2040 Metropolitan Transportation Plan *Update*

EASTGATE
Regional Council of Governments

2040 Metropolitan Transportation Plan Update

July 2018

Title VI & Non-Discrimination Policy

It is Eastgate's Policy that all recipients of federal funds that pass through this agency ensure that they are in full compliance with Title VI and all related regulations and directives in all programs and activities. No person shall, on the grounds of race, color, national origin, sex, age, disability, low-income status, or limited English proficiency, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any of Eastgate's programs, policies, or activities.

Content Disclosure

The *2040 Metropolitan Transportation Plan Update* is financed by the Federal Highway Administration, Ohio Department of Transportation, Federal Transit Administration, and Eastgate Regional Council of Governments. The contents of this report reflect the views of Eastgate, which is responsible for the facts and the accuracy of the data presented herein.

Serving Northeast Ohio since 1973

The Eastgate Regional Council of Governments is a multipurpose Regional Council of Governments for Ashtabula, Mahoning, and Trumbull counties, as established by Section 167.01 of the Ohio Revised Code. Eastgate is the agency designated or recognized to perform the following functions:

- Serve as the Metropolitan Planning Organization (MPO) in Mahoning and Trumbull counties, with responsibility for the comprehensive, coordinated, and continuous planning for highways, public transit, and other transportation modes, as defined in Fixing America's Surface Transportation Act (FAST Act) legislation.
- Perform continuous water quality planning functions in cooperation with Ohio and U.S. EPA.
- Provide planning to meet air quality requirements under the FAST Act and the Clean Air Act Amendments of 1990.
- Administration of the Economic Development District Program of the Economic Development Administration
- Administration of the Local Development District of the Appalachian Regional Commission.
- Administration of the State Capital Improvement Program for the District 6 Public Works Integrating Committee.
- Administer the area clearinghouse function, which includes providing local government with the opportunity to review a wide variety of local or state applications for federal funds. Administration of the Clean Ohio Conservation Funds.
- Administration of the regional Rideshare Program for Ashtabula, Mahoning, and Trumbull Counties.
- With General Policy Board direction, provide planning assistance to local governments that comprise the Eastgate planning area.

GENERAL POLICY BOARD (2018)

Chairman – Pat Ginnetti, Mahoning County

Vice Chairman – Julie Green, Trumbull County

Mayor Eric Augustein, Village of Beloit
Mayor Ruth Bennett, Village of Orangeville
Mayor Jamael Tito Brown, City of Youngstown
Mauro Cantalamessa, Trumbull County Commissioner
Mayor John Darko, City of Hubbard
David Ditzler, Mahoning County Commissioner
J.P. Ducro, IV, Ashtabula County Commissioner
James Ferraro, Director, Western Reserve Transit Authority
Mayor Herman Frank II, Village of Washingtonville
Mayor Douglas Franklin, City of Warren
Mayor Richard Duffett, City of Canfield
Frank Fuda, Trumbull County Commissioner
Fred Hanley, Hubbard Township
Mark Hess, Trumbull County Transit
Mayor Arno Hill, Village of Lordstown
Mayor James Iudiciani, Village of Lowellville
Mayor Harry Kale, Village of New Middletown
Casey Kozlowski, Ashtabula County Commissioner
Paul Makosky, City of Warren
Mayor Shirley McIntosh, Village of West Farmington
Mayor John McNally, City of Youngstown
Mayor James Melfi, City of Girard
John Moliterno, Western Reserve Port Authority
Mayor Nick Phillips, City of Campbell
John Picuri, District Deputy Director, ODOT District 4
Mayor J. Michael Pinkerton, Village of Sebring
James J. Pirko, Citizens Advisory Board Representative, Trumbull County
Mayor Glen M. Puckett, Village of McDonald
Daniel Polivka, Trumbull County Commissioner
Kurt Princic, OEPA NE District Chief
Carol Rimedio-Righetti, Mahoning County Commissioner
Randy Samulka, Citizens Advisory Board Representative, Mahoning County
Mayor Thomas Scarnecchia, City of Niles
Mayor Timothy Sicafuse, Village of Poland
Randy Smith, Trumbull County Engineer
Mayor Dave Spencer, Village of Craig Beach
Mayor Terry Stocker, City of Struthers
Zachary Svette, Trumbull County Metro Parks
Anthony Traficanti, Mahoning County Commissioner
Mayor Lyle A. Waddell, Village of Newton Falls
Kathryn Whittington, Ashtabula County Commissioner
Mark Winchell, Ashtabula County
Joanne Wollet, Poland Township Trustee
Mayor James Woofter, City of Cortland
Aaron Young, Mill Creek MetroParks

TECHNICAL ADVISORY COMMITTEE (2018)

Chairman-Gary Shaffer Vice Chairman-Kristen Olmi

CITIZENS ADVISORY BOARD (2018)

Chairman-Randy Samulka Vice Chairman-James J. Pirko

MTP 2040 UPDATE REQUIREMENTS

The following are requirements under the FAST Act for Metropolitan Planning Organizations:

Include participation of public ports and private transportation providers
The Western Reserve Port Authority, the port authority for Mahoning and Trumbull counties, is member of the GPB and various committees led by Eastgate. Eastgate works closely with private transportation providers, especially through the Transit Exclusive element of the Overall Work Program.

Encourage MPOs to consult with other types of planning activities.
Mahoning and Trumbull county planning commissions are members of GPB and various committees led by Eastgate. Eastgate participates on several planning-related committees. As a COG, Eastgate is heavily involved in land use, environmental, and economic development planning.

Incorporate facilities that support intercity transportation and commuter vanpools.
Eastgate has worked closely with WRTA to seek and program funding to improve transit facilities at Federal Station, which houses Greyhound Transportation. Vanpools are included in the GoOhio system.

Build upon resiliency and reliability efforts.
Eastgate developed in partnership with other MPOs and COGs in Northeast Ohio a Sustainable Communities Consortium entitled NEOSCC. NEOSCC acknowledges resiliency through each of its goals and actions in order to be adaptable to future needs. Eastgate considers environmental resiliency through its environmental planning program and natural disaster mitigation through county-led committees.

Reduce or mitigate stormwater impacts of surface transportation.
Eastgate provides education to member communities on best practices for stormwater management through EPAC. Discussions are occuring to include additional points towards proposals that integrate stormwater solutions for Ohio Public Works Commissions grants.

Improve CMP goals.
Eastgate will update its CMP in tandem with FHWA's and ODOT's rollout of the Congestion Reduction performance measure in FY 2019. Transportation demand management strategies such as GoOhio and job-hub designations for access and reverse-commutes further the CMP goals.

Integrate tourism.
Eastgate will partner with the Mahoning County Convention and Visitor's Bureau and Trumbull County Tourism Bureau to monitor high-participation events and the transportation needs of tourists in FY 2019.

Meet current and projected transportation infrastructure needs.
Eastgate will continually improve on this requirement through the adoption of performance measures. Additionally, the MPO will consider creative funding and financing for infrastructure.

EXECUTIVE SUMMARY

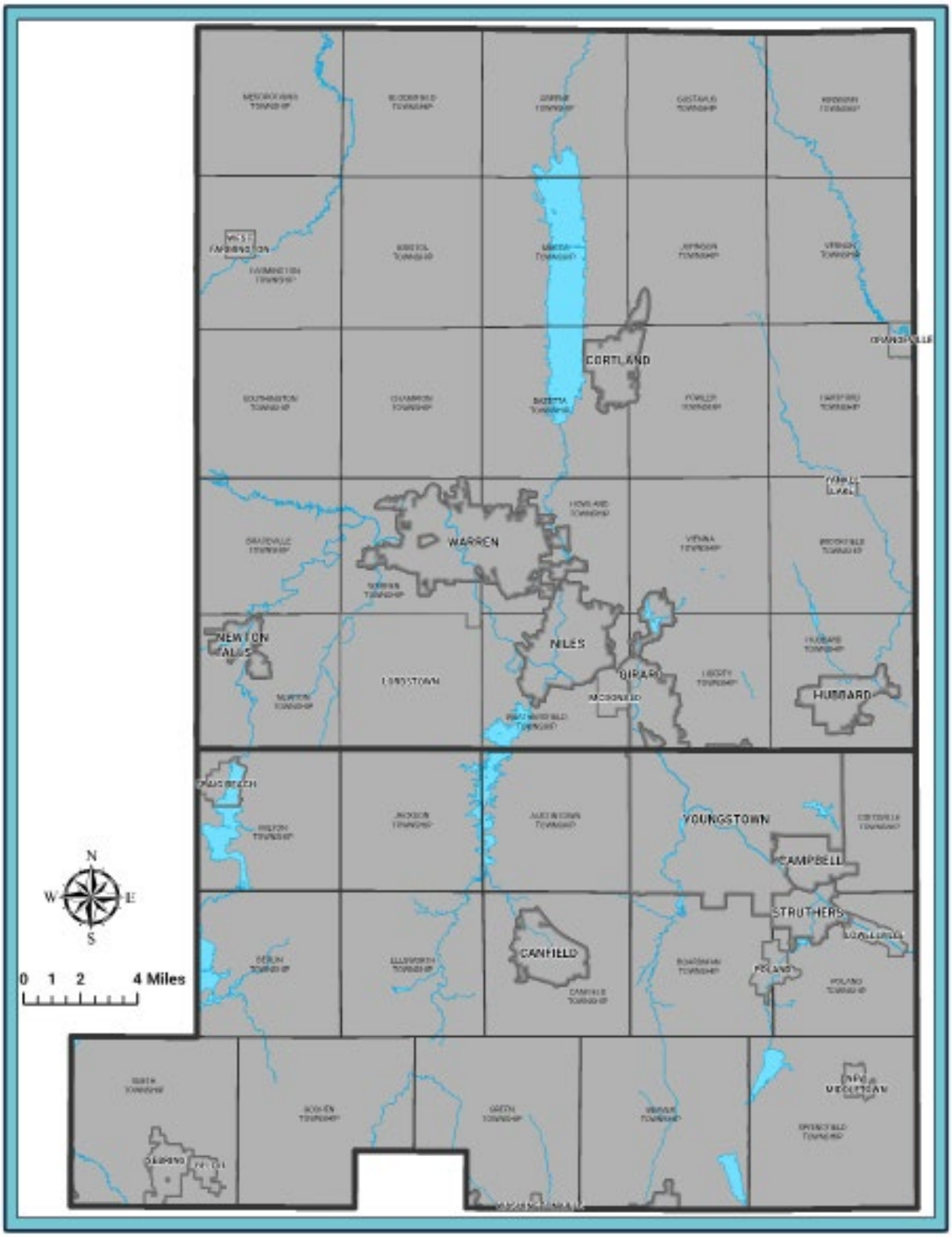
Mahoning and Trumbull counties are serviced by an extensive network of roads, transit services, bikeways, and pedestrian facilities that provide connectivity, mobility, and accessibility, within and adjacent to the region (**EXHIBIT A: EASTGATE PLANNING AREA**). This extensive network must be safe and efficient to support the economy and quality of life for those who live, work, and visit the Mahoning Valley.

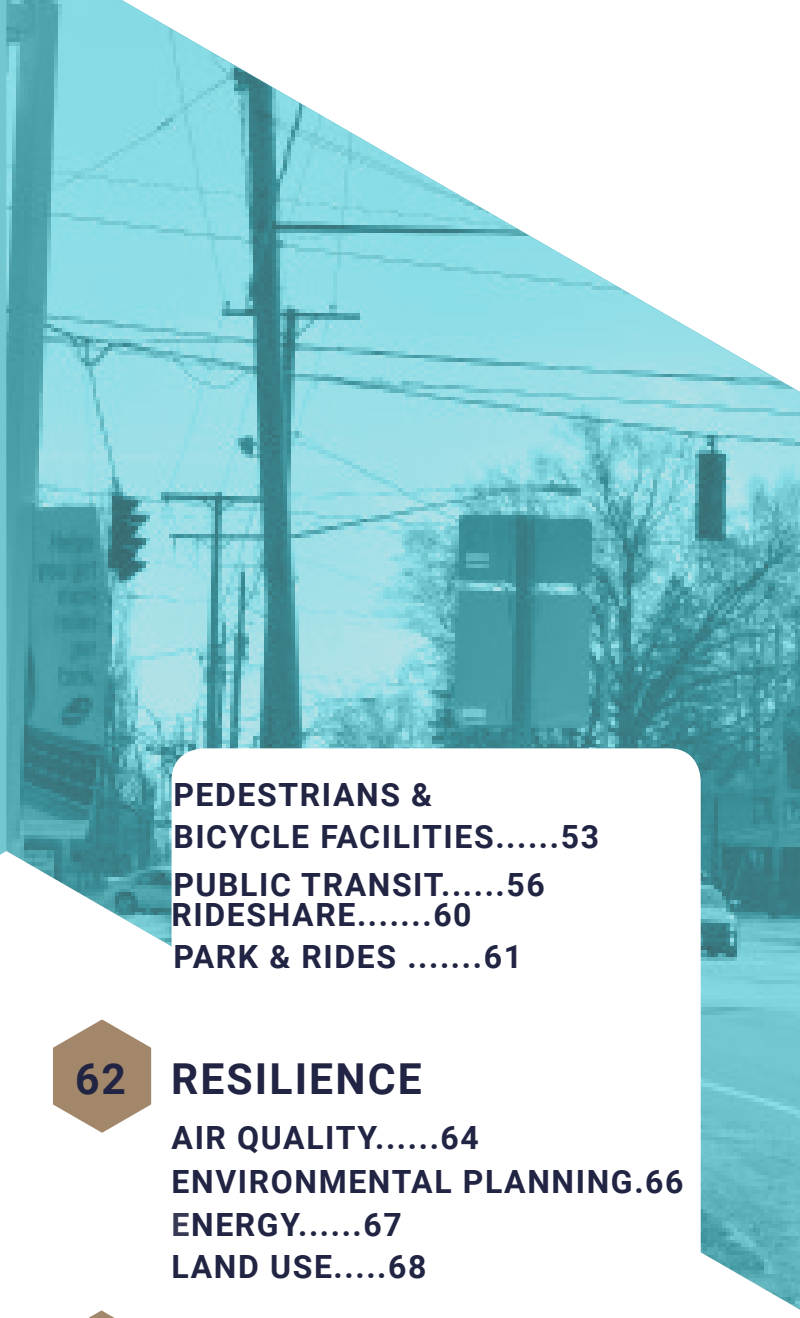
The *2040 Metropolitan Transportation Plan Update* provides recommended strategies and projects to maintain and develop the region's transportation system through 2040. This plan is an update to the *2040 Metropolitan Transportation Plan* that was approved by Eastgate's General Policy Board (GPB) in 2013. It is a federal requirement to update this plan to address performance measures and subsequent amendments as introduced by the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFEEA-LU), Moving Ahead for Progress in the 21st Century (MAP-21), and the Fixing America's Surface Transportation (FAST) Act in addition to the Metropolitan Transportation planning rule (23 CFR Parts 450 and 771) in the Code of Federal Regulations (CFR).

MAP-21 and FAST Act requirements have been delayed beyond this update and meeting these requirements occurs after the 2020 Census, however Eastgate Regional Council of Governments continues to work towards implementation of these acts.

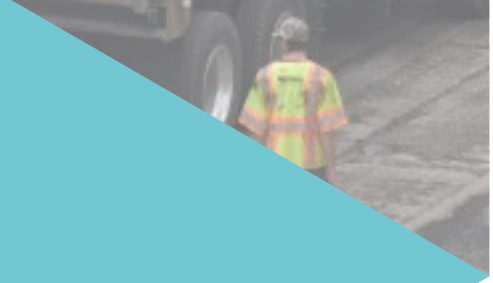
The *2040 Metropolitan Transportation Plan Update* was developed over several years to acknowledge completed projects and changes in the transportation network that transpire during the metropolitan planning process. This plan was created by Eastgate Regional Council of Governments with the assistance of public and private stakeholders and transportation representatives at the local, state, and federal levels. This update includes an overview of regional trends, goals, planning components, a funding forecast, projects, performance measures, and implementation strategies. This update provides an important base for building a resilient, forward-looking infrastructure, with the ability to adjust and adapt to future challenges.

EXHIBIT A: EASTGATE PLANNING AREA





» CONTENTS



INTRODUCTION

What is an MPO?

Metropolitan Planning Organizations (MPOs) were established by federal law in the 1970s through the Federal-Aid Highway Act that created planning commissions for urban areas that had a population of fifty-thousand or more. MPOs were instituted to ensure that the "3-C" transportation planning process, which must be continuing, cooperative and comprehensive, is carried out among various agencies and local jurisdictions located in a region. Entities involved in the 3-C process include state and local highway departments, airport authorities, rail operators, transit authorities, and private providers of public transportation that affect local area travel demand. MPOs like Eastgate Regional Council of Governments do not typically operate the transportation system they serve, but rather are responsible for implementing the transportation project priorities that are identified through consensus-building.

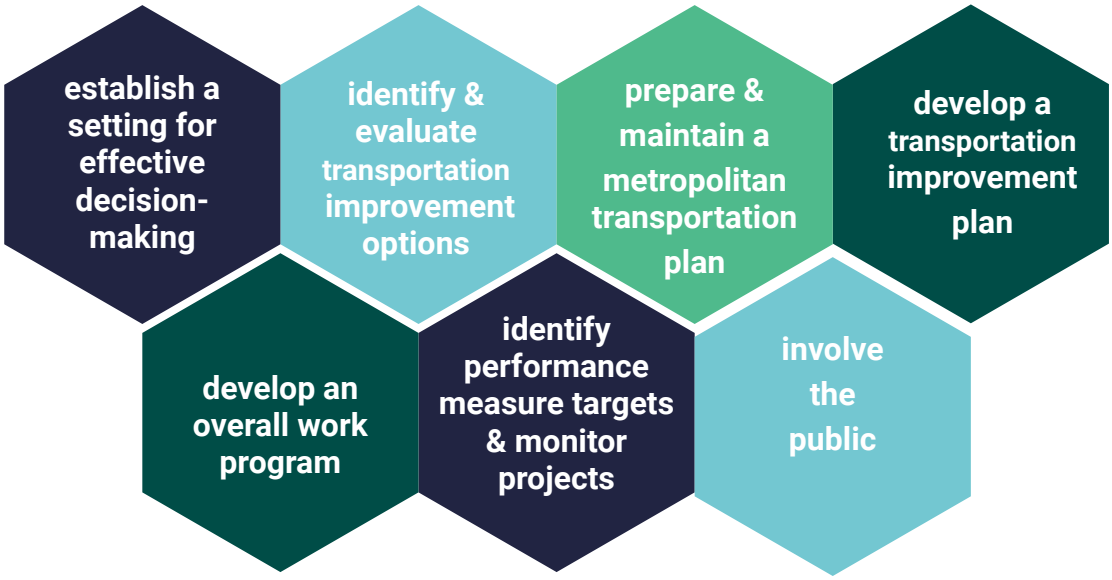
What is Eastgate?

Eastgate Regional Council of Governments (hereafter referred to as Eastgate) is the MPO for the urban area of Mahoning and Trumbull counties, or Youngstown, OH-PA. Eastgate is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Ohio Department of Transportation (ODOT), as well as local member governments. Eastgate is also a council of governments, fulfilling other roles as allowed by the Ohio Revised Code (ORC) in planning and the administration of public funding. Eastgate is governed by a policy board, the General Policy Board (GPB), that is comprised of representatives from local governments and transportation entities. The GPB is assisted by Eastgate staff and the Technical Advisory Committee (TAC) that prepare studies and technical assessments, facilitate public input, and foster interagency coordination (**EXHIBIT B: FUNCTIONS OF AN MPO**).

What is an MTP?

The Metropolitan Transportation Plan (MTP), documents the planning process carried out by Eastgate and its partners, identifying strategies and projects to maintain and improve the transportation system over a twenty-year horizon. The MTP, per federal law, must include both long-range and short-range program strategies that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods. It is developed through four key steps: identifying trends and forces shaping the region, working with the public stakeholders to develop a collective vision and goals for regional development, then recommending strategies to help achieve the vision. The MTP provides the basis for how federal transportation funding is spent to improve surface transportation such as roads, bridges, and transit operations. The MTP must be fiscally constrained, meaning proposed projects cannot exceed projected funding.

EXHIBIT B: FUNCTIONS OF AN MPO



Coupled with being an urban area, because the population of Mahoning and Trumbull counties exceeds two-hundred thousand, Eastgate is also a Transportation Management Area (TMA). As a TMA, Eastgate must incorporate additional entities and processes into the transportation planning process, such as a Congestion Management Process (CMP), as explained in **EXHIBIT C: TMA REQUIREMENTS**. In 2000, the Sharon, Pennsylvania Metropolitan Statistical Area (MSA) was combined with the Youngstown-Warren MSA to form the Youngstown-Warren-Boardman OH-PA Metropolitan Area. However, FHWA defines the urban area boundary as Youngstown, OH-PA. The areas combined because the urban area shifted, merging with the Pennsylvania cities of Farrell, Hermitage, and Sharon to create a larger TMA. Eastgate and the Mercer County Regional Planning Commission (MCRPC), which prepares the Mercer County MTP, remain separate MPOs that have entered a cooperative agreement. Eastgate and MCRPC work together closely to continue the 3-C transportation planning process for the region as shown in **EXHIBIT D: EASTGATE URBAN AREA & TRANSPORTATION MANAGEMENT AREA**.

The MTP's actions are carried out through Eastgate's Overall Work Program (OWP) and by building partnerships with planning partners to bring the vision to fruition. The MTP's strategies and projects are reflected in the Transportation Improvement Program (TIP) that provides a comprehensive

A population greater than 50,000 that is often composed of densely populated cores surrounded by less-populated municipalities, or commuter belts. Urban areas are distinguished from each other based on their demographic & industry-sector features.

EXHIBIT C: TMA REQUIREMENTS

list of transportation improvements utilizing federal and state funding over a four-year period. The TIP is also fiscally constrained and contains highway, bridge, non-motorized, and transit system projects.

Why update the MTP?

In addition to reflecting a twenty-year horizon, MPOs are required to update the MTP on a schedule determined by whether the urban area is in attainment or nonattainment with the National Ambient Air Quality Standards (NAAQS) as defined in the Clean Air Act Amendments of 1990 (CAA). Transportation emissions contribute to volatile organic compounds (VOCs) and oxides of nitrogen (NOx) and other pollutants that affect air quality and climate change. Air quality refers to the management of air pollutants (including greenhouse gases and particulate matter) present in each area. Poor air quality can have detrimental impacts to the environment and human health. In 2006, Eastgate was designated an attainment area. In 2013, Eastgate was designated as a maintenance area for the 1997 eight-hour ozone NAAQS.

