Committee Formation – Summer/Fall 2023

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Final Steps Plan Preparation Schedule

	2023		
	May	June	July
Plan Presentation to MPO	25		
Plan Review and Comment Period	26		24
MPO Plan Adoption			27

Freight Advisory Committee Formation – Late Summer/Fall 2023

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Appendix 5

Illustrative Year One Work Program for the ERPC MPO Freight Advisory Committee

The formation and early activity of the Freight Advisory Committee (FAC) is extremely important to freight plan implementation and the long-term success and impact of the FAC. The table below is an illustrative recommendation for a 12-month work program for the FAC. It should be reviewed by ERPC staff in preparing for the organizing meeting and introduced at the FAC the organizing meeting as the 12-month work or activity program. Circumstances and opportunities may, and should, alter this program. For example, an October 2023 start is presumed, however the months can be adjusted if October 2023 is not the starting month for the FAC.

Month	Tentative Activities – Standing Agenda Items Not Included
October	<ul style="list-style-type: none"> Organizational meeting Freight plan review Work Program review Action Identification for FAC membership growth
November	<ul style="list-style-type: none"> Guest Speakers 1 – Trucking Industry Review of Core Freight Network
December	<ul style="list-style-type: none"> Background briefing on ERPC and the ERPC MPO LRTP and TIP processes, and integration of the Freight Plan
January 2024	<ul style="list-style-type: none"> Review Freight Plan Goals and Objectives Action Identification for some or all of the plan goals for the 2024 calendar year
February	<ul style="list-style-type: none"> Guest Speakers 2 – Panel Presentation of Other FACs nationally
March	<ul style="list-style-type: none"> Review Freight Project Inventory and recommend additions, adjustments
April	<ul style="list-style-type: none"> Guest Speakers 3 – Water Ports: port authorities, ODOT, MARAD
May	<ul style="list-style-type: none"> ODOT presentation of TRANSPORT OHIO and its implementation Regular reviews of 2024 actions list continues
June	<ul style="list-style-type: none"> Guest Speakers 4 – Freight Railroads Identification of quarterly public education topics on freight for the ensuing year and person/team responsible for preparation
July	<ul style="list-style-type: none"> Field view of regional freight facilities
August	<ul style="list-style-type: none"> Review of Core Freight Network
September	<ul style="list-style-type: none"> Identification of accomplishments in year 1 Publication/presentation of accomplishments to the public

Suggested Meeting Frequency

In year one, a monthly meeting of one hour is suggested. Meetings should be conducted in a hybrid fashion, encouraging members and interested stakeholders to participate in person and allowing state and federal transportation planning partners to participate remotely. Alternatively, a bi-monthly meeting of two hours could be programmed.

The formation of a few small working groups (or subcommittees or task forces) may favor the bi-monthly schedule. Ultimately, the FAC meetings may be quarterly but a greater frequency in the short term should help to establish momentum and traction.

Standing agenda items for the FAC should include:

1. Welcome and Introduction of Guests and Participants
2. Presentation
3. Freight Plan Implementation Status
 - a. Brief Status Reports from Subcommittee or Task Force Representatives (after actions/activities are identified)
 - b. Status Report from ERPC Staff
4. Special Topics Discussion, e.g., Core Freight Network review
5. Two-Minute Highlights on Industry Trends, Freight-relevant Economic Development, Etc. by all participants
6. Next Meeting Date(s) and Primary Activities