Eastgate must submit motor vehicle budgets for precursor emissions related to this standard. Since the *2040 MTP* was published in 2013, Eastgate has shifted from a four to five-year update schedule as required by FHWA and FTA, because of its status as reviewed by the Environmental Protection Agency (EPA).

Updates to the MTP also allow for the integration of surface transportation when reauthorization of federal acts occurs.

EXHIBIT D: EASTGATE URBAN AREA & TRANSPORTATION MANAGEMENT AREA

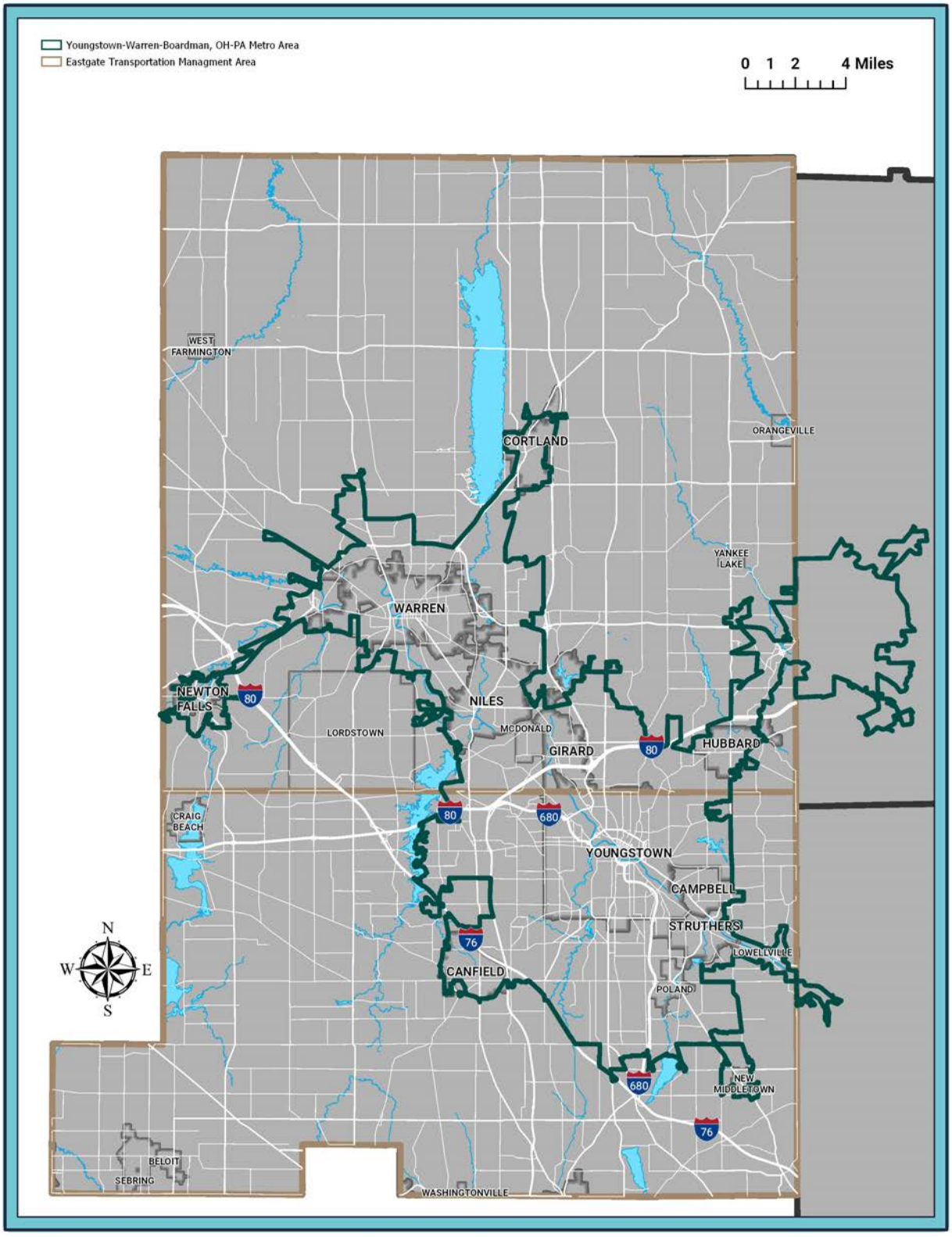
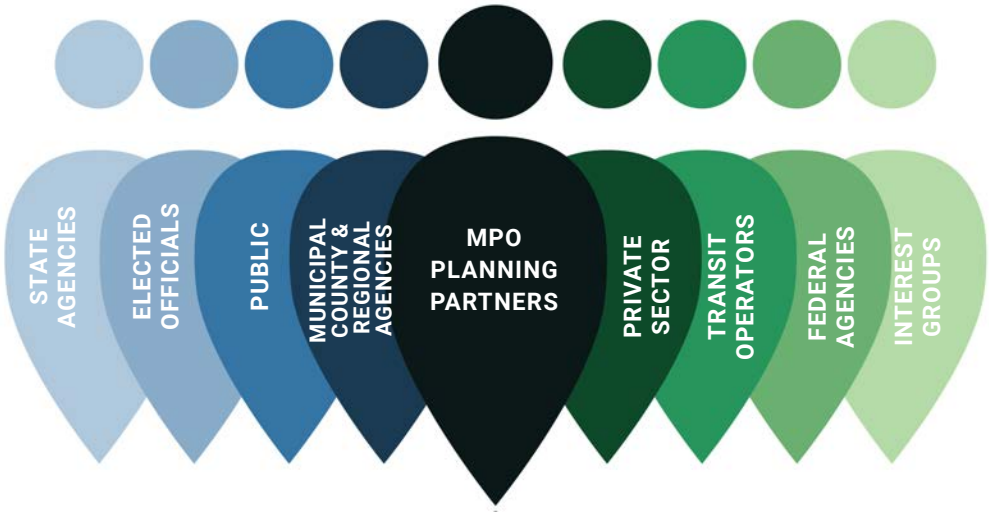


EXHIBIT E: REAUTHORIZATION ACTS

These acts authorize funding levels for surface transportation programs over the life of the act, a list of the acts can be seen in **EXHIBIT E: REAUTHORIZATION ACTS**.

The FAST Act was signed into law in 2015, replacing MAP-21 and SAFETEA-LU, that were in the *2040 MTP*. The FAST Act authorizes $305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistic programs. The FAST Act maintains a focus on safety, establishes funding for various highway-related programs, continues to streamline project delivery, and, for the first time, provides a dedicated source of federal dollars for freight projects. The most recent federal transportation authorization requires long-range plans to incorporate performance measures. Congress has mandated that states and MPOs adopt performance targets; set targets; and monitor progress in the areas of safety, highway and transit system asset condition, congestion and system performance, freight movement system performance, and environmental sustainability. It is important to continually update the MTP to understand how the transportation system is impacted by development patterns, environmental conditions, and technology. Additionally, updating the MTP allows the MPO to work together with local communities, agencies, and stakeholders to implement, monitor, and evaluate the plan. Eastgate will continue to work with federal, state, and local planning partners to move forward with performance measures planning, and to develop targets within the framework of the MTP as described in **EXHIBIT F: MPO PLANNING PARTNERS**).

EXHIBIT F: MPO PLANNING PARTNERS



In addition to working with the planning partners, Eastgate undertakes a Public Participation Process (PPP). During the development of the *2040 MTP Update,* Eastgate's PPP underwent revision. The updated PPP is included below:

EASTGATE'S PUBLIC PARTICIPATION PROCESS

1.1 Strategy

Eastgate remains committed to a proactive transportation planning and public involvement process. Eastgate supports early and ongoing public involvement in developing the MTP, TIP, and all other program activities.

It is Eastgate's objective to reaffirm this commitment through a specific plan of action designed to provide maximum opportunity for public involvement in consultation with all interested parties who participate in the transportation planning process. In conjunction with public involvement, this process will include, as appropriate, consultation with those representatives from state and local agencies, and public officials responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. This process is intended to guide and facilitate meaningful discussion throughout the transportation planning process, as well as confirm that stakeholders, interest groups, and the public can comment on all transportation plans and programs.

The goal of the Public Participation Process is to provide a fully engaged public forum between those decision-making entities from state and local agencies, public officials, and citizens concerning transportation issues and the participation process. The participation process provides reasonable opportunities for interested parties to comment on the content of plans and provides the opportunity for public input. Citizens and interested parties contribute to the public review, and are encouraged to enter an active dialogue regarding Eastgate's planning process and plan developments. The Public Participation Process is designed to educate the public on the process and issues involved in transportation planning and the associated activities and mandated federal requirements prior to approval.

1.2 Identification of Interested Parties and Participation Issues

The Public Participation Process will recognize participants who are interested in or affected by the activities linked to Eastgate's plans and programs. To achieve active public participation, Eastgate uses a variety of outreach combinations through direct mailings to interested parties, direct contact with the public through universal methods such as advertisements and notices in newspapers, press releases and other mass media associated activities, social media, electronic formats, to the maximum extent possible.

1.3 Information and Education

One of the purposes of the Public Participation Process is to inform and educate the public regarding the purpose and development of the MTP and the TIP. Information disseminated must be clear, concise, and represent a solid foundation that allows for the public to provide their input to recommendations that will result from the planning process conducted by Eastgate. To enhance this effort, Eastgate proposes to expand various visualization techniques to be more "user friendly" for those participants not traditionally involved in developing/reviewing the transportation planning process, enabling complex concepts to be easily understood.

1.4 Federal and State Guidelines and Requirements

In accordance with federal guidelines, the Eastgate Regional Council of Governments is the designated MPO for Mahoning and Trumbull counties. Eastgate's previous "Public Participation Process" was revised to meet the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation, and was approved by the General Policy Board in April 2007. The Moving Ahead for Progress in 21st Century Act (MAP-21) was signed into law on July 6, 2012, and became effective on October 1, 2012. MAP-21 retained all the SAFETEA LU Metropolitan Planning Regulations, in which transportation planning requirements became effective immediately; Eastgate remains in compliance with MAP-21 planning provisions. In October 2013, Eastgate updated the Public Participation Process to reference MAP-21. The Fixing America's Surface Transportation Act (FAST Act) was signed on December 4, 2015. The FAST Act explicitly adds public ports and certain private providers of transportation, including intercity bus operators and employer-based commuting programs to the list of interested parties that an MPO must provide with reasonable opportunity to comment on the transportation plan. [23 U.S.C. 134(I)(6)(A)]. Eastgate will comply with FAST Act's public participation requirements. Eastgate's Public Participation Process was reviewed and revised in 2018 to coincide with updates of our MTP and Title VI Programs.

2. Achievement Strategies

2.1 Objectives

The primary objectives of this policy are to:

- Bring a diverse cross-section of the public into the public policy decision making process,
- To maintain meaningful public participation from the early stages of the planning process,
- To utilize combinations of public participation and visualization techniques to meet the

the public, and

- To provide ongoing outreach to traditionally underserved communities, including but not limited to, low income, the elderly, persons with disabilities, and minority populations to ensure environmental justice issues are addressed.

2.2 Public Participation Core Components

To achieve the objectives outlined above, several core components must be included in the participation process. These include:

- The confirmation that stakeholders, interest groups, and the public can comment on transportation plans and programs,
- The ongoing early involvement of key stakeholders throughout the planning process,
- Personalizing public participation meetings and activities to obtain productive input,
- Expand visualization techniques to present transportation plans and programs,
- Publicize transportation plans and programs in electronic formats, alternative formats upon request, and on the agency's web site,
- To continue to develop relationships with local media, and
- To utilize social media.

2.3 Stakeholders

The previously approved Public Participation Process (Public Participation Program) identified possible stakeholders linked to the MTP and TIP. Stakeholders are individuals and/or groups who have a direct interest, involvement, or are generally affected by projects, programs, or plans. Identifying "interested Parties" outside of the formal organizational structure of Eastgate is necessary to obtain adequate public input. Stakeholders commonly include but are not limited to:

- People who live in a project area,
- Businesses in a project area,
- Civic and community associations,
- Environmental or special interest groups,
- State and local agencies responsible for land use management, natural resources, conservation, and historic preservation groups as appropriate, and
- Public ports and certain private providers of transportation, including intercity bus operators and employer-based commuting programs in the project area.

3. Public Participation Tools

The Public Participation Process exhibits the importance of effective public participation as a component to a project or plan's success, therefore, various techniques are needed to

engage the public in the decision-making process. As appropriate, new techniques will be be incorporated as they become available and are shown to be successful.

Below is a list of outreach activities, followed by a discussion of the technique including the specific objective of each and procedures to be used in implementation. Eastgate will use all or a combination of the following techniques, dependent on available resources, to involve the public in the transportation planning process through:

- Direct mailings
- Newsletters
- Press releases
- Advertisements
- Webpage
- Community events
- Office open-houses
- Citizens Advisory Board
- Public opinion surveys
- Social media

3.1 Objectives and Procedures Involving Public Participation Tools

Direct Mailings

Objectives: To inform specific audiences through the distribution of pertinent information.

Procedures: Using mailing lists, disseminate letters, newsletters, plan information, etc. to inform the public and encourage response.

Newsletters

Objectives: To inform audiences through the distribution of pertinent information; to encourage involvement through promotion of opportunities for the public to become active in the process.

Procedures: Using e-mail and when requested direct mailing list, Eastgate will continue to distribute the quarterly agency newsletter as well as any pertinent special edition newsletters published by Eastgate. Newsletters are also made available on the agency website.

Press Releases

Objectives: To inform the public through a wide-range distribution of pertinent information; to encourage involvement through promotion of opportunities for the public to become active in the process.

Procedures: Distribute news releases to newspapers and radio stations.

Advertisements

Objectives: To inform the public of information available for review and/or public meetings to be held.

Procedures: Whenever possible and appropriate, advertisements will be placed in newspapers, in addition to major regional newspapers. Radio announcements will also be aired when possible and appropriate.

Web Page

Objectives: To provide access to the latest public information, upcoming events and meetings 24-hours a day; to allow the public to provide comments and feedback on projects and plans.

Procedures: Information regarding upcoming public meetings will be posted on the agency's website; agency programs and plans will be placed on the website; the public can also comment on plans throughout the public review process using e-mail, paper format, and/or any accessible format.

Community Events

Objectives: To provide the public with the opportunity to review, comment, and provide feedback on transportation plans, and activities by setting up displays at public events and places.

Procedures: Set up displays featuring pertinent information and relevant transportation plans and reports available for review.

Office Open House

Objectives: To provide the public with the opportunity to tour agency offices and observe the tools and equipment used in the transportation planning process as well as review, comment, and provide feedback on transportation plans, reports, and activities.

Procedures: Hold periodic office open-houses and have relevant plans and reports available for review.

Citizens Advisory Board

Objectives: To inform specific and general audiences through the focused distribution of pertinent information; to encourage involvement through promotion of opportunities for the public to become active in the process.

Procedures: At each monthly meeting of the Eastgate Citizens Advisory Board, provide details on transportation projects and related issues to inform the public and encourage response.

Public Opinion Surveys

Objectives: To access widespread public opinion on various transportation plans and reports, activities, and miscellaneous issues in the area.

Procedures: Distribute public opinion surveys to members of the public.

Social Media

Objectives: To inform audiences through the distribution of pertinent information; to encourage involvement through promotion of opportunities for the public to become active in the process.

Procedures: Using social media such as Facebook and Twitter to provide information.

3.2 Consideration of Public Comments

Public comments from the various sources will be organized and analyzed, where appropriate, so that the suggestions and comments may be considered by Eastgate staff and decision makers.

Summaries will be prepared and disseminated to Eastgate Committees and the General Policy Board.

When possible, Eastgate staff will respond to those who participated to demonstrate the results of their involvement through direct mailings, e-mail, newsletters, webpage, and news releases. All comments and responses will be placed on Eastgate's webpage.

4. Evaluating the Program

Eastgate will review the Public Participation Process at the end of each state fiscal year to determine if the objectives of the program were fulfilled.

The Public Participation Process is available for download on Eastgate's website:

www.eastgatecog.org

REGIONAL TRENDS

Understanding trends in land use development, population, employment, and other factors can inform future projected needs of the transportation system. People and industry rely on the transportation system every day to meet their needs such as getting to work, going to school or a medical appointment, or transporting goods. Eastgate maintains a database to model how travel patterns may evolve over a twenty-year period. These trends help transportation planners and other stakeholders understand how development patterns, demographic changes, and economic conditions may affect the network.

Location

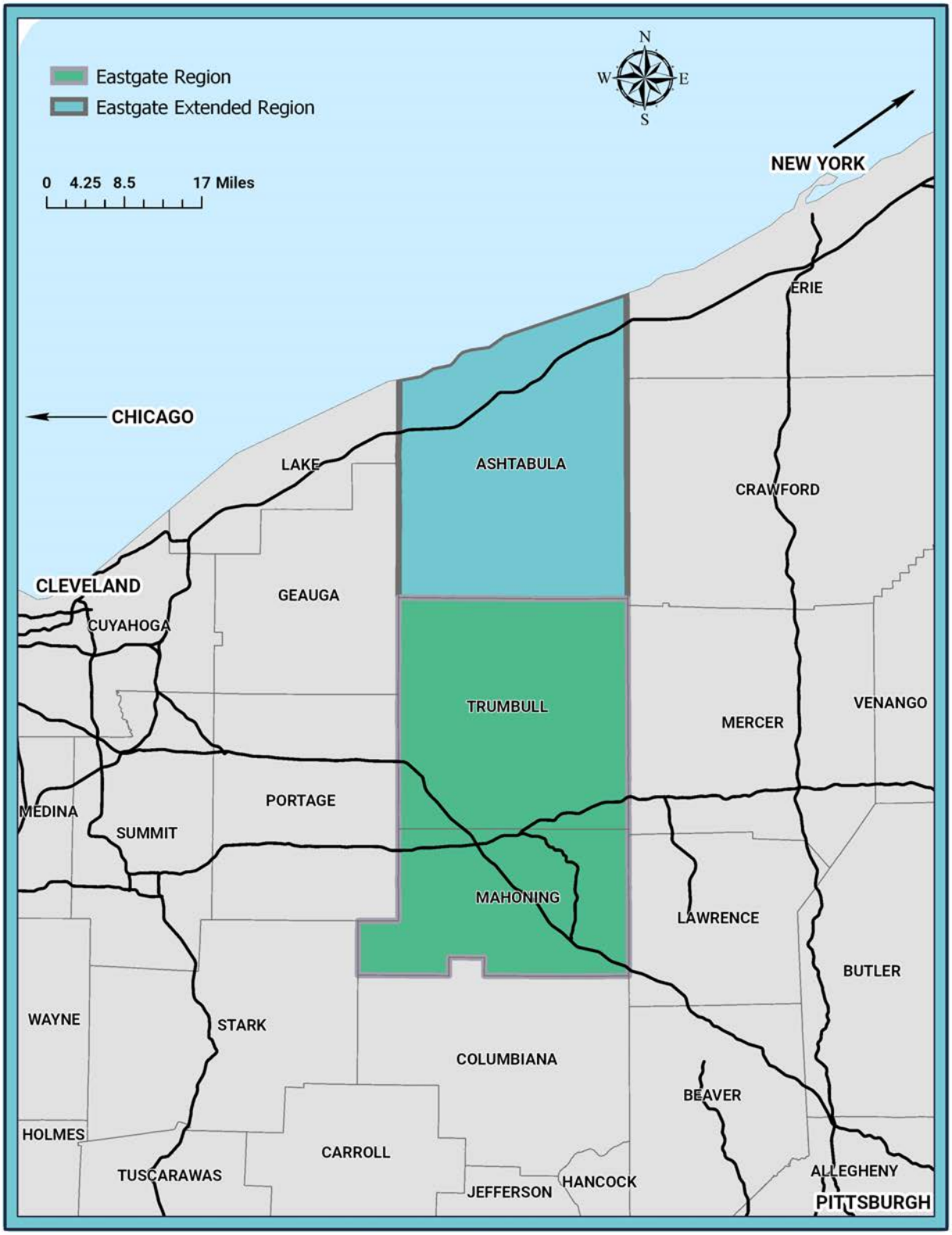
Mahoning and Trumbull counties were originally part of the Connecticut Western Reserve that colonized several counties in northern and eastern Ohio. Many local towns such as Canfield, Poland, and Warren feature architecture traditional to New England planning. Geographically, the region is situated within twenty-five miles of both Lake Erie and the Ohio River and is equal distant to Cleveland and Pittsburgh. The region is bounded on the north by Ashtabula County, on the west by Geauga, Portage and Stark counties, on the south by Columbiana County, and on the east by the Pennsylvanian counties of Mercer and Lawrence as shown in **EXHIBIT G: EASTGATE'S REGIONAL CONTEXT**.

The area is 1,049 miles, or 671,360 acres and is comprised of sixty-three cities, villages, and townships. The Eastgate metropolitan transportation planning area is part of the Mahoning Valley that includes Mahoning, Trumbull, and Columbiana counties. Columbiana County has in the past been a part of Eastgate's planning area but is not part of the urban area. Columbiana County is currently a member of the Regional Transportation Planning Organization (RTPO) OMEGA – Ohio Mid-Eastern Governments Association.

Land Use

Land use and the transportation system have a symbiotic relationship as development influences regional travel patterns and the system's capacity. Land use and site development decisions can also affect access to transit and other multi-modal connections. Site development that takes place without consideration for regional travel patterns may result in congestion and poor access management. Access management is a set of techniques that local governments can use to control access to highways, major arterials, and other roadways. The benefits of access management include improved movement of traffic, reduced crashes, and fewer vehicle conflicts. Planners identify existing and

EXHIBIT G: EASTGATE'S REGIONAL CONTEXT



proposed land use activities to determine future impacts on travel demand. This information helps to determine where transportation facilities may need upgrades to meet future demand. Travel demand is determined by a model, where areas of intensive development generate more trips and thereby require additional transportation improvements, while areas that are steady or declining in trip generation must maintain their existing transportation infrastructure. MPOs must budget and prioritize the capital needs in the context of the regional transportation network and where trip generation is increasing.

Trip generation occurances are complicated by land use development.

In 2000, the urban area was 146,667 acres and in 2010 it was 155,632 acres. Despite a population decline of over 34,000 people during these ten years, the urban area expanded by 8,965 acres, or 6%. An increased urban area and decreased population not only depicts sprawl, but important issues such as expanding infrastructure with limited population growth. This development pattern has led to many negative externalities, including increased reliance on driving, drastic reduction in open space and agricultural land, detrimental impacts to air and water quality, and increased need for infrastructure and services across a larger footprint. A comparison of projected land use in from 2010 to 2040 is demonstrated in **EXHIBIT H: 20 10 LAND USE** and **EXHIBIT I: 2040 LAND USE**.

Vibrant NEO, a product of the Northeast Ohio Sustainable Communities Consortium (NEOSCC), further describes various land use scenarios based on land use patterns and demographic changes. Without mediation, the Eastgate region will continue to sprawl at even lower rates of density and legacy cities and first ring suburbs will continue to decline in population.

EXHIBIT H: 2010 LAND USE

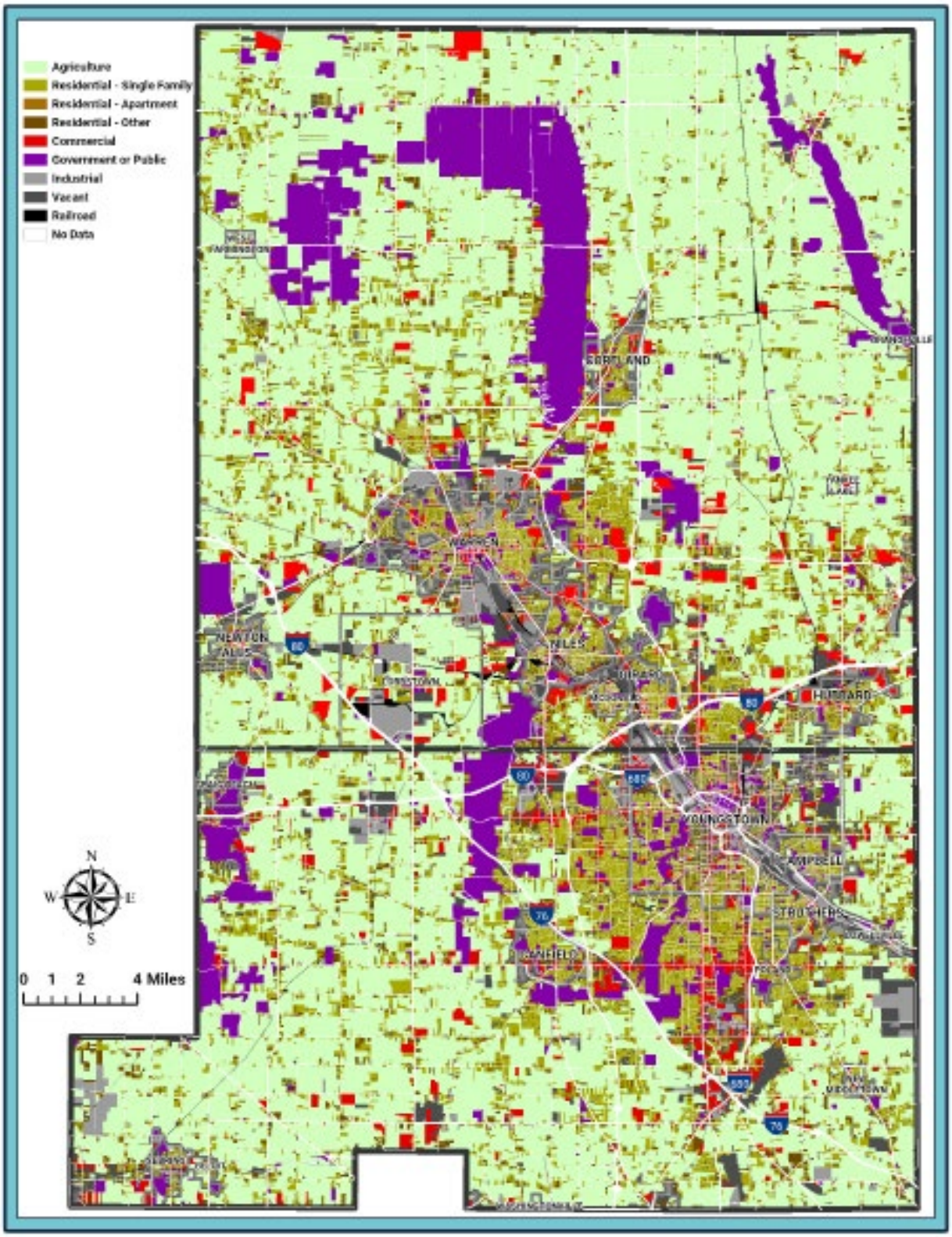
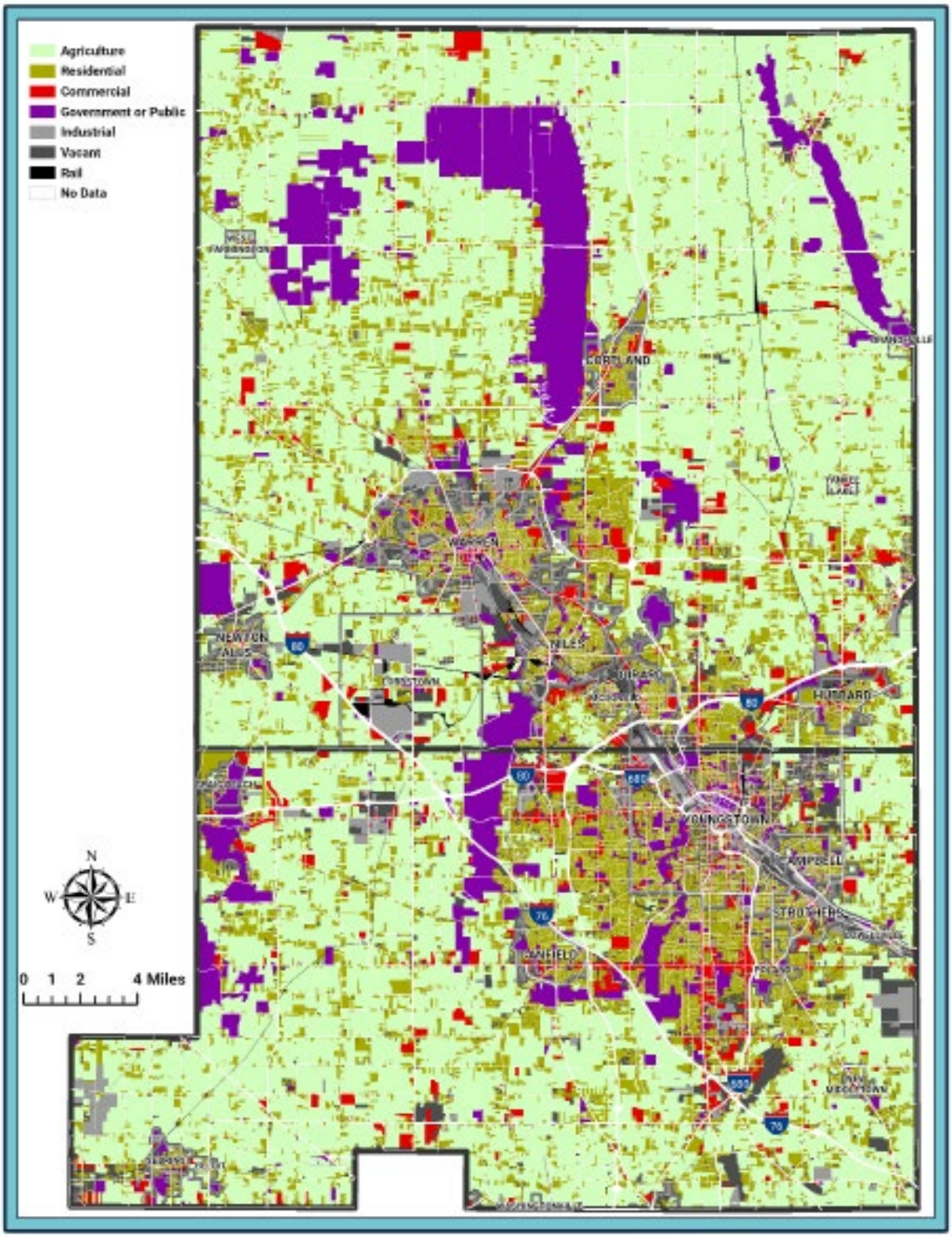


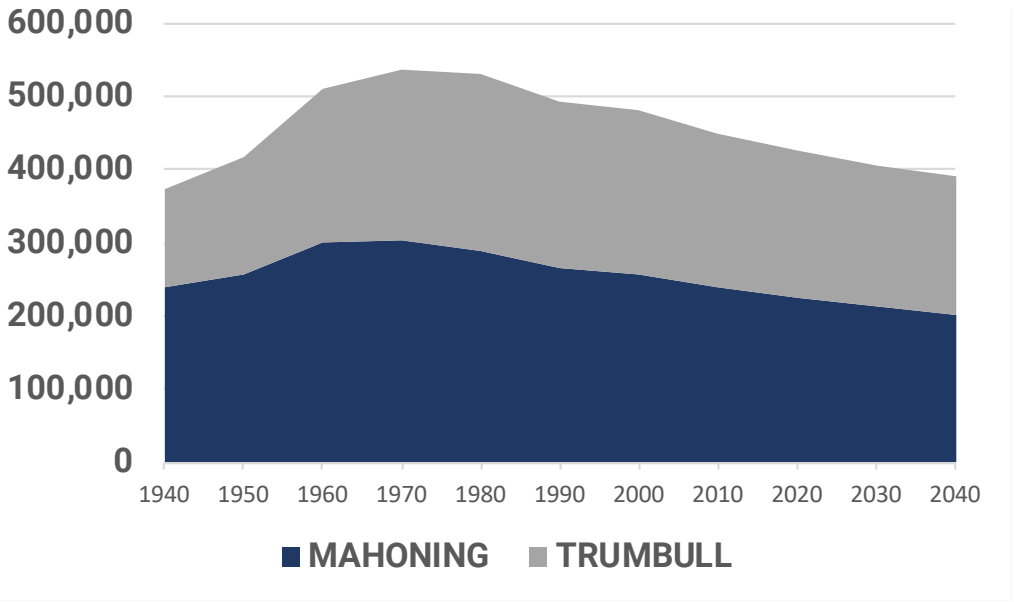
EXHIBIT I: 2040 LAND USE



Population

Since 1970, when the population peaked at 536,003, the Eastgate Region has only seen decline. Between 2010 and 2015, the population declined from 449,135 to 435,651, a 3% decrease. Most of this decline is due to out migration to other communities. In particular, the past several years of the American Community Survey have seen out migration to Pittsburgh, Columbus, and Phoenix. Between 2010 and 2015, 7,265 people left the region, equivalent to losing six people per day. A historical trend line showing Eastgate's peak in 1970 is shown in

EXHIBIT J: POPULATION CHANGE IN THE EASTGATE REGION 1940 - 2040

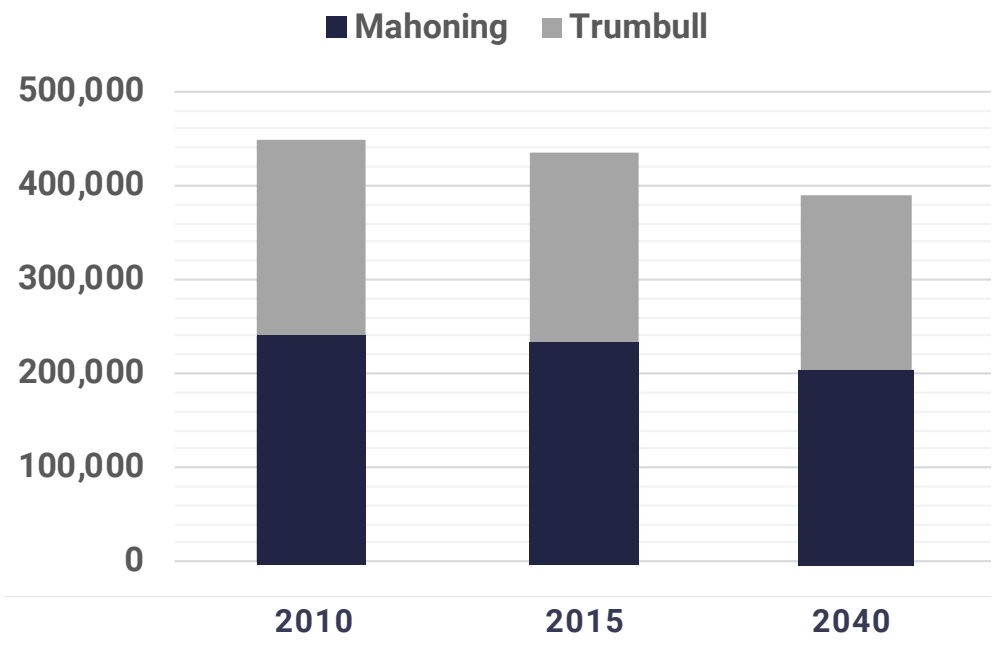


SOURCE: OHIO DEVELOPMENT SERVICES AGENCY

The projected population in 2040 is 389,880, a 13.2% decrease from 2010 levels as shown in **EXHIBIT K: POPULATION CHANGE IN THE EASTGATE REGION 2010 - 2040**. This projection is based on county-wide data provided by the Ohio Development Services Agency (ODSA). Decreasing population greatly affects the trip demand and sustainability of the transportation system because traditional transportation funding mechanisms are based on growth models for maintenance and expansion. Eastgate is in the process of reaching out to other MPOs with decline and evaluating ways of addressing this issue.

EXHIBIT K: POPULATION CHANGE IN THE EASTGATE REGION 2010-2040

BETWEEN 2010 AND 2040, MAHONING COUNTY WILL LOSE 36,183 PEOPLE AND TRUMBULL COUNTY WILL LOSE 23,062 PEOPLE, A 13.2% OVERALL LOSS.



SOURCE: OHIO DEVELOPMENT SERVICES AGENCY

Age

The median age of the Eastgate Region is 43.5, per 2015 5-Year Estimates from the American Community Survey (ACS). The two counties are significantly older than Ohio (39.2) and the nation (37.6). The median age reflects the low number of births and negative in-migration in the two counties, compared to state and national averages. The region's largest demographic group is the baby boomers, born between 1946 and 1964. The baby boomers will exit the workforce entirely by 2030. Year-over-year increases in median age require the Eastgate Region to consider the transportation needs of an aging population that may progressively experience limited mobility. Given that over the past fifty years transportation planning has encouraged single-occupancy vehicles and dispersed land use patterns, special attention will need to be given to the safety of aging drivers. Additionally, the impact of changing demographics will have a profound impact on regional preferences and travel trends in the coming years. According to many reports, including Smart Growth America, mixed-use

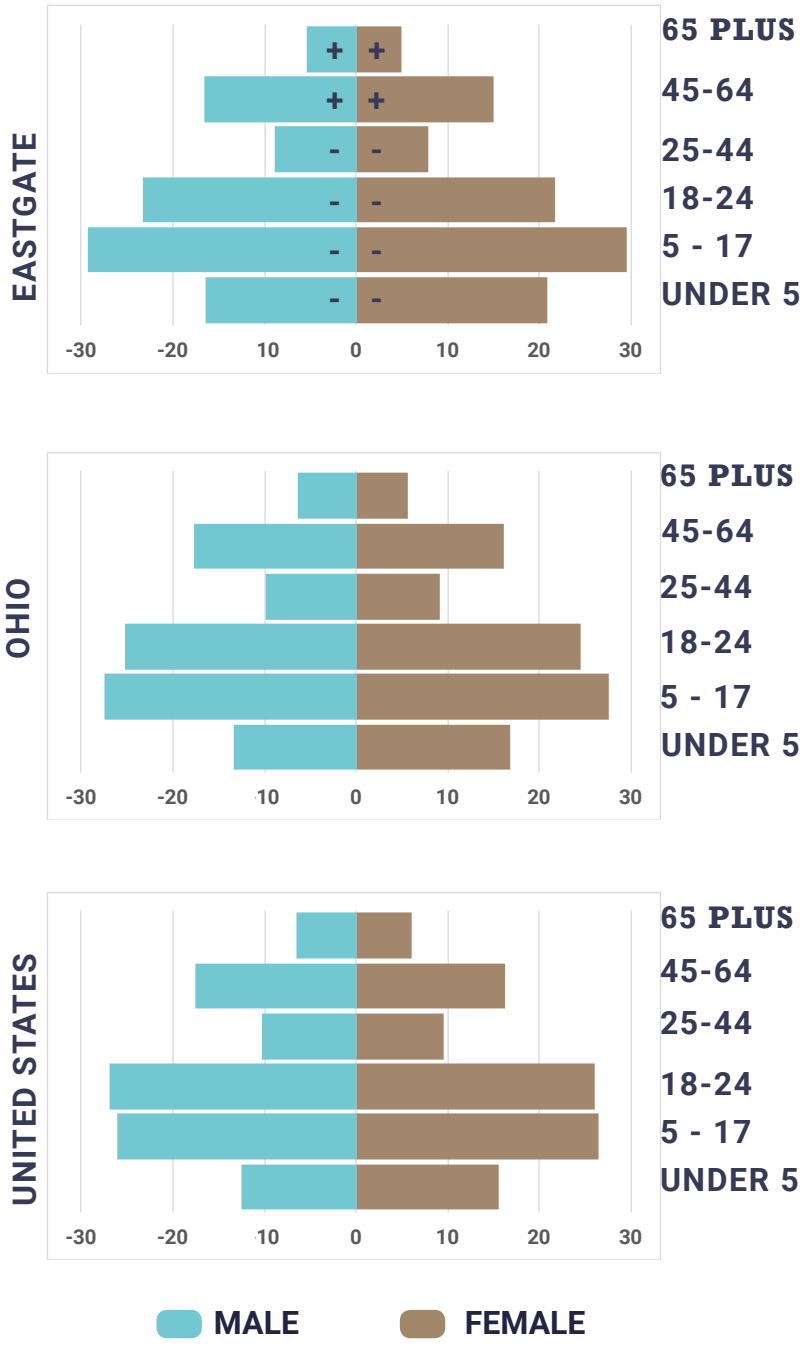
communities that are walkable, bikeable, and accessible by public transit can enhance quality of life and improve access to necessary services for all residents.

A healthy age pyramid looks like a triangle. In the Eastgate Region, there is an exodus of 25-44 year-olds as shown in **EXHIBIT L: AGE PYRAMIDS.** A **+** indicates the the region has a greater percentage than the state and nation per age group and sex. As shown in the Eastgate age pyramid, the region has less individuals than the state and nation under 44 years of age and more 45 years of age and older.

Racial Diversity

The Eastgate Region (84.2% White) is less racially diverse than the state of Ohio (82.4% White) and the nation (73.6% White). Mahoning County is more diverse, with over 15% of the population identified as Black, compared to under 9% in Trumbull County as shown in **TABLE 1: 2015 POPULATION IDENTIFYING AS WHITE**. The lack of diversity may be tied to the lack of in-migration and significant out migration in the region.

EXHIBIT L: AGE PYRAMIDS



SOURCE: AMERICAN COMMUNITY SURVEY

TABLE I: 2015 POPULATION IDENTIFYING AS WHITE			
	2010	2015	CHANGE
EASTGATE REGION	84.8%	84.2%	0.6
OHIO	83.4%	82.4%	-1.0
UNITED STATES	74.0%	73.6%	-0.4

SOURCE: AMERICAN COMMUNITY SURVEY

English Proficiency

In the Eastgate Region, 1.8% of the population have limited English proficiency. In comparison, 2.6% of Ohioans and 8.6% of Americans have limited English proficiency as shown in **TABLE 2: 2015 PERCENT OF POPULATION FIVE-YEARS AND OVER WHO SPEAK ENGLISH LESS THAN "VERY WELL"**. Lower limited English proficiency percentages may be attributed to the region not being attractive for employment.

TABLE 2: 2015 PERCENT OF POPULATION FIVE-YEARS AND OVER WHO SPEAK ENGLISH LESS THAN "VERY WELL"			
	2010	2015	CHANGE
EASTGATE REGION	1.8%	1.8%	0.0
OHIO	2.4%	2.6%	0.2
UNITED STATES	8.7%	8.6%	-0.1

SOURCE: AMERICAN COMMUNITY SURVEY

Migration

Foreign-born residents in the Eastgate Region number 10,051, per 2015 ACS 5-Year. Nearly 40% of foreign-born residents came from Europe and 25% of this European population is Italian. Although more foreign-born residents are European, the country of Mexico has the largest number of immigrants in the region, with 1,288 people. Most foreign-born residents migrated to the region some time ago, only 15% came to the area in the last five years. Limited in-migration may be attributed to the region not being attractive for employment.

Poverty Rate

Per capita, mean income rose between 2010 and 2015 in the Eastgate Region, however, the poverty rate grew from 16.0% to 17.7%. The poverty rate in Ohio is 15.8% and is 15.5% nationally. More alarmingly, the poverty rate for Black/African-American population is 41.2% compared to 27.0% nationally and 40.0% of people of Hispanic or Latino origin are in poverty compared to 24.3% nationally as shown in **TABLE 3: 2015 POVERTY RATE**.

TABLE 3: 2015 POVERTY RATE

	2010	2015	CHANGE
EASTGATE REGION	16.0%	17.7%	1.7
OHIO	14.2%	15.8%	1.6
UNITED STATES	13.8%	15.5%	1.7

SOURCE: AMERICAN COMMUNITY SURVEY

Household Income

The mean household income in the Eastgate Region in 2015 was $55,644, more than $10,000 less than state and $20,000 less than national averages. The growth rate of the region was also less robust than the state and nation from 2010-2015, at 4.4% as shown in **TABLE 4: 2015 HOUSEHOLD INCOME**. Lower household income may be attributed to a weak economy with low-wage service jobs and low education attainment rates. A recent study by Eastgate found that the Youngstown, OH-PA region had lower education attainment rates than it's peers, including Canton, OH and Flint, MI.

TABLE 4: 2015 HOUSEHOLD INCOME

	2010	2015	GROWTH RATE
EASTGATE REGION	$53,308	$55,644	4.4%
OHIO	$62,205	$66,409	6.8%
UNITED STATES	$70,883	$77,558	9.4%

SOURCE: AMERICAN COMMUNITY SURVEY

Per Capita Income

The per capita income in the Eastgate Region in 2015 was $23,783, well below the state and nation as shown in **TABLE 5: 2015 PER CAPITA INCOME**.

TABLE 5: 2015 PER CAPITA INCOME

	2010	2015	GROWTH RATE
EASTGATE REGION	$22,339	$23,783	6.5%
OHIO	$25,113	$26,953	7.3%
UNITED STATES	$27,334	$28,930	5.8%

SOURCE: AMERICAN COMMUNITY SURVEY

Housing

Since 2000, compared to the state and nation, less new housing has been built in the Eastgate Region. Limited new housing units is reflected in a higher owner-occupancy rate and a higher ratio of single family housing to the state and nation, because of the type of housing built during the population peak as shown in **TABLE 6: 2015 HOUSING CHARACTERISTICS**. The region has pockets of high vacancy rates, but overall is comparable to the state and nation. Given that the average size household in the Mahoning Valley is 2.33 persons and there are 207,134 units in the region, if no new structures were to be built between 2015 and 2040, there would still be an excess of 39,800 unoccupied units by 2040. Over 19% of the existing housing stock in 2015 will become unoccupied by 2040. Aging housing stock that is not aligned with the size of the population and their needs will remain a key concern of the Mahoning Valley.

TABLE 6: 2015 HOUSING CHARACTERISTICS

	MEDIAN VALUE OF UNIT	OWNER OCCUPANCY RATE	% SINGLE-FAMILY	% MULTI-FAMILY	% MOBILE HOME	% BUILT AFTER 2000	% VACANT
EASTGATE REGION	$97,200	69.5%	75.7%	21.4%	2.9%	6.2%	10.9%
OHIO	$129,900	66.3%	68.5%	27.6%	3.9%	10.9%	10.8%
UNITED STATES	$178,600	63.9%	61.6%	31.9%	6.4%	16.4%	12.3%

SOURCE: AMERICAN COMMUNITY SURVEY

Travel Patterns

In the Eastgate Region per 2015 ACS 5-Year, more households have vehicles than do not (8.2% without) than the state (8.5% without) and national averages (9.1% without). However, 18.8% of households in Youngstown and 12.9% in Warren do not own vehicles. The urban cores of each county have significantly more households without vehicles than the region as seen in **TABLE 7: 2015 HOUSEHOLDS WITHOUT VEHICLES**.

TABLE 7: 2015 HOUSEHOLDS WITHOUT VEHICLES

	2015
YOUNGSTOWN	18.8%
WARREN	12.9%
EASTGATE REGION	8.2%
OHIO	8.5%
UNITED STATES	9.1%

SOURCE: AMERICAN COMMUNITY SURVEY

Per 2015 ACS 5-Year estimates, mean travel time to work for both counties are relatively the same at 21.4 minutes for Mahoning County and 22.2 minutes for Trumbull County. Ohio's mean commute travel time is 23.24 minutes and nationally it is 26.4 minutes.

Utilizing Longitudinal Employer-Household Dynamics (LEHD) data, between 2004 and 2014 the distance that people traveled for work increased. Between 2004 and 2014, the number of people that traveled less than ten miles for work decreased by 5.1% to 53.5%. The number of people that commute more than fifty miles each way increased by 2.2% to 14.2%. Between 2004 and 2014, the number of workers who live in Mahoning and Trumbull counties dropped from 175,059 to 171,475, a difference of 3,584 people. As to the number of workers who work in Mahoning and Trumbull counties, the number of employees dropped by 16,263, or 9.3%, during this time-period. One can infer that less people travel to the Mahoning Valley for work than in years past.

More people that live in the region are travelling further for employment than in years prior, in part, due to the local economy. Another reason people are travelling further is that because of limited congestion and shorter than average commute times, it is easier to travel long distances in less time than other metropolitan regions. Eastgate is studying these trends through its Job Hub initiative, which is looking at where there are concentrations of traded-sector jobs.

LEHD data indicates that for those that live in the two-county region, the greatest employment center is Youngstown (21,803), followed by Warren (13,739) and Boardman (13,739) as explained in **TABLE 8: WHERE THE EASTGATE REGION'S WORKFORCE LIVES** and **TABLE 9: WHERE THE EASTGATE REGION'S WORKFORCE WORKS. EXHIBIT M: EMPLOYMENT TRENDS** provides an overview of employment trends in the region. **EXHIBIT N: EASTGATE REGION'S WORKFORCE PER 10,000 IN 2004 & 2014** provides context on the decline of employment from those both commuting to and living in the region.

TABLE 8: WHERE THE EASTGATE REGION'S WORKFORCE LIVES	
	2014
1. YOUNGSTOWN	21,803
2. WARREN	13,739
3. BOARDMAN	13,388
4. AUSTINTOWN	7,547
5. NILES	6,558

TABLE 9: WHERE THE EASTGATE REGION'S WORKFORCE WORKS	
	2014
1. YOUNGSTOWN	14,018
2. BOARDMAN	11,147
3. WARREN	9,103
4. AUSTINTOWN	8,761
5. NILES	5,484

SOURCE: LEHD

EXHIBIT M: EMPLOYMENT TRENDS

158,560
PEOPLE WERE EMPLOYED IN THE EASTGATE REGION IN 2014

51.0%
OF PEOPLE WHO LIVE IN THE EASTGATE REGION ARE EMPLOYED OUTSIDE THE REGION IN 2014

5,196
LESS PEOPLE IN 2014 COMMUTED TO THE EASTGATE REGION FOR WORK COMPARED TO TEN YEARS EARLIER, A 6.6% REDUCTION

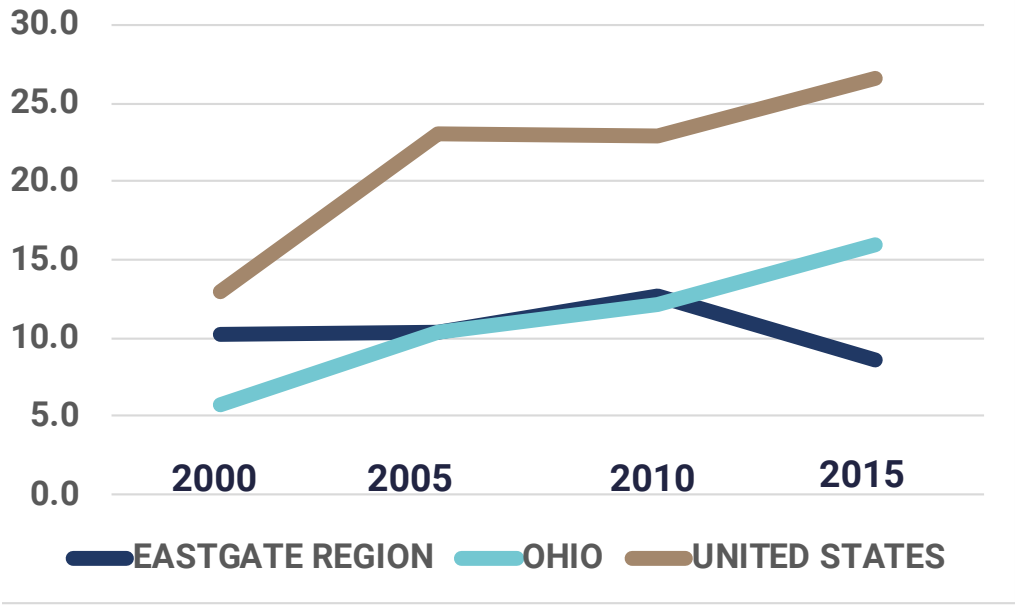
EXHIBIT N: COMPARISON OF EASTGATE REGION'S WORKFORCE PER 10,000 IN 2004 & 2014

SOURCE: LEHD

VMT

Vehicle Miles Traveled (VMT) is a measurement of miles traveled either by passenger vehicle or truck. Annual VMT is used as an indicator for many transportation planning factors including congestion, personal travel patterns, and economic growth. Historically, national recessions would slow growth in VMT and then it would pick up again. VMT after the Great Recession did not grow like it has in the past and there are many theories for this lack of growth including high gas prices, limited economic expansion, aging population, mass transit usage, and telecommuting. Between 1995 and 2015, VMT in the Eastgate Region rose by 0.8% compared to 16.9% in Ohio. Eastgate's limited VMT growth is reflected through its decreasing and aging population and stagnant economic growth. It should be noted that the calculation for VMT by ODOT has been refined over the past five-years, so year-over-year comparisons aren't entirely consistent. A summary of trends is shown in **EXHIBIT O: VMT**.

EXHIBIT O: VMT



SOURCE: ODOT

TRAVEL DEMAND MODEL

Assigning the mode and direction of travel is important for populating the Travel Demand Model, a forecasting tool. It is a macro level planning tool for measuring highway network performance and provides a general perspective on traffic congestion. The Model is broken into subdivisions that are referred to as Traffic Analysis Zones (TAZs) that vary in size depending upon the density and land use. Each of the 733 TAZs that cover Mahoning and Trumbull counties serve as a geographic unit for developing forecasts based on the four-step process:

- Trip Generation
- Trip Distribution
- Mode Choice
- Route Assignment

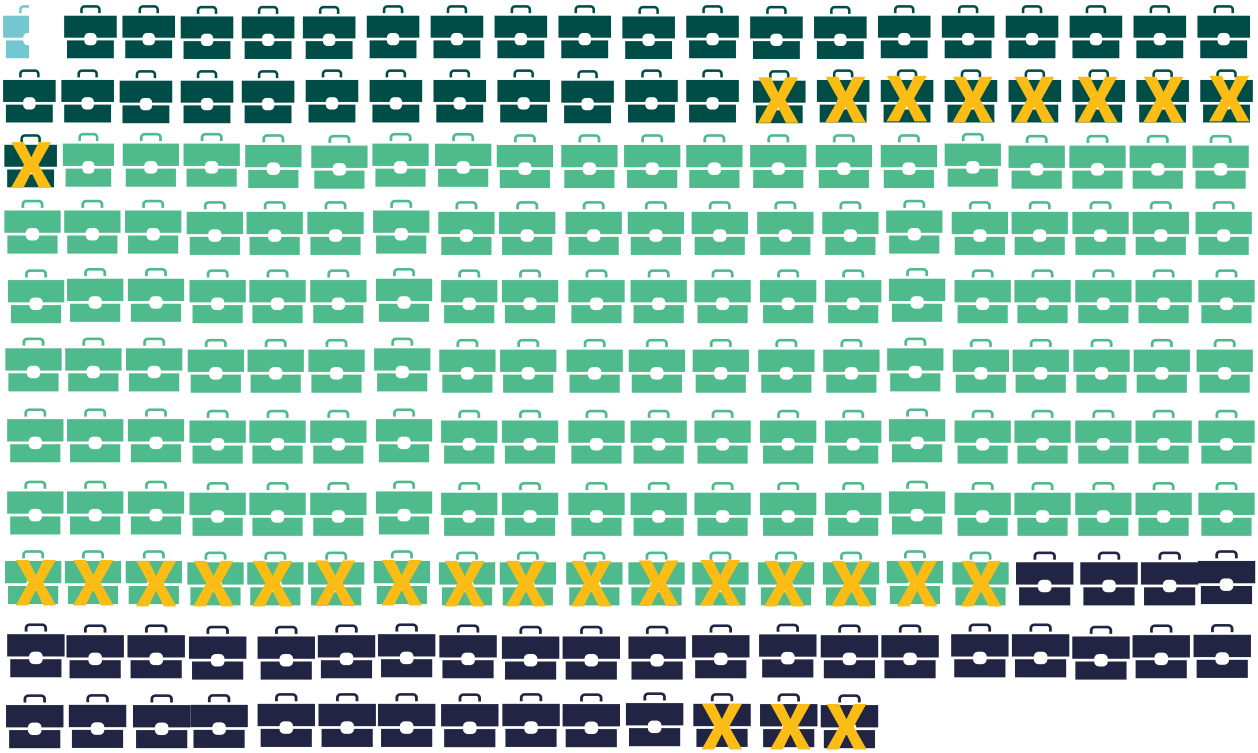
The Travel Demand Model inputs projections provided by ODSA to determine where people may reside and work over a twenty-year horizon. Locations for where people may live and/or work are divided into four zones: Central Business District (CBD), Urban, Suburban, and Rural. Given the overall decline in population, except for CBDs, each of the zones will see further decline in residents and jobs over the projected twenty-year horizon. The number of jobs is forecasted to incrementally grow in the areas of Utilities and Primary Metal Manufacturing. Presently, Utilities are in Niles, Weathersfield, and Youngstown. Primary Metal Manufacturing is located along the Mahoning River Corridor and in Lordstown.

In addition to the projected job growth by the Travel Demand Model, ODSA recognizes eleven target industries important for the state's economic future. The industries are advanced manufacturing, automotive, food processing, logistics, and polymers and chemicals. The Comprehensive Economic Development Strategy (CEDS) further details the targeted cluster of advanced manufacturing; specifically, materials, automotive, and food processing. These industries are experiencing rapid transformation. For instance, just-in-time delivery and lean inventories are changing the footprints of manufacturing facilities. Robotics and artificial intelligence are modifying workforce needs. Hence, the Travel Demand Model should be interpreted for smart decision-making rather than predicting the future. As shown in **EXHIBIT P: COMPARISON OF HOUSEHOLDS PER 1,000 PEOPLE IN 2010 & PROJECTED FOR 2040,** the total number of households is projected to shrink by 60,000, with signficicant impact to urban communities. In **EXHIBIT Q: COMPARISON OF EMPLOYMENT PER 1,000 PEOPLE IN 2010 & PROJECTED FOR 2040,** 28,000 jobs will disappear from the region. **TABLE 10: EMPLOYMENT PER INDUSTRY TYPE** further explains within which industries employment is expected to grow and/or decline. Growth in agriculture, utilities, and manufacturing is projected, however these industries are changing with automation. In order to address projected loss of households, and jobs, Eastgate will undertake scenario planning, seek guidance from other MPO's with similar demographic issues, and work with ODOT to apply modeling suitable for Eastgate's needs. This work will be tied to the development of performance targets and other prioritization that will be developed through visioning. Goals will be structured that fully consider all modes of transportation. A transportation needs assessment will be created through community meetings, a goal setting process, travel demand modeling, surveys, congestion analysis, crash incidents analysis, accessibilty analysis, and other items as defined in the OWP for 2019, 2020, and beyond.

SOURCE: TRAVEL DEMAND MODEL & ODSA

EXHIBIT P: COMPARISON OF HOUSEHOLDS PER 1,000 PEOPLE IN 2010 & PROJECTED FOR 2040

EXHIBIT Q: COMPARISON OF EMPLOYMENT PER 1,000 PEOPLE IN 2010 & PROJECTED FOR 2040



CBD
SUBURBAN
URBAN
RURAL

SOURCE: TRAVEL DEMAND MODEL & ODSA

TABLE 10: EMPLOYMENT PER INDUSTRY TYPE			
NAICS	2010	2040	GROWTH
11: AGRICULTURE	177	206	16.2%
21: MINING +	273	242	-11.3%
22: UTILITIES	775	992	28.1%
23: CONSTRUCTION	6,768	5,662	-16.3%
31-33: MANUFACTURING	15,142	17,725	17.1%
42: WHOLESALE TRADE	6,594	6,210	-5.8%
44-45: RETAIL TRADE	16,183	14,520	-9.3%
48-49: TRANSPORTATION & WAREHOUSING	4,109	3,861	-8.1%
51: INFORMATION	2,072	2,130	2.8%
52 : FINANCE & INSURANCE	4,746	4,182	-11.9%
53: REAL ESTATE & LEASING	2,149	2,018	-6.1%
54 : PROFESSIONAL SERVICES +	5,704	4,691	-17.8%
55: MANAGEMENT OF COMPANIES	1,840	1,684	-8.5%
56: WASTE MANAGEMENT & REMEDIATION	11,208	10,743	-4.1%
61: EDUCATION	17,285	15,874	-8.2%
62: HEALTH CARE & SOCIAL ASSISTANCE	38,301	33,776	-11.8%
71: ARTS, ENTERTAINMENT & RECREATION	1,536	1,104	-28.1%
72: ACCOMMODATION & FOOD SERVICES	16,645	14,932	-10.3%
81: OTHER SERVICES	5,538	5,241	-5.4%
91: PUBLIC ADMINISTRATION	9,033	8,825	-2.3%

Understanding where people travel for work is important for determining the future needs of the transportation system. The Eastgate Region working population is heavily dependent on single-occupancy motor vehicles. Between 2011 and 2015, there was little change in modal choice in how people commuted to work. Nearly 98% of workers commuted by car, truck, or van. Of that 98%, nearly 90% drove alone and only 7% carpooled. More people as a percentage walk or take a taxi, motorcycle, bicycle, or other means of transportation than utilize public transit as shown in **EXHIBIT R: TRAVEL TO WORK PATTERNS**.

EXHIBIT R: TRAVEL TO WORK PATTERNS

3.3% **Work from home compared to 3.5% in Ohio and 4.4% nationally**

89.6% **Commute alone by car, truck, or van compared to 83.4% in Ohio and 76.4% nationally**

7.1% **Carpool by car, truck, or van compared to 7.9% in Ohio and 9.5% nationally**

>1% **Commute by public transit, walking, taking a taxi or motorcycle, bicycling, or other means compared to 5.2% in Ohio and 9.7% nationally**

SOURCE: AMERICAN COMMUNITY SURVEY

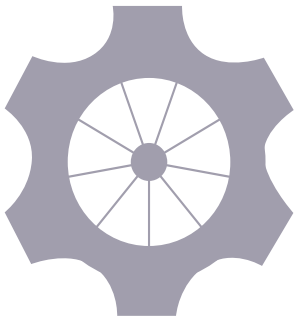
VISION & GOALS

Eastgate's vision is to strengthen the established transportation network through preservation, efficiency, collaboration, and modal choice as defined by the objectives of its *2040 MTP*. This vision and reasoning was debated and agreed upon by the TAC in order to provide structure to the *2040 MTP Update*. Careful consideration to what transportation investments are made between now and 2040 are key for implementing this vision. Operating and maintaining a transportation network that moves both people and goods is necessary given the data findings and modeling trends explored through the transportation planning process.

To accomplish this vision, Eastgate has adopted FHWA and FTA's planning factors for MPOs as goals for the *2040 MTP Update*. Prior to this *2040 MTP Update,* there was no vision or process for incorporating goals into plans, programs, and/or projects. With new staff and an emphasis on planning, further development of transportation planning factors and a thorough planning process will take place. As a first step, Eastgate integrated the planning factors from FHWA and FTA with its existing structure of the OWP that is based around major functions of the MPO. In the future, Eastgate will develop its own goals that will in turn prioritize projects.

Economy:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Promote consistency between transportation improvements and planned growth and economic development patterns.



Mobility:

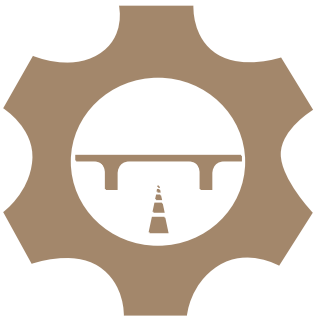
- Increase accessibility and mobility for people and freight.

Resilience:

- Protect and enhance the environment.
- Promote energy conservation.
- Improve quality of life for the community

Safety:

- Increase the safety of the transportation system for motorized and nonmotorized users.



System Performance:

- Emphasize the preservation of the existing transportation system.
- Increase the security of the transportation system for motorized and non-motorized users.
- Promote efficient system management and operation.

Technology:

- Enhance the integration and connectivity of the transportation system for all modes.

GEARS

A complex network of components governs the transportation planning process. These components have been simplified into six “gears” that represent the sub-systems that must work together seamlessly to deliver interoperability of surface modes. They also reflect FHWA and FTA’s planning factors. This section outlines each of the six gears and explains why they are important and how they are incorporated into the transportation planning process. Eastgate includes the gears through the development of the OWP. The OWP includes short range planning activities such as monitoring congestion, locations of accidents, and corridor performance. Continuing planning activities include extensive data collection, monitoring assets, and other surveillance functions. The TAC provides influence on the types of planning and coordination needed to optimize the transportation network. This input is in turn utilized by Eastgate for the preparation of reports and studies that correlate to suggested performance measures.

ECONOMY

The economy and transportation are inseparable. Transportation moves goods and people, employs workers, and consumes materials and services produced throughout the economy. In fact, in 2015, 9% of the total Gross Domestic Product of the United States was transportation related, according to the Bureau of Economic Analysis. A reliable transportation network is also necessary to improve efficiency that allows American businesses to be competitive through lower production costs.

Transportation planning for the economy has in the past focused on where industry is and connecting supply chains and other resources such as available land and workforce. This process is growing in complexity as the transportation system matures and competition for government funds intensifies. Meanwhile automation, digitization, and freelancing are changing the nature of the workplace.

Traditional approaches of utilizing transportation projects for economic growth are considering new variables and metrics for their return on investment such as economic competitiveness, social equity, environmental stewardship, public health, and livability. The Transportation Research Board (TRB) defines two types of infrastructure investment: expansion and enhancement. Expansion includes the construction of additional highway segments and adding lanes that is traditional to economic development. Enhancement includes new technologies such as intelligent highway systems and congestion pricing. Both types of investments are considered by Eastgate to support the economic vitality and competitiveness of the metropolitan area.

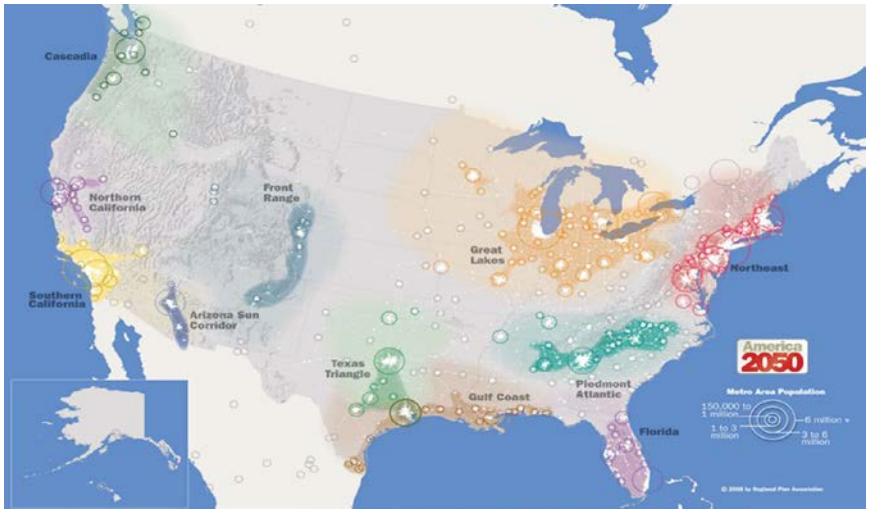
Moving forward, Eastgate will coordinate economic development considerations more closely by integrating its economic development and transportation planning departments, which currently have separate work programs. Economic development staff is preparing information on this topic that will be utilized by transportation staff and groups such as Grow Mahoning Valley.

Megaregions

Under Secretary Foxx, the U.S. Department of Transportation released *Beyond Traffic 2045* that highlights transportation challenges the United States will face over the next three decades. One of the key terms introduced in this document as a major trend for decision-making is megaregions. Megaregions are a group of geographic locations and/or areas that are combined because of similar characteristics and mutual interests. The Regional Plan Association, based out of the New York City metropolitan area, has identified ten megaregions as part of America 2050, an effort to look at a broad range of transportation, sustainability, and economic development issues impacting America's growth in the twenty-first century. Megaregions are the result of metropolitan regions expanding through low density settlement patterns, resulting in interlocking economic and transportation systems that link these populations together as shown in **EXHIBIT S: MEGAREGIONS**. The Eastgate Region is part of the Midwest Megaregion, which is defined by the metropolitan areas in North America largely along the Great Lakes that have a rich industrial history. As part of this megaregion, Eastgate inherently works across political boundaries on issues such as air pollution and freight movement.

MPOs are encouraged to think and act at the megaregion level to address emerging challenges and take advantage of opportunities that arise around economic opportunity and global sustainability. Current activities include modeling passenger and freight flows along major corridors to understand the spatial and modal transport patterns in order to reduce conflicts and congestion. These conversations are currently occurring through organizations such as the Ohio Association of Regional Councils (OARC), a forum where MPOs across Ohio meet, as well as ODOT and FHWA's Ohio office. Eastgate's long-range planning process strives to be consistent and complimentary to the goals and policies of its members and its partners beyond the MPO's boundaries. These policies include supporting transportation system expansion projects, addressing development patterns and congestion, air quality, climate change, energy reliance, and transportation funding.

EXHIBIT S: MEGAREGIONS



SOURCE: FHWA

Movement of Goods

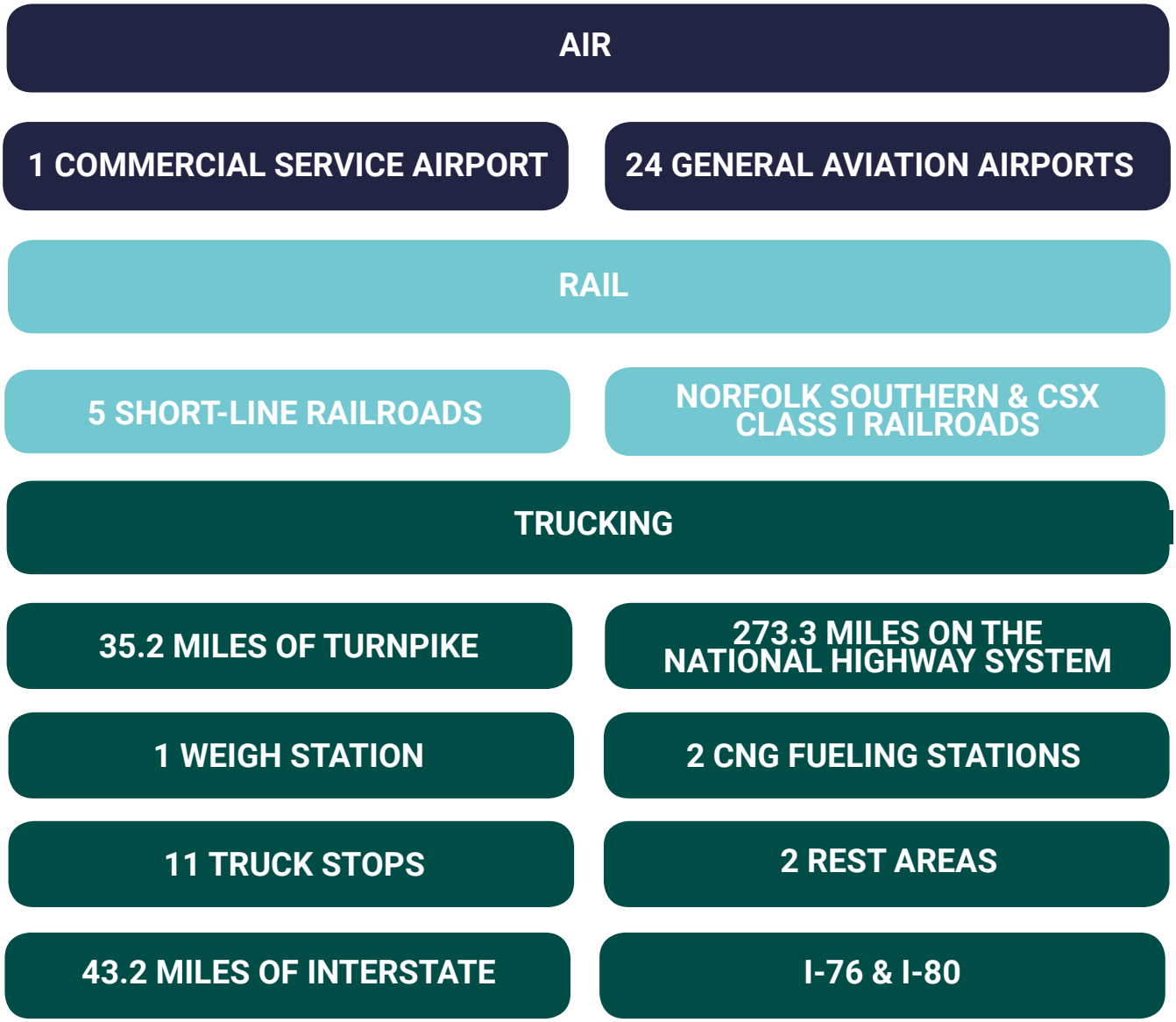
Freight is synonymous with economic competitiveness and job creation. The Youngstown, OH-PA urban area is within a five-hundred-mile radius of over one-hundred and thirty-two million people, including large metros and major ports such as Chicago, New York City/ Newark, Philadelphia, Baltimore, Boston, and Norfolk (StatsAmerica Big Radius Tool). The movement of goods is critical to the Eastgate Region with its strategic location between Lake Erie and the Ohio River and key freight corridors of Interstate 76, 80, and the Ohio Turnpike. According to the Bureau of Labor Statistics, in 2016, 16,500 people were employed in Transportation and Material Moving occupations in the Youngstown, OH-PA urban area.

The logistics field is rapidly changing because of new technologies that have shifted supply chain management. The completion of the Panama Canal expansion is transforming the nation's ports, particularly on the East Coast, thus disrupting well-established freight routes. Marcellus and Utica Shale development is leading to the repurposing of idled refineries to process liquid products, and pipelines are being constructed to transport propane and ethane for processing. These developments have recently resulted in a more prominent focus on freight and the needs of its stakeholders. Additionally, the rise of e-commerce and just-in-time deliveries has led to a significant increase in deliveries to homes and places of work, putting new stress on local roads. This important form of commerce must be integrated with street design and best practices such as internal loading zones, off-hour deliveries, and alternative delivery sites.

The FAST Act includes several provisions to ensure the safe, efficient, and reliable movement of freight. These provisions include a *National Multimodal Freight Policy* and *National Freight Strategic Plan*. For the first time, the act includes discretionary funding for freight infrastructure through competitive grants and allocations to each state department of transportation. As part of the FAST Act, each state department of transportation is responsible for developing a statewide freight plan. In 2017, ODOT released T*ransport Ohio: Statewide Freight Plan* that includes opportunities, challenges, trends, and a freight investment plan. Ohio is unique in that it has the fourth largest interstate system, eighth most maritime tonnage, and is second in the number of intermodal facilities in the nation. These amenities make Ohio an ideal location for back-office operations and fulfillment and distribution centers. All freight activity is expected to increase through 2040, the majority of it being trucking. Trucking is often the least expensive and most convenient option for business except for heavier, long-distance loads, however the costs associated with pavement damage, traffic congestion, crash risk, greenhouse gases, and local air pollution must be considered by transportation planners.

Eastgate works closely with ODOT and its neighboring MPOs including Akron, Canton, Cleveland, and Pittsburgh on the implementation of the statewide freight plan. Eastgate will follow guidance from FHWA and ODOT in setting targets for performance measures for freight movement on the interstate system. Additionally, Eastgate through the *2040 MTP Update*, is preparing a *Regional Freight Study* that includes a summary of and recommendations for freight assets in Mahoning and Trumbull counties. Below is a high-level overview of Eastgate's freight assets in **EXHIBIT T: FREIGHT ASSETS**.

EXHIBIT T: FREIGHT ASSETS



MOBILITY

Eastgate is responsible for considering the needs of all transportation system users in the planning process, including low-income and minority households, older adults, and individuals with disabilities. Mobility as a concept is interpreted in a variety of ways depending on several factors including geographic scale, such as looking at a corridor versus a metropolitan area. Mobility can be defined as the time and costs required for travel. Mobility decreases when costs and travel times increase.

In the Eastgate Region, mobility depends on location, household income, and automobile ownership. The Housing and Transportation (H+T) Affordability Index available from the Center for Neighborhood Technology (CNT) states that the traditional measure of affordability for a family is that 30% of income should be spent on housing and 15% on transportation. In Mahoning and Trumbull counties households spend between 27-30% of their income on transportation expenses as shown in **Table 11: Mobility Scores**. Transportation costs are not affordable for several reasons, including limited choice of modes and land use patterns that separate where people live from jobs and other opportunities. The H+T Index doesn't rate any communities in the region as Location Efficient, meaning that places are compact, close to jobs and services, with a variety of transportation choices.

TABLE 11: MOBILITY SCORES

	AFFORDABILITY	TRANSIT SCORE of 0-10
YOUNGSTOWN	27	3.5
WARREN	27	0.9
MAHONING	29	2.2
TRUMBULL	30	0.5
EASTGATE REGION	29	1.3

SOURCE: H+T INDEX & ALLTRANSIT SCORE

Concurrently, the area of the region with the highest AllTransit Score is Youngstown with 3.5 on a scale of 10. It is the highest because of its relative density, institutions, and fixed-route transit (**TABLE 11: MOBILITY SCORES**). Eastgate considers numerous factors for improving mobility, including accessibility and modal choice as part of its environmental justice efforts. Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people, regardless of religion, ethnicity, income, or education level, in the planning and decision-making process. Executive Order 12898 mandates that federal agencies incorporate environmental justice considerations and analysis in their policies, programs, and activities on minority populations and low-income populations. Environmental justice is intensely screened at all stages of project development to enhance the principles of equity, which include accessibility and mode choice. A four-step process that utilizes Geographic Information Systems (GIS) software, census data identifying targeted demographic areas and statistics, project location information, input to a project impact analysis matrix (PIAM), control variables, and subjectivity are used to identify targeted areas to be appraised for environmental effects on minority and/or low-income areas. Eastgate's EJ analysis is in the Implementation & Monitoring Strategy section.

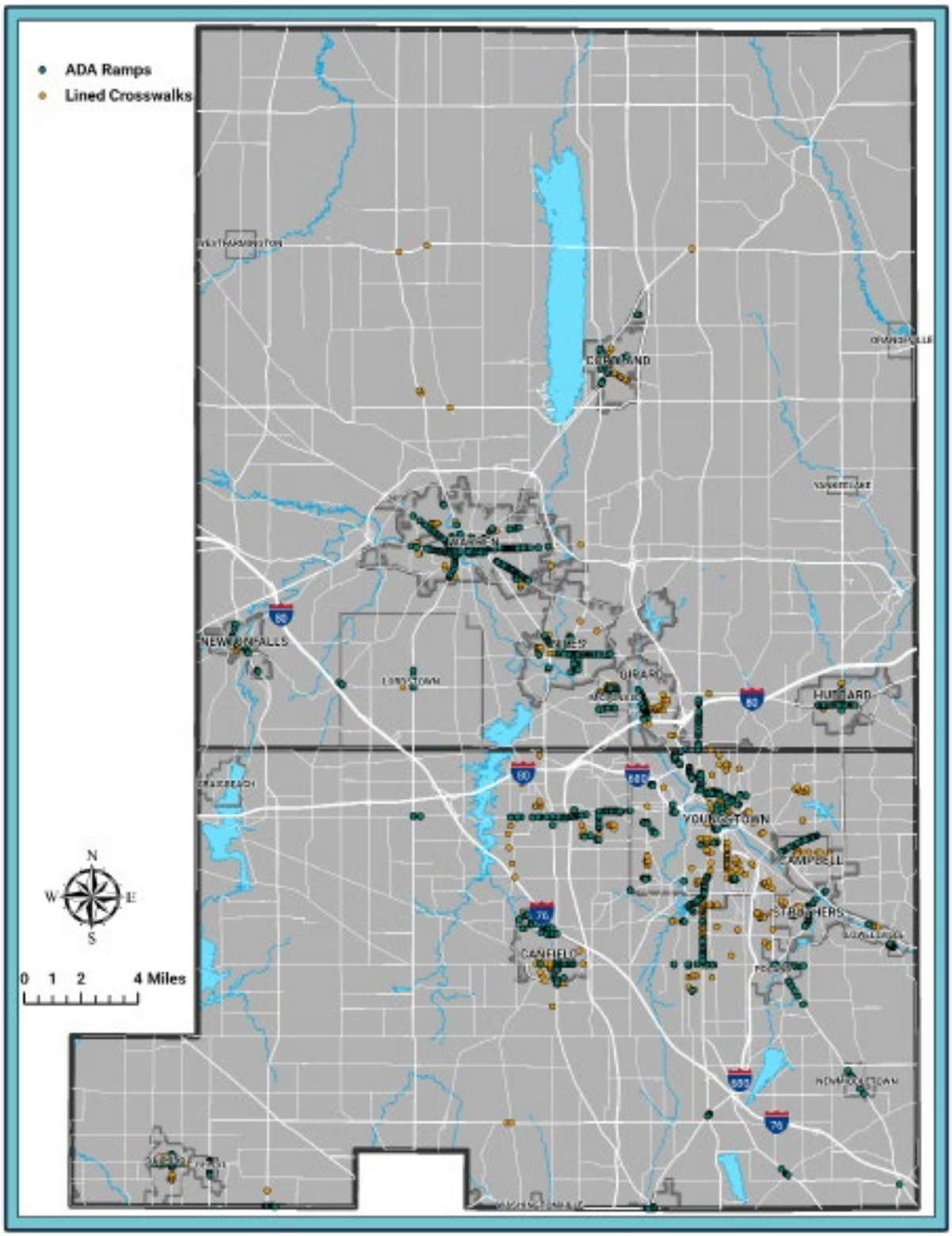
Americans with Disabilities Act (ADA)

Section 504 of the Rehabilitation Act of 1973 that prohibits the exclusion from participation of anyone with a disability under any program or activity receiving federal financial assistance was supplemented in 1990 by Title II of the Americans with Disabilities Act. The purpose of the Americans with Disabilities Act (ADA) of 1990 is to ensure that people with disabilities have the same opportunities to participate in the mainstream of American life. People with disabilities should be able to participate in state and local government programs and services, including being able to use the transportation system in an accessible and safe manner. ADA enforces standards for accessible design of federally-funded construction, including FHWA and FTA. Local governments utilizing FHWA's funds are required to provide pedestrian access on streets and sidewalks for persons with disabilities whenever a pedestrian facility exists.

In 2014, ODOT updated its ADA transition plan to outline progress in ensuring that Ohio's transportation system is accessible to all users. ODOT provides guidance to communities on pedestrian facilities and other ADA compliance through design guidelines such as the ADA Accessibility Guidelines (ADAAG) and Uniform Federal Accessibility Standards (UFAS). For instance, all ODOT resurfacing projects require the construction of ADA compliant curb ramps. Other factors considered are continuous sidewalks and detectable warnings.

Eastgate conducts many activities to implement ADA, including assisting communities on self-evaluations and transition plan updates that inventory accessibility conditions, define strategies, and prioritize schedules for implementing fully accessible pedestrian networks. Transition plans are intended to identify system needs and integrate them with ODOT's planning process of the STIP and TIP. Additionally, Eastgate continues to monitor, document, and map transit overlays of fixed-route service lines to identify areas where service is limited to the public due to incomplete sidewalks and curb ramps as shown in **EXHIBIT U: ADA INFRASTRUCTURE SURVEY**.

EXHIBIT U: ADA INFRASTRUCTURE SURVEY



Pedestrian & Bicycle Facilities

Pedestrian and bicycle facilities are referred to as active transportation. Active transportation is more than recreation, as it is another form of mobility. Active transportation is particularly beneficial for short trips of three miles or less and is a TDM strategy for reducing automobile dependence and congestion. Safe, convenient, and attractive pedestrian and bicycling environments are key components of livable communities, and good pedestrian and bicycle networks ensure that there are travel options. The UNC Highway Safety Research Center reports that pedestrians and bicyclists are a powerful indicator of the social and economic health and safety of a community. This activity is often associated with more robust economies and healthier populations, while a lack of pedestrian and bicycle activity can be interpreted as a deficit in personal security and safety requirements.

In 2014, WRTA began phasing in the installation of bicycle racks on the front of its buses to address last-mile passenger demand. Planning for bicycle and pedestrian travel is a priority of FHWA and it is required that bicyclists and pedestrians be given due consideration in the comprehensive transportation plans developed by each MPO and state. Bicycle transportation facilities and pedestrian walkways are to be considered, where appropriate, in conjunction will all new construction and reconstruction of transportation facilities, except where not permitted such as expressways.

To support active transportation, Eastgate provides a variety of planning services to assess pedestrian and bicycle networks including a comprehensive inventory of sidewalks and bicycle facilities as shown in **EXHIBIT V: BIKE SUITABILITY** and **EXHIBIT W: SIDEWALK INVENTORY**. While local governments make many decisions and investments that affect walking and bicycling, MPOs act as strong leaders in regional planning by convening and coordinating stakeholders. Walking and bicycling are part of regional mobility, and MPOs set the goals and objectives that guide the investments that support walking and bicycling. The *Regional Bicycle Plan* includes an inventory of existing and proposed bicycle facilities in the two counties. The document also outlines short term planning goals and long-term infrastructure projects such as the completion of bikeways. An update of this document is being scheduled in Eastgate's work program and the results will be incorporated into the next update of the MTP. Eastgate, with ODOT and other planning partners, is developing a state-wide system that will connect metropolitan areas and places of interest with safe bicycle routes. Eastgate and its partners are also proactively exploring bike-share programs. Improving safety of walking and bicycling is important to the planning process as these road users are most vulnerable to fatality and severe injury in a crash. Eastgate assists communities in developing Safe Routes to School Plans and other initiatives such as Complete Streets policies to improve the perceived safety of these modes.

Improving safety of walking and bicycling is important to the planning process as these road users are most vulnerable to fatality and severe injury in a crash. Eastgate assists communities in developing Safe Routes to School Plans and other initiatives such as Complete Streets policies to improve the perceived safety of these modes. Eastgate is working with ODOT to meet the safety emphasis area targets for serious and fatal pedestrian and bicycle incidents under the safety performance measure.

EXHIBIT V: BIKE SUITABILITY

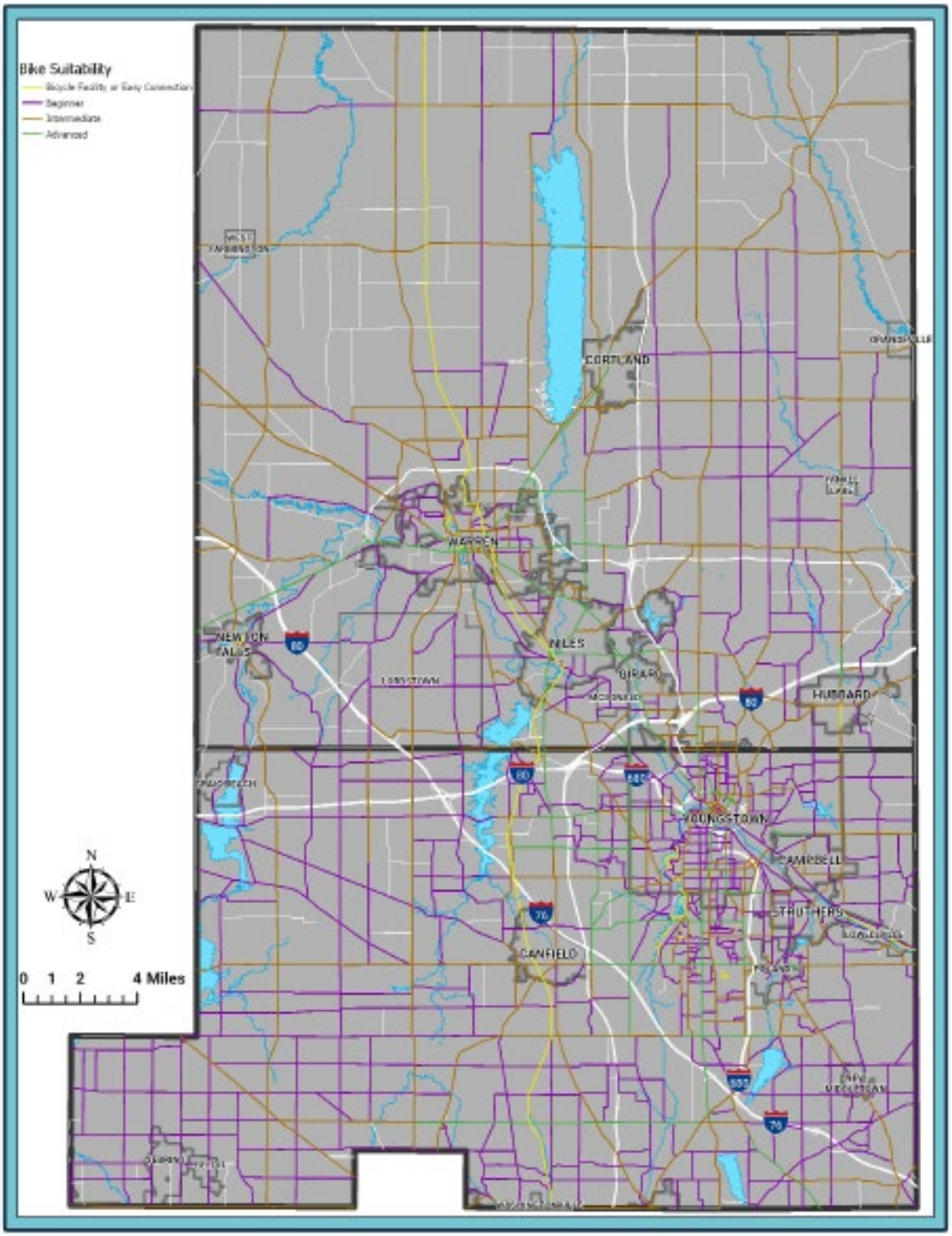
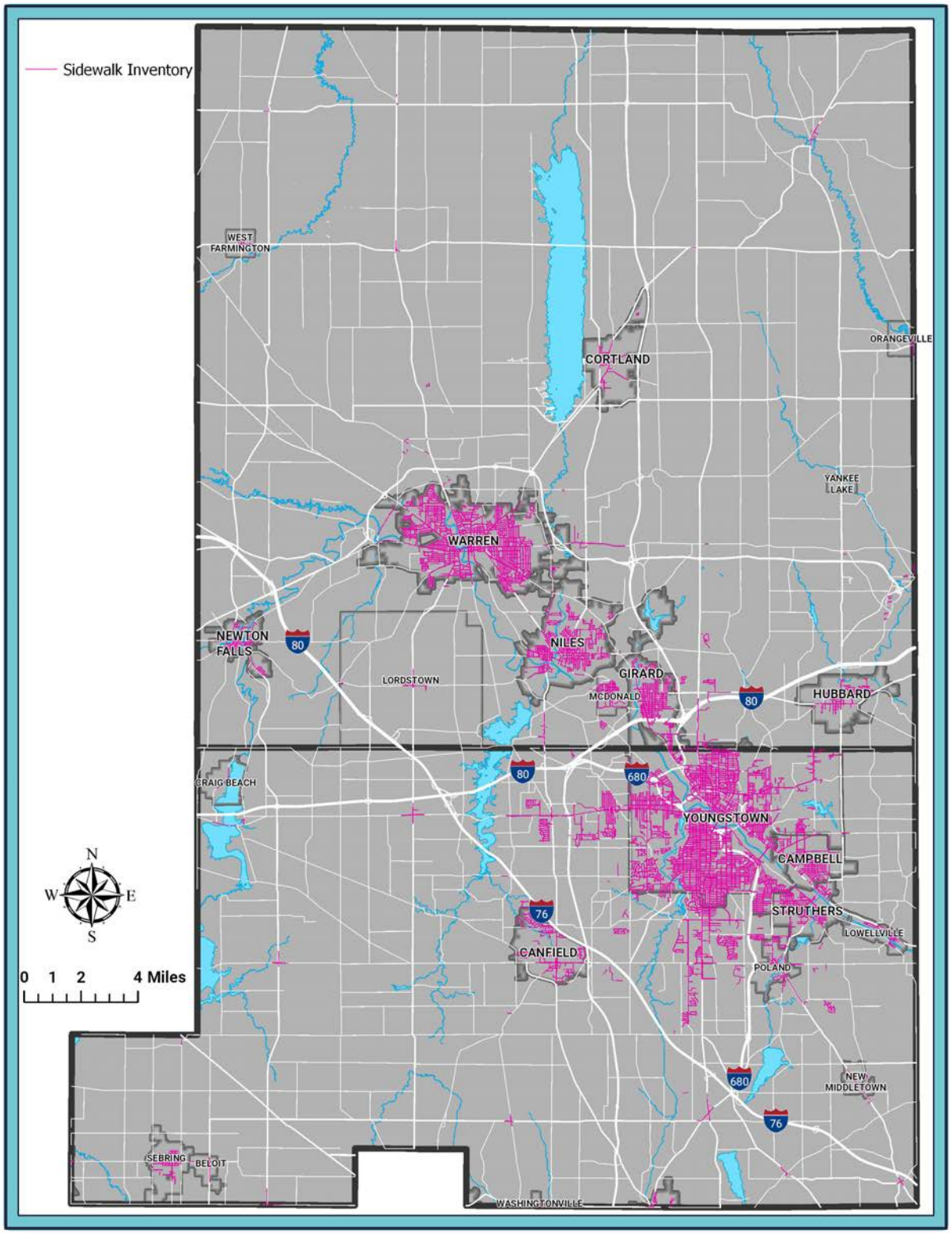


EXHIBIT W: SIDEWALK INVENTORY



Complete streets are those that accommodate pedestrians, bicyclists, transit, freight vehicles, and cars, maximizing regional transportation choices and mobility.

Public Transit

Public transit is one modal choice available to individuals who may not be able to drive, afford, or maintain a vehicle. It preserves a connection to healthcare, employment, entertainment, and educational facilities, among other daily activities and destinations. Additionally, public transit reduces congestion, personal transportation costs, and carbon output. Eastgate's Urban Area is shown in **EXHIBIT X: URBAN AREA BOUNDARY** and includes three public transit operators:

- Western Reserve Transit Authority (WRTA): Serves Mahoning County, OH and several areas in Trumbull County, OH
- Trumbull County Transit System (TCTS): Designated sub-recipient of federal transit funding for Trumbull County, OH
- Shenango Valley Shuttle Services (SVSS): Authorized by the City of Sharon, PA as the Authorized Designated Recipient to provide transit service in the Pennsylvanian portion of the urbanized area

Public transit in the Eastgate Region is delivered in several forms. In Mahoning County, there is fixed route, shuttle, suburban loop, ADA all-access, and countywide service. WRTA provides weekday service six-days a week on twenty-one fixed routes and weekday evening service on six nightline routes as shown in **EXHIBIT Y: FIXED ROUTE SYSTEM**. WRTA in conjunction with Youngstown State University operates five, fixed route shuttles around campus. There are four fixed route suburban loop services in Austintown, Boardman, and Canfield. ADA all-access is designed for people with disabilities and seniors who are not able to or have difficulty using fixed-route bus service. This service includes home pick-up and destination drop-off to individuals within three quarters of a mile of WRTA's fixed route bus and loop service areas. Countywide service is an available origin-to-destination service of small buses and vans open to anyone travelling in Mahoning County beyond the three-quarters of a mile fixed route and service areas. Trumbull County Transit Board services operate under a county-wide demand-response service in Trumbull County. Citizens can request trips on a first-come, first-service basis.

Services for individuals with disabilities and seniors is supplemented through FTA's 49 USC Section 5310 "Enhanced Mobility" Program. These funds are distributed to the Urban Area; Western Reserve Transit Authority, Trumbull County Transit Board, and the Pennsylvania Department of Transportation are the designated recipients. Eastgate works closely with its planning partners and public transportation providers to expedite transit funding splits through a Memorandum of Understanding (MOU) with MCRPC.

Funding for operations of public transit continues to be challenging for many reasons, including the spreading out of employment, services, and housing without an increase in population and tax base. Transit providers struggle to arrange appropriate levels of service

across municipal and county boundaries. Attention to this matter is needed given the findings in Regional Trends such as an aging population and pockets of communities with limited mobility.National trends should also be considered, such as younger professionals and millennials preferring accessible transit. The transit systems in the region can balance transit needs and demands through coordination of the bi-state region.

Eastgate participates in the development of two planning documents for transit services. First is the *Transit Development Program* (TDP), which is a five-year planning document that supports and identifies transit capital improvements. The TDP, available in Eastgate's library, should be referred to for system descriptions, proposed fixed routes, and capital improvement projects. The second are coordinated public transit - human service transportation plans (HSTP), which are a requirement for "Enhanced Mobility" funds. HSTPs are created through input from transit systems, human service agencies, groups focused on senior transportation, and county departments of job and family services that provide specialized transportation services based on a rider's unique situation. In 2016, WRTA updated the HSTP for Mahoning and Mercer counties and in 2017, TCTB updated its HSTP. HSTPs encourage mobility management, a strategic approach to the various public, private, and social service providers that often lack formal coordination. Eastgate monitors the implementation of these plans and encourages transit-oriented development when appropriate.

EXHIBIT X: URBAN AREA BOUNDARY

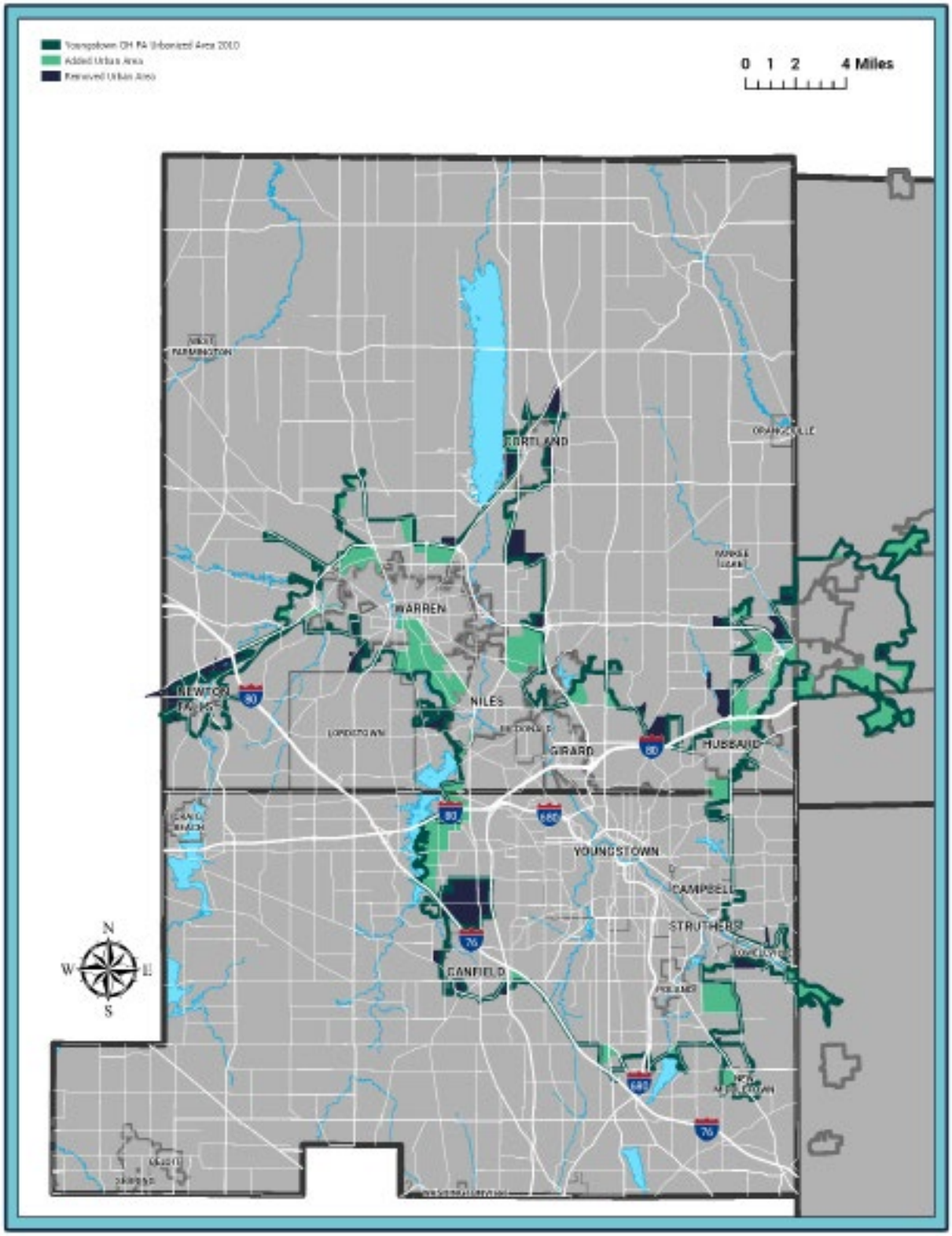
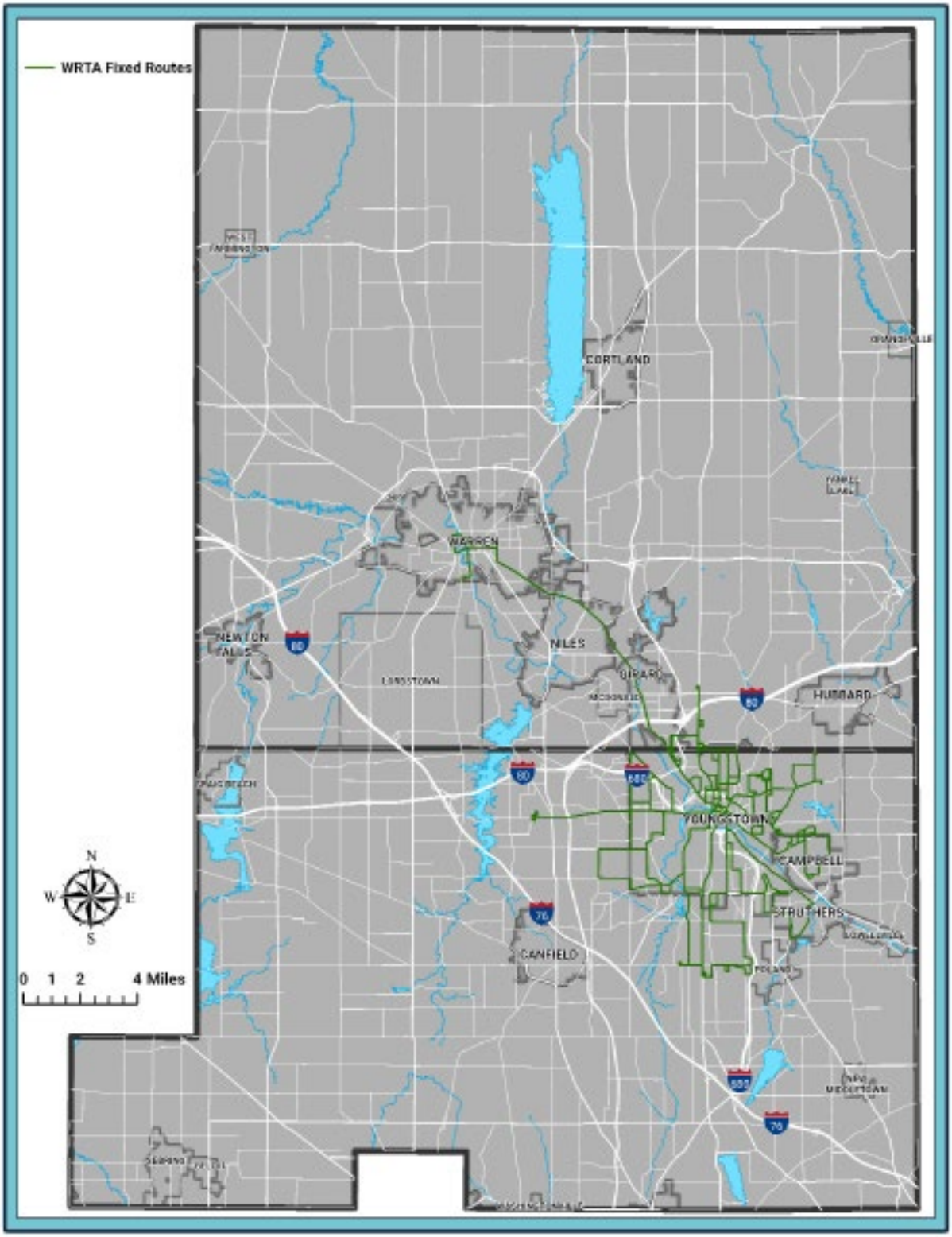


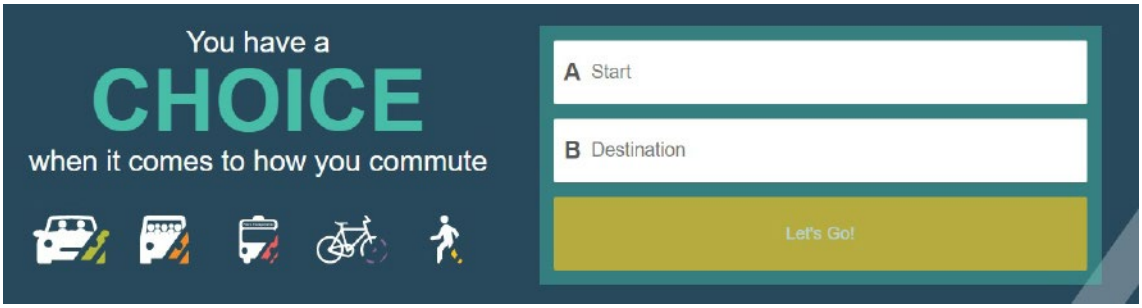
EXHIBIT Y: FIXED ROUTE SYSTEM



Rideshare

Ridesharing allows for commuters to drive together in the same vehicle. Ridesharing is encouraged because individuals can save on gas, parking, and costs associated with wear and tear. It also has the external benefits of reducing congestion and air pollution. Ridesharing is undergoing a massive transformation due to digital networks and smartphone apps that can use real-time data to match supply and demand. In 2017, Eastgate's Rideshare program was expanded and reoriented as Gohio. Gohio is a TDM platform across the entire state with a search tool that can be utilized by residents, human service agencies, and other stakeholders to obtain detailed ride information. Gohio connects individuals to various transportation options by carpool, vanpool, transit, walk, bike, or drive. Each option includes information on distance, time, and CO^2 emissions. Eastgate and its partners are currently developing outreach materials and strategies for this tool. Additionally, Uber, Lyft, and other private ridesharing services as well as car rentals and taxis are active in the metro region.

gohio commute

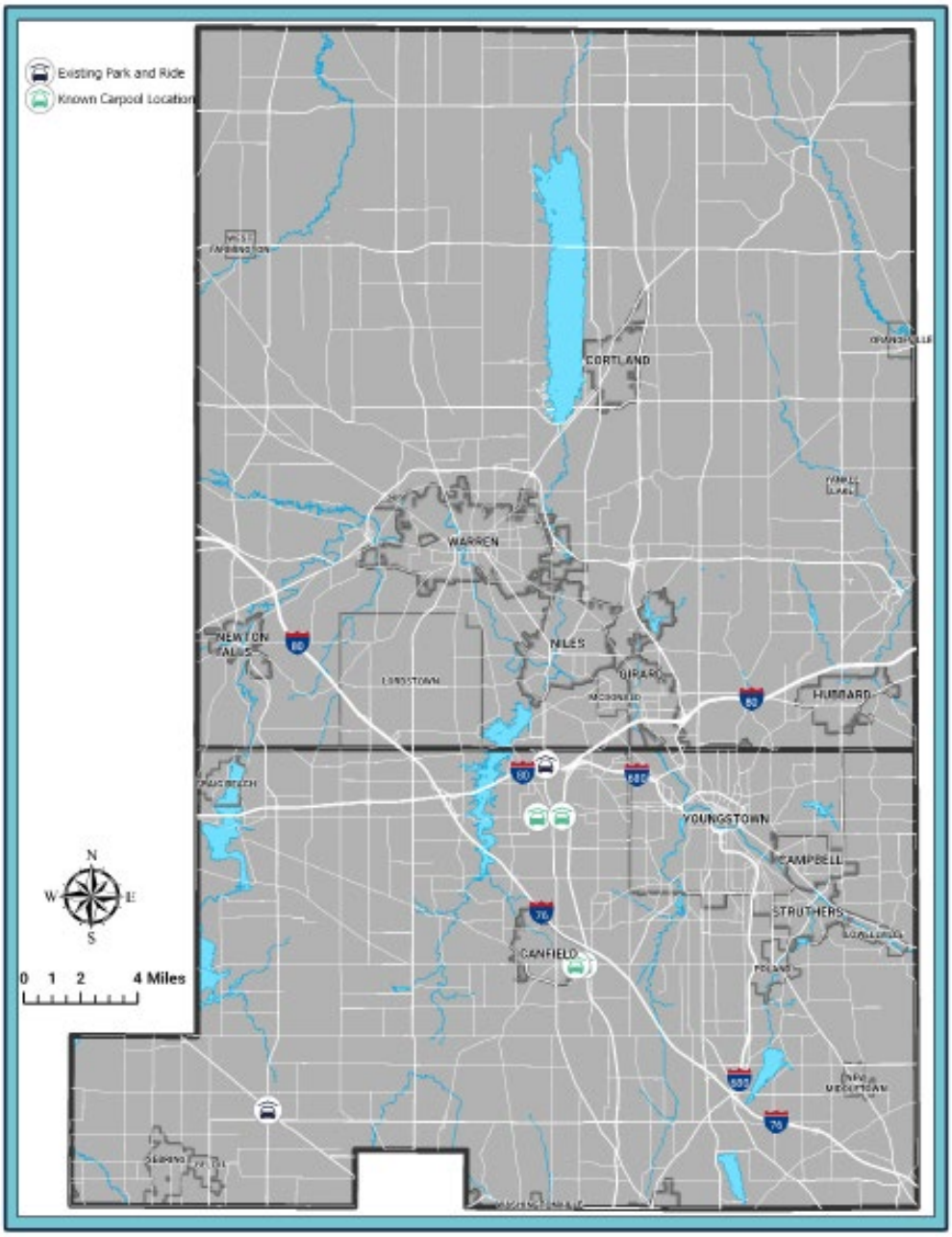


The FAST Act supports intercity bus and commuter vanpools for their role in reducing congestion, pollution, and energy consumption in a cost-effective manner. MPOs are encouraged to provide facilities that enable an intermodal transportation system. For intercity buses, Greyhound stops in Youngstown at Federal Station, which is operated by WRTA. Greyhound offers service four-times a day to Cleveland, twice a day to Pittsburgh, and once a day to Erie. Greyhound serves over 2,300 destinations. Additionally, Great Wall offers daily service to New York City from Exit 226 on Interstate 80 in Girard.

Park and Rides

In addition to ridesharing, park and rides reduce single vehicle occupancy usage. Park and rides are both formal and informal. Formal locations are shown in **EXHIBIT Z: PARK & RIDE MAP.** Whereas formal locations have signage, informal lots are at generally-known meeting places, often located near intersections, major arterials, or near transit trip generators. Eastgate tracks informal locations in addition to formal locations as part of the planning process. Eastgate encourages ridesharing and the use of park and rides for transportation performance management and FHWA's performance rules on congestion that are measured by the number of non-single occupancy vehicles (SOV) and peak hour excessive delay (PHED).

EXHIBIT Z : PARK & RIDE MAP



RESILIENCE

In 2014, FHWA issued a directive to establish a policy on preparedness and resilience to climate change and extreme weather events for current and planned transportation systems. Climate change is a phenomenon that refers to any significant change in the global climate occurring over an extended period. Global warming, the observed increase in average global surface temperatures over the past several decades, is one facet of climate change. Over the past century, humans have released large amounts of carbon dioxide (CO_2) and other greenhouse gases (GHGs) into the atmosphere.

Most of these emissions have come from the combustion of fossil fuels. The primary source of regional GHG emissions is the burning of fossil fuels (primarily gasoline, natural gas, and heating oil) to produce energy. Other sources of GHG emissions include methane from agriculture and natural gas system leakages, some industrial processes, and clearing land. Extreme weather events such as heat waves, droughts, tropical storms, high winds, storm surges, and heavy downpours are increasing in strength and frequency, according to the U.S. Global Change Research Program. For the Eastgate Region, concern arises around the stress on public facilities and higher costs of services, particularly with increased temperatures, prolonged heat waves, and increased precipitation that may prematurely deteriorate infrastructure and cause asphalt roads to buckle and washout.

In response to this policy and other initiatives, FHWA has developed tools and guidance for systematic consideration of climate risks at transportation system and project levels. State departments of transportation, MPOs, and others are encouraged to use these tools as part of the planning process. States are required to develop risk-based asset management plans and to consider alternatives for facilities repeatedly needing repair or replacement that utilize federal funding.

SOURCE: WDRB

LOCAL FLOODING

POTHOLES IN SPRING MONTHS

In 2016, ODOT published *Ohio DOT Infrastructure Resiliency Plan* that is an analysis of the type of transportation assets vulnerable to climate change and extreme weather events. The plan addressed potential consequences from a broad range of potential climate impacts and provides a foundation for integrating assessment results into future decision-making processes and future resiliency studies. Namely, increased incidences of heavy precipitation events will impair the function of core assets of highways, bridges, and culverts. For instance, a vulnerability calculation determined that US 62 west of SR 165 and US 224 east of SR 625 are in the top ten most vulnerable bridges and US 62 west of SR 165 is in the top twenty most vulnerable culverts in the state. Eastgate is incorporating the recommendations of this document into its planning process and through performance measures. Activities include adding weather data analytics and identifying stressors to proposed facilities. Additionally, ODOT's District 4 office provides guidance for adopting best practices for regional collaboration and cost sharing.

Air Quality Conformity

Eastgate encourages travel choices that minimize the discharge of emissions (pollutants), and that work to accomplish and maintain high air quality standards. Poor air can exacerbate breathing disorders, heart disease, and trigger asthma attacks. Transportation largely relies on fossil fuels, which are significant contributors to emissions of VOCs and NOx, the two major air pollutants related to smog. Reducing vehicle miles traveled along with refitting diesel trucks to remove emissions from exhaust, improving travel efficiency, and promoting rideshare; and active transportation are all components of a well-rounded MTP in addressing air quality for six criteria pollutants in the transportation system of a region. Criteria pollutants are or could be harmful to people, including carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_2), particulate matter (PM) and sulfur dioxide (SO_2). There are also many compounds which have been determined to be hazardous which are called air toxics. The 1990 CAAA identified actions MPOs must take to reduce emissions from on-road mobile sources (including cars and trucks but also lawn mowers, airplanes, locomotives and other engines and equipment that can be moved from one location to another). These actions are for the following areas:

- **Nonattainment* Areas**: If the concentration of one or more of the six pollutants in a geographic area exceeds the regulated or "threshold" level for one or more of the NAAQS the area may be classified as a nonattainment area. *An attainment area is a geographic area that meets or has pollutant levels below the NAAQS.

- **Maintenance:** those geographic areas that had a history of nonattainment, but now consistently meet the NAAQS have been re-designated by EPA from 'nonattainment' to 'attainment with a maintenance plan' or designated by the Environmental Quality Commission. Air quality conformity tests are performed to demonstrate that the trends in air pollutant concentrations – (emission burdens) from the plan do not exceed the budgets set for mobile sources established in the Ohio Environmental Protection Agency (OEPA) State Implementation Plan (SIP).

The Eastgate Region is an attainment area for the 2008 Ozone standard and PM2.5 (1997 and 2006 standards). It was also a maintenance area for the 1997 ozone standards, with 2009 and 2018 (MOBILE based) budgets. Effective July 20th, 2013, the 1997 Ozone standard was revoked for conformity purposes. Accordingly, Eastgate's MTP and TIP were no longer required to demonstrate transportation conformity.

However, the U.S. Court of Appeals for the D.C. Circuit recently issued a decision in *South Coast Air Quality Management District v. EPA*, No. 15-1115, which struck down portions of the 2008 Ozone NAAQS SIP Requirements Rule concerning the ozone National Ambient Air Quality Standards (NAAQS). These portions of the 2008 Ozone NAAQS SIP Requirements Rule addressed implementation requirements associated with the revocation of the 1997 ozone NAAQS. The impact of the decision addresses two groups of ozone areas described in the decision:

- Areas that were maintenance areas for the 1997 ozone NAAQS at the time of revocation and are designated as attainment for the 2008 Ozone NAAQS. These areas have not been required to make transportation conformity determinations for any ozone NAAQS since the 1997 ozone NAAQS were revoked in April 2015 by EPA's Rule. Eastgate is an MPO in this category.

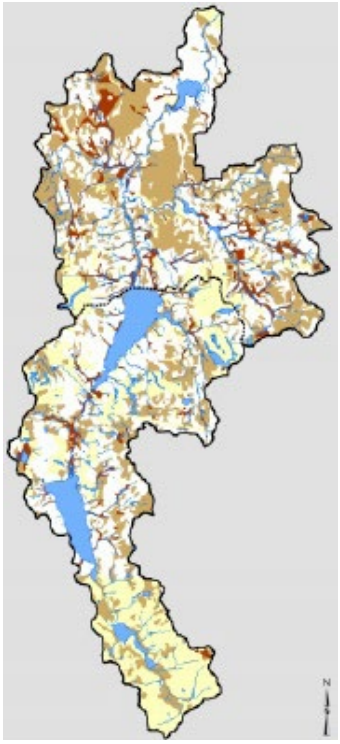
- Areas that were designated as nonattainment for the 1997 ozone NAAQS at the time of revocation and are designated as attainment for the 2008 Ozone NAAQS. These areas have not been required to make transportation conformity determinations for any ozone NAAQS since the 1997 ozone NAAQS were revoked in April 2015 by EPA's Rule.

Consequently, Eastgates *2040 MTP Update* and TIP that include the addition of a project that is not exempt from transportation conformity may not proceed until transportation conformity with the 1997 ozone NAAQS is determined. **Appendix D** documents the way mobile emissions have been forecasted for *2040 MTP Update*.

Environmental Planning

Eastgate actively promotes environmental stewardship and resiliency through its environmental planning program and forums such as the Environmental Planning Advisory Committee (EPAC), a subcommittee of TAC. EPAC is a forum for member communities, resource agencies, and regulators to learn about environmental issues that are part of the transportation planning process. Recently, EPAC has hosted workshops on implementing and funding green infrastructure and environmentally-friendly de-icing strategies. Eastgate encourages the use of green infrastructure (whenever possible and practical) for stormwater management.

The National Environmental Policy Act (NEPA) of 1970 established a national policy to promote the environmental protection in the actions and programs of Federal Agencies, such as FHWA and FTA. Eastgate follows mandated environmental mitigation activities to avoid, to the fullest practical extent, any activity that adversely impacts the environment during the design, construction, or maintenance of the transportation system. It is important that appropriate action throughout the project development process be taken to avoid, minimize, and mitigate impacts as required by federal, state, and local law. A coordinated approach between planning and project development can lead to transportation investments that reflect community needs. Another direct link between NEPA and transportation planning is the requirement that a project must be included in the region's air quality conforming plan and the region's TIP before it can advance, because major changes late in the planning process can trigger nonconformity and other planning reassessments that can lead to delays.



EXAMPLE OF WATERSHED PLANNING

Energy

Transportation is analogous with energy use, and today according to the U.S. Energy Information Administration, nearly one-third of the energy consumed in the U.S. is for transportation. Different types of energy sources, or fuels, are used for transportation including petroleum products such as gasoline, diesel and propane, biofuels such as ethanol and biodiesel, natural gas, and electricity. The U.S. Energy Information Administration also reports that about 92% of total energy in the transportation sector is petroleum products. In the Eastgate Region, as of August 2017, there are three compressed natural gas, three electric, and four propane fueling stations. There are also ethanol fueling stations in Columbiana, Ohio and Sharon, Pennsylvania. In recent years there has been increasing interest in hydrogen, compressed natural gas, and electric fueling stations. With the shale industry, compressed natural gas is of interest in the Eastgate Region. Diversification of energy sources remains at the forefront of transportation planning as technology improves access and drives down alternative fuel costs.

ACCESS Ohio 2040 outlines and provides data-driven solutions for reducing emissions including the following:

- Vehicle Technology: improve energy efficiency of vehicle fleet
- Fuel Technology: encourage use of alternative fuels with reduced carbon content
- Travel Activity: reduce VMT through policy and land-use adjustments
- Vehicle and System Operations: improve efficiency of vehicle operations with respect to speed and smoothness of traffic flow

Eastgate provides education to its members on emission reduction strategies such as providing information on the ODSA's Alternative Fuels Transportation Program and TDM strategies.

AIR QUALITY MONITORING

CNG FUELING STATION - SOURCE: WFMJ

Land Use

MPOs and MTPs must foresee and coordinate planning strategies with land use management, natural resources, environmental protection, conservation, and historic preservation. Transportation projects not only directly impact the environment, but have implications on future land use decisions due to travel decisions that in turn endanger prime farmlands and critical wetlands and floodplains. To minimize complex transportation projects that could cause severe impacts to the built and natural landscapes, have long term budgetary effects, and complicate community interaction and negotiations with a potential project sponsor; careful and deliberate thought and planning must be present before, and during, project planning phases. Policies, principals and strategies crafted to minimally impact, and where possible, to enhance all aspects of life, are necessary in today's transportation plans. Federal support for integrating resiliency and adaptive responses to the impacts of climate change and weather events into land use planning was greatly stressed under Secretary Foxx.

Eastgate and ODOT continue to follow this regulation by striving to avoid, to the fullest practical extent, any activity that adversely impacts the environment during the design, construction, or maintenance of the state and/or local transportation system. In the case of Mahoning and Trumbull counties, flooding is the greatest threat. Eastgate also supports redevelopment and infill to minimize the costs of new investment and land consumption and promote multi-modal places. Development patterns that locate jobs, housing and recreation in closer proximity to each other, can mean shorter and fewer car and truck trips, reducing VMT and likely reducing motor vehicle emissions and many other unintentional consequences of increased transportation use.

SAFETY

Safety has been a priority function of transportation planning since the Highway Safety Act of 1966, which recognized the need for extensive highway safety programs to curb increasing accidents and fatalities that are largely preventable. Since then, Transportation Safety Planning (TSP) has evolved into a comprehensive, system-wide, multimodal, proactive process that better integrates safety into surface transportation decision-making.

Federal law requires that states and MPO transportation planning processes be consistent with *Strategic Highway Safety Plans* (SHSPs) for motorized and non-motorized users and adopt performance targets. There are also federal requirements that performance management must be included in the transportation planning process. More information on safety and performance management can be found in the Implementation and Monitoring Strategy and Safety Performance Report - 2017 sections.

The *Regional Safety Study* is updated every three years, most recently in 2016. This study identifies high accident intersections and corridors in Mahoning and Trumbull counties. The document identifies hazardous locations in the region and ranks them in an effort to identify potential safety improvement projects that can utilize Highway Safety Funding and looks at ODOT's crash emphasis areas of: Serious Crash Types; Roadway Departures; Railroad Intersections; Rear End Collisions;

High Risk Drivers/Behaviors Impaired Drivers; Seat Belts; Speed; Young and Older Drivers; Distracted Drivers; Special Vehicles/Users; Motorcycle Riders; Bicycle Riders; Pedestrians; Commercial Vehicles. A rolling average portrays that three percent of crashes in the region resulted in a fatality or a serious injury, or 44 deaths and 319 serious injuries annually.

Eastgate encourages best practices through FHWA's four E's: Engineering, Enforcement, Education, and Emergency Response. Eastgate does this particularly through education. Eastgate is an active partner in the Mahoning County Safe Communities Coalition and the Trumbull County Safe Communities Coalition. The coalitions bring together transportation officials, community planners, health workers, law enforcement, concerned citizens, educators, and others to share resources, develop solutions, and bring attention to traffic safety issues. Areas of emphasis include the following: motorcycle safety; seatbelt usage; teen driving; texting; alcohol and drug use as shown in **TABLE 12: FOUR "E'S"**.

TABLE 12: FOUR "E'S"

ENFORCEMENT	**Targets high crash locations for speeding and aggressive behavior and develops effective enforcement policies.**
ENGINEERING	**Enhances road, intersection and pedestrian safety design features to reduce road departures, minimize the severity of roadway crashes, make intersections safer for drivers and create safer pedestrian crossings.**
EDUCATION	**Improves public safety awareness and updates highway engineers and roadway planners on the latest safety research through videos, handbooks, websites, brochures, manuals and training courses. Targets high risk populations such as non-users of safety belts, impaired or drunk drivers, teens and young adults, commercial vehicle drivers and non-users of motorcycle helmets.**
EMERGENCY SERVICES	**Aims for a fast response to traffic crashes involving injuries, a quick clear of the roadway and effective communication and coordination with other agencies.**

Eastgate also conducts its own traffic safety studies to bring attention to traffic safety issues, outline baseline safety performance, and review individual locations to ensure data accuracy as shown in **EXHIBIT AA: FATAL & SERIOUS CRASH DENSITY FOR 2014-2016**. These studies may observe traffic and operating conditions such as hazards, equipment malfunctions, sight distance obstructions, and other safety concerns such as bicycle and pedestrian conflicts. Eastgate also produced a bicycle and pedestrian network gap analysis that identifies areas that hinder the movement of non-motorists to and from activity centers.

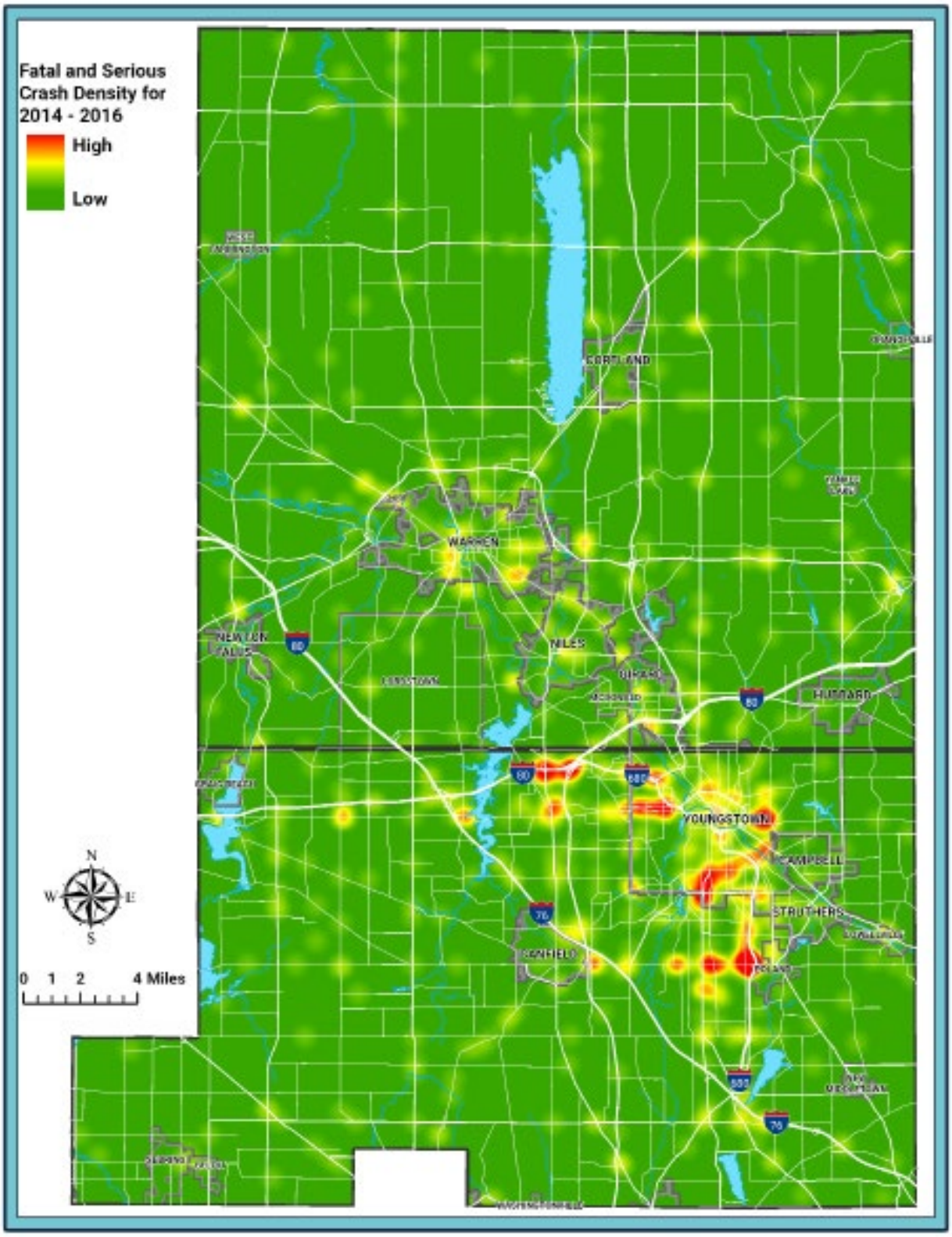
Recently, a series of locations were observed for distractive driving in the *Distracted Driving Study*. The 2017 Distracted Driving Fact Sheet summarizes twelve locations; the most common distraction is phone (using the phone either up to their ear or held out in front of them) at 53%, followed by device (using a device with one hand and not focused on the road) at 32%, then food/drink at 12%. The largest percentage of distracted drivers by age are 26-40-year-olds.

In 2017, Eastgate completed an information guide on Road Diets that includes potential candidate roadways. A Road Diet is reconfiguring a roadway to reduce the number of travel lanes along a corridor or section of road. The physical width of the roadway doesn't change, rather former travel lanes may have alternative uses such as bike lanes and on-street parking. Road Diets are relatively low-cost countermeasures that limit conflict points. Eastgate continues to work closely with its members when resurfacing roadways to consider Road Diets when and where applicable.

TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS TRAINING IN CRANBERRY, PA

LOCAL SAFETY ASSESSMENT

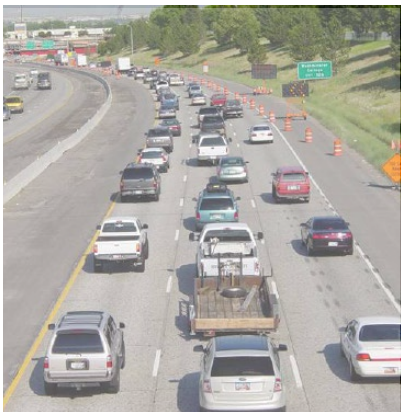
EXHIBIT AA: FATAL & SERIOUS CRASH DENSITY FOR 2014-2016



SYSTEM PERFORMANCE

The performance of the transportation system affects our lives daily, by helping us access jobs and services, or purchase goods in a timely and cost-effective manner. Infrastructure is a critical platform upon which we build our communities and economy. The region's twentieth century physical infrastructure of roads, bridges, and transit systems remains essential to our ability to travel about the region. Often, these assets are at risk of being in a state of disrepair.

At all levels of decision-making, the maintenance of the existing network of roads, bridges, and other transportation facilities is a primary focus.Defining system performance can be complex because there are so many factors and various ways of measuring efficiency and maintenance, such as accessibility and mobility. Eastgate monitors system performance in a data-driven, comprehensive, and integrated way through the various products in the OWP that include traffic network analysis, safety reports, and multi-modal planning so that individual, short-term decisions support strategic, long-term goals. This section on System Performance outlines two principle ways Eastgate monitors efficiency and effectiveness: Asset Management and the Congestion Management Process (CMP).



Asset Management

Over the last sixty years, the United States built one of the world's most extensive transportation systems, representing trillions of dollars in public investment. Maintaining roadways in a state of good repair is essential for sustaining this system. Asset management is defined by ODOT as a strategic and systematic approach for operating, maintaining, and improving physical assets over their life cycle that is based on quality data and well-defined objectives. An effective asset management approach incorporates the following:

- descriptive asset inventories
- operations and maintenance tasks
- long-range financial planning

Assets that may be monitored include pavements, bridges, tunnels, transit capital assets, rail activities, and roadside features. Once the asset is in the management system, local governments, MPOs, and DOTs can use the information to structure a sequence of treatments for maintenance, preservation, repair, rehabilitation, and/or replacement to sustain a desired state of good repair over the life of the asset. Most often, assets that are in the worst condition are prioritized most highly for reconstruction or replacement, which is very costly relative to other types of maintenance and preservation activities. A more cost-effective approach is to consider preventive maintenance activities and rehabilitation activities that stop short of asset replacement.

The FAST Act places strong emphasis on system preservation and maintenance, continuing "Fix it First". Historically, asset management has been a critical, but under-represented and under-funded element of the transportation planning process. Over the past few years ODOT has implemented Transportation Asset Management (TAM) as its business process for managing critical assets to better coordinate planning,

development, preservation, and construction while being fiscally responsible. ODOT's TAM includes the development of a platform for the integration of all asset inventory databases including roadways, bridges, and culverts. This process requires the integration of innovative technologies for inventory collection and data quality.

Eastgate is taking guidance from ODOT in developing its own approach towards TAM, primarily focusing on roadways that are classified as "collectors" or higher through the development of a *Transportation Asset Management Plan* (TAMP). Implementing TAMP at the MPO will allow local governments to do more with less. As infrastructure continues to age and construction costs rise, public funding remains either stable or declines in amount. Therefore, a strategic and systematic process for operating, maintaining, and improving physical assets is necessary. In addition to creating a framework based upon methods used by ODOT to manage roadway assets, Eastgate will educate local communities on the value and importance of an asset management program.

Pavement Condition Rating

Before asset management became common practice, MPOs in Ohio abided by Pavement Management Systems (PMS) that indicated the condition of roadways. PMS is considered an objective measurement of a pavement's condition, which is used to rank and select maintenance strategies. PMS utilizes Pavement Condition Ratings (PCRs) as shown in **EXHIBIT AB: PAVEMENT CONDITION RATING (PCR) SCALE** that are based upon a visual inspection of pavement distress. PCRs are determined by each pavement segment receiving a numeric rating between zero and one-hundred. The score is determined by deducting points from one hundred for each observable distress, according to guidance issued by ODOT. Local governments use PCRs to devise schedules for road resurfacing aId reconstruction. A summary of functional class and roadway miles can be found in **EXHIBIT AC : FUNCITONAL CLASS**.

To enhance PCRs, Eastgate is incorporating TAM strategies into its decision-making process in the TIP and coordinating with the District 6 Public Works Integrating Committee to advocate for more thorough road condition ratings in the State Capital Improvement Program (SCIP) and Local Transportation Improvement Program (LTIP).

EXHIBIT AB: PAVEMENT CONDITION RATING (PCR) SCALE

Bridges

The NBI database is a collection of all of the nation's bridges that are more than twenty feet in length, which includes public roads, including Interstate Highways, U.S.

highways, state, and county roads. In Ohio, any self-supported structure equal or greater than ten feet in length is considered a bridge. Therefore, ODOT'S Transportation Information Mapping System (TIMS) includes an inventory and condition data on highway bridges between ten and twenty feet as shown in **TABLE 14: BRIDGES**. Bridges are assigned a rating that represents the general condition of the structure. Structural assessments, together with ratings of the physical condition of key bridge components, determine whether a bridge is classified as "structurally deficient" or "functionally obsolete." The three components of a bridge that are individually inspected and rated are the deck surface; the superstructure that support the deck; and the substructure, which supports the superstructure and distributes all bridge loads to below-ground bridge footings. Structural assessments determine whether a bridge is classified as structurally deficient or not structurally deficient. A bridge is considered structurally deficient if significant load-carrying elements are found to be in poor condition due to deterioration and/or damage. A structurally deficient bridge requires significant maintenance and repairs to remain in service. The classification of a bridge as "structurally deficient" does not imply that it is unsafe for travel. FHWA guidelines assign a condition rating of Good, Fair, or Poor based on the minimum NBI condition rating of the deck, superstructure, or substructure.

Eastgate is finalizing updated methodologies for its TAMP, including PCRs and bridge ratings. Once finalized, Eastgate will provide a data-driven overview and recommendations for the maintenance of PCRs and bridges. This information in turn will support ODOT on performance targets for maintaining infrastructure in a state of good repair.

EXHIBIT AC:
FUNCTIONAL CLASS

Congestion Management Process

Traffic congestion is the condition where a roadway network's usage increases, causing slower speeds, longer trip times, and increased vehicular queuing. Congestion can also be caused by geometrics or roadway attributes, traffic accidents, construction, signal timing, and bad weather. Congestion management is the term for applying strategies that improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. These strategies may include increasing capacity such as adding turning lanes, or they can be TDM strategies. Congestion in the Eastgate Region is less than larger metros, as indicated by a shorter commute time than the state average and the Congestion Management Process (CMP). Congested roadways in the Eastgate region are shown in **EXHIBIT AD: CONGESTED ROADWAYS.**

According to FHWA, a CMP is a systematic approach that provides accurate, up-to-date information on transportation system performance and IT assesses alternative strategies. It follows the 3-C process by including community choices regarding transit services, livability, and land use. The CMP is integrated into the transportation planning process, including transportation improvement strategies such as operations and capital projects. Its guiding principle is that transportation investments will support the land use goals and policies of the MTP. As a TMA, Eastgate is required to maintain a CMP. Eastgate's CMP, updated in 2010, identifies congested locations in the region based on spatial and temporal characteristics. It also measures the severity of congestion. The CMP can be found in Eastgate's Library under Congestion.

Roadways with a Level of Service (LOS) of E (unstable flow) or F (forced or breakdown flow) are considered congested. Thirty-three roadway segments in Mahoning County and twenty-three roadway segments in Trumbull were identified. As a result of the CMP, travel times were observed in Time and Delay studies for South Avenue and Midlothian, and US-224 in Canfield. Signal improvements were analyzed in Signal Delay studies for McClurg and SR-7, US-62 and SR-46, and US-224. A summary of programing that has occured since the last update to the CMP is in **Table 13: CMP CONGESTED ROADWAY SEGMENTS.**

Future CMP updates will identify the cause of congestion, assess mitigation strategies and their alternatives, and evaluate improvements. A major component of the update will be the incorporation of transportation system management and operations (TSMO) and Transportation Demand Management (TDM). In FY 2019, Eastgate will update its CMP with new planning capacity and consideration given the lack of congestion in the region when compared nationally. According to the 2017 INRIX Traffic Scorecard Report, Youngstown is 275th out of 297 cities in the United States. 2% of driving time is spent in congestion and a total of five peak hours are spent in congestion annually. Eastgate will support the state in meeting performance management targets for reducing congestion.

EXHIBIT AD: CONGESTED ROADWAYS

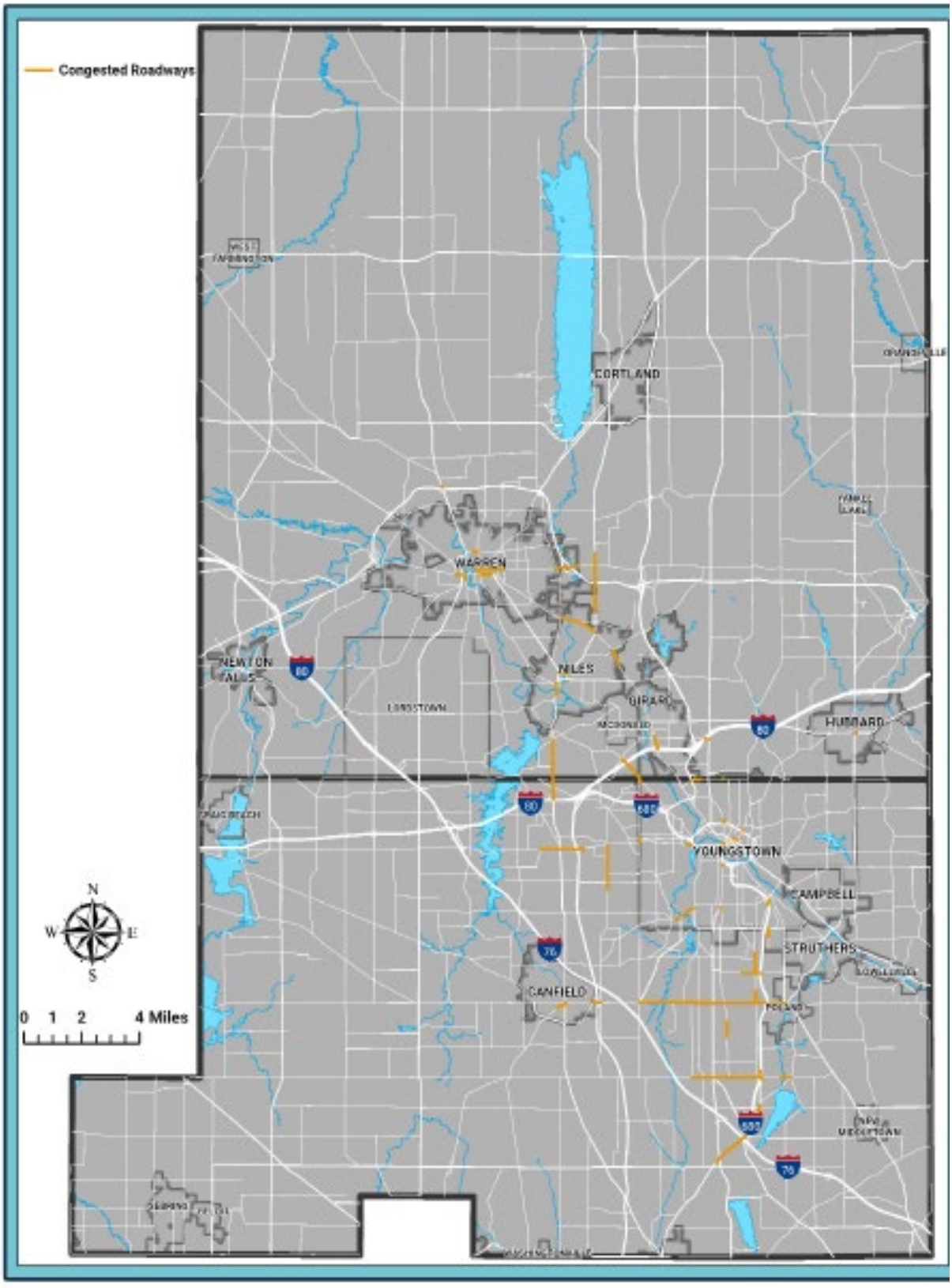


TABLE 13: CMP CONGESTED ROADWAY SEGMENTS

HIGHWAY	COUNTY	JURISDICTION	FROM	TO	STATUS
SR-46	MAH	AUSTINTOWN TWP	I-80	COUNTY LINE	PROGRAMMED
I-680 RAMP	MAH	BOARDMAN TWP	I-680	WESTERN RESERVE RD	RAMP MODIFIED
SOUTH AVE	MAH	BOARDMAN TWP	MATHEWS RD	LAKE PARK RD	PROGRAMMED
WESTERN RESERVE RD	MAH	BOARDMAN TWP	HITCHCOCK RD	I-680	PROGRAMMED
US-62	MAH	CANFIELD	COURT ST	SR-46	WIDENED
SR-164	MAH	SPRINGFIELD TWP	I-680 RAMP	WESTERN RESERVE RD	PROGRAMMED
GOLETA AVE	MAH	YOUNGSTOWN	GYPSY LN	HOSPITAL ENTRANCE	EMPLOYMENT LOSS
LINCOLN AVE	MAH	YOUNGSTOWN	ELM ST	WICK AVE	RESTRIPED
MARKET ST	MAH	YOUNGSTOWN	BOARDMAN ST	FEDERAL PLAZA	PROGRAMMED
WICK AVE	MAH	YOUNGSTOWN	SERVICE RD	SCHOOL ENTRANCE	RESTRIPED
MARKET ST	TRU	HOWLAND TWP	SR-82 OFF RAMP	SAWGRESS ST	PROGRAMMED
MARKET ST	TRU	HOWLAND TWP	NORTH RD	SR-82 OFF RAMP	PROGRAMMED
ATLANTIC ST	TRU	WARREN	ADAMS AVE	PARK AVE	PROGRAMMED
HIGHLAND AVE	TRU	WARREN	UNION ST	US-422	PROGRAMMED
MARKET ST	TRU	WARREN	MAIN ST	LAIRD AVE	PROGRAMMED
PARK AVE	TRU	WARREN	FRANKLIN ST	MARKET ST	PROGRAMMED
US-422	TRU	WARREN	PARKMAN RD	SR-45	PROGRAMMED
US-422	TRU	WARREN	PINE AVE	CHESTNUT AVE	PROGRAMMED
WASHINGTON ST	TRU	WARREN	MERCER AVE	ELM RD	PROGRAMMED

TECHNOLOGY

Experimental technologies have the potential to transform how transportation systems are planned, designed, built, and operated. The past few decades have seen an exponential curve in software development and data accessibility. This development has drastically changed the transportation industry's understanding of travel behavior through real-time information and sophisticated modelling. Examples of current technologies include traffic counting, crash detection, toll collecting, traffic signal flow, and transit operations surveillance.

Consumers depend on traffic condition reports, electronic maps, on-board vehicle performance monitors, real-time transit information, and many other services that didn't exist on such a large scale less than a decade ago. At the same time, hardware development is advancing due to private-sector interest and greater mobile bandwidth. And yet, most of the transportation system is mature and it takes multiple years to decades to plan and implement new projects through the transportation planning process. The rapidly evolving Fourth Industrial Revolution, as seen in **TABLE 14: FOURTH INDUSTRIAL REVOLUTION**, is further widening the gap between transportation planning and implementation because robotics, machine learning, and artificial intelligence are changing mobility. The speed of technology's ability to address issues of congestion, mobility, and safety are slowed by the pace of regulation, policy-development, and funding. Regardless, MPOs like Eastgate must adapt and proactively plan as the transportation system becomes increasingly connected.

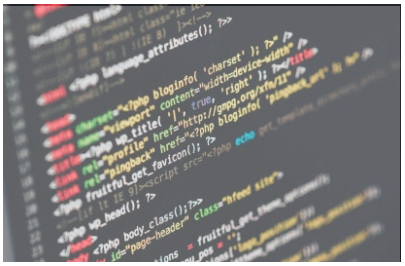
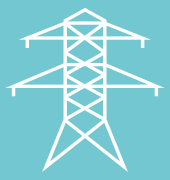
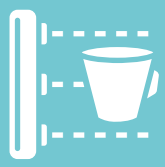


TABLE 14: FOURTH INDUSTRIAL REVOLUTION

	 FIRST (1770s)	 SECOND (1870s)	 THIRD (1960s)	 FOURTH (2010s)
TECHNOLOGY	STEAM POWER ***MECHANICAL PRODUCTION***	ELECTRICITY ***MASS PRODUCTION***	ELECTRONICS COMPUTERS ***AUTOMATED PRODUCTION***	ROBOTICS ARTIFICIAL INTELLIGENCE ***3D PRINTING***
URBAN FORM	***CORE***	ELEVATORS ***CONCENTRIC ZONES***	GLOBALIZATION INTERNET E-COMMERCE ***SUBURBS***	INTERNET OF THINGS NETWORKED SPACE ***VIRTUAL***
TRANSPORTATION	CANALS RAILROADS	SUBWAYS TROLLEYS CARS BUSES TRUCKS AIRPLANES	INTELLIGENT TECHNOLOGY SOLUTIONS REAL TIME TRANSPORT SPACE TRAVEL	CONNECTED & AUTOMATED VEHICLES DRONES

ADAPTED FROM WORLD ECONOMIC FORUM

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) are advanced applications that aim to provide innovative services for traffic management and the movement of goods. It is a "system of systems" that maximizes the capacity and safety of the existing roadway network by incorporating additional guidance. Types of ITS projects are shown in **TABLE 15: ITS APPLICATIONS.** ITS provides the tools necessary to address many of our current surface transportation problems, particularly in the areas of congestion, safety improvements, and better traveler information that can be addressed through communication and system integration. It is also a useful tool for anticipating and addressing future demands. ITS applications apply current and emerging technologies in such fields as information processing, communications, control, and electronics, and can provide real-time traffic information to the travelling public. Future applications include autonomous and connected vehicles that can significantly impact ITS.

For instance, the Internet of Things (IoT), where devices communicate seamlessly with each other, will shift transportation engineering perspectives with real-time information, as seen with route-optimization tools and apps such as Google Maps and Waze.

Eastgate mainains and monitors the regional ITS architecture and hosts workshops and trainings. Eastgate also encourages ITS projects through the TIP. Current ITS projects in the TIP include signal optimization in the City of Youngstown. A complete list of ITS in the Eastgate Region and how information flows between them can be found here:

http://consystec.com/ohio/eastgate/

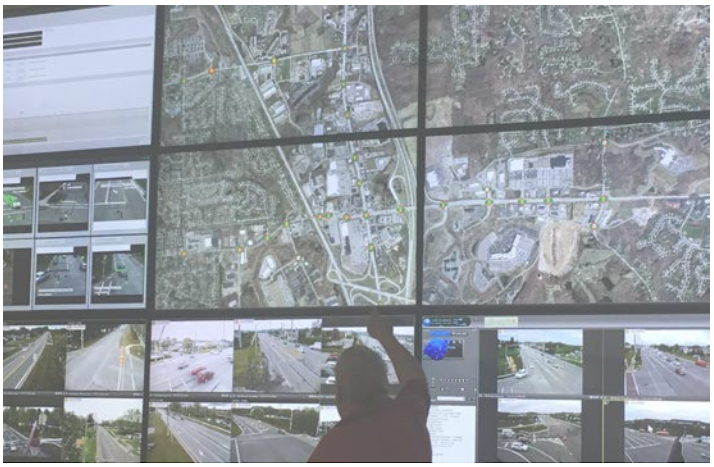
TABLE 15 : ITS APPLICATIONS
SIGNAL COORDINATION
SIGNAL PRE-EMPTION
MESSAGE BOARDS
TRAFFIC INCIDENT MANAGEMENT (TIM)
BROADCAST TRAVELER INFORMATION
COORDINATED RESPONSE, ROAD/WEATHER INFORMATION SYSTEMS (RWIS)
HIGHWAY RAIL GRADE CROSSING
TRAFFIC CONTROL SYSTEMS
COMMERCIAL VEHICLE OPERATIONS
DESTINATION DYNAMIC MESSAGE SIGNS (DDMS)
CAMERAS
AUTOMATIC TRAFFIC COUNTING

Security

The vulnerability of the transportation system and its role in emergency evacuations are important for ensuring public safety. Federal law requires that transportation planners consider security. Transportation security can be defined as freedom from harm, tampering, natural disasters, and extreme weather events that would affect motorized and nonmotorized travelers. In addition to safety, security planning takes place to prevent, manage, and respond to threats. Security largely involves the deployment of technology. Cybersecurity is a new and growing need in transportation due to the increasing use of digitally connected and automated systems, along with mobile devices. Monitoring the transportation system to ensure against infrastructure failures as well as reviewing scenarios where the network may fail are also a part of security planning. The Department of Homeland Security has developed a *National Infrastructure Protection Plan*, which outlines how government and private sector work together to manage risks to the Nation's critical infrastructure.

Security is a critical component of transit planning, where technology is used to address public perception, vandalism, and physical deterioration of the system. Transit agencies are required to spend at least one percent of their Urban Area allocation on security measures to comply with various certification requirements. Examples of security related projects can be, but are not limited to: increased lighting of a facility or transfer points; surveillance equipment and emergency communication at a facility or within the transit system; contracts for security training services, or staff time allocated to address security issues.

Although Eastgate has no direct role in responding to emergencies such as tornados, severe thunderstorms, winter storms, floods, or terrorism; the agency participates in the planning process. Regular meetings are held through county-wide coalitions that include the Ohio State Patrol, ODOT, Ohio Turnpike Commission, transit agencies, and hospitals to identify routes for emergency vehicles, improve evacuation planning, and monitor infrastructure for security purposes. Regional coordination is critical to security and emergency preparedness. Each county in Ohio is required to have a *Natural Hazards Mitigation Plan*.

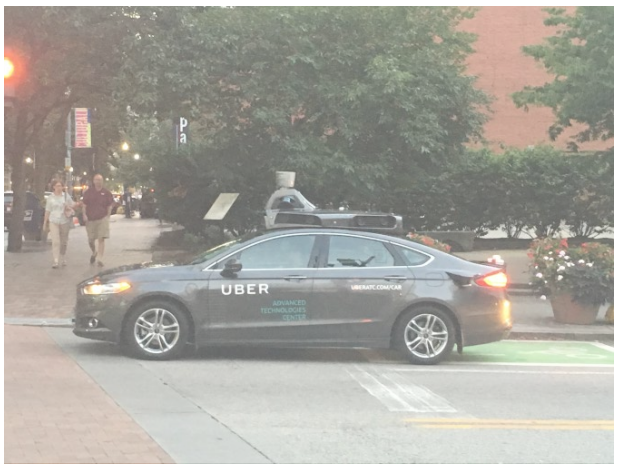


Connected & Autonomous Vehicles

The automation and inter-communication of motor vehicles is revolutionizing ground transportation in big ways, leading to conversations on how the future relationship between mobility and land use may be radically different. Connected and Autonomous Vehicles (CAVs) offer many benefits including the following:

- Reduce crashes & their associated costs
- Improve travel time & route planning
- Increase capacity of existing infrastructure due to more efficient traffic flows
- Boost access for the young, older adults, and people with disabilities
- Reduce freight-associated costs
- Free time traditionally spent on driving
- Save fuel & reduce vehicle maintenance
- Provide more efficient parking
- Improve transit & rail operating costs

CAVs use short-range wireless communication to share information on safety, surrounding infrastructure, and other road users such as pedestrians and bicyclists. Partial automation that is currently available to customers allows lane guidance, active cruise control, and automatic braking. As this technology is refined and becomes more affordable, it will be integrated into not only luxury but standard vehicle models. Soon, fully automated vehicles that use GPS extensive mapping data, wireless-communications, and sensor systems,



including cameras, lasers, and radars will navigate roadways instead of drivers. Academia, private industry, and the federal government have various projections for when fully-autonomous vehicles will be available, in part because there are various levels of autonomy as shown in **TABLE 16: LEVELS OF AUTONOMY**. Issues such as cyberattacks and security, cost to market, and complexities in decision-making such as turning movements are advancing.

Various state and federal legislation are in the works. In 2017, the Federal Automated Vehicle Policy Statement was issued, which provides an initial regulatory framework to states and manufacturers on the safe design, development, testing, and deployment of highly automated vehicles. The State of Ohio is providing vast resources to the Smart Mobility Initiative, a partnership of ODOT, Ohio Department of Public Safety, Ohio Turnpike and Infrastructure

Commission, and The Ohio State University. Ohio is also home to the Transportation Research Center, part of the National Highway Traffic Safety Administration's Vehicle Research and Test Center that is a testing facility for autonomous vehicle and smart highway research. The Initiative allows the State to embrace new technologies for drones, autonomous and connected vehicle technology, and data analytics. Three test locations for smart technologies include US-33 Smart Mobility Corridor in Columbus, the Interstate 270 beltways in Columbus, and Interstate 90 in Northeast Ohio. Although the test sites are outside of the Eastgate Region, the MPO remains engaged in discussions on implementation. Ohio is also part of the Smart Belt coalition with Pennsylvania and Michigan that is creating a strategic plan on applying self-driving and connected vehicle technologies to work zones and testing them with commercial freight.

TABLE 16: LEVELS OF AUTONOMY
0 - NO AUTOMATION
1- DRIVER ASSISTANCE
2 - PARTIAL AUTOMATION
3 - CONDITIONAL AUTOMATION
4 - HIGH AUTOMATION
5 - FULL AUTOMATION

SOURCE: PEDESTRIAN AND BICYCLE INFORMATION CENTER

SOURCE: ODOT

FUNDING

Transportation is funded in a variety of ways, however, nationally the demand for funds is greater than the supply. Federal funding includes the Federal Highway and Transit Trust Funds, which are primarily funded through gas tax receipts. The federal gas tax of 18.4 cents per gallon has not been increased since 1993. More efficient vehicles, inflation, and the economic recession have also resulted in flat revenue collection from this funding source. General funds that are approved by Congress are used to keep the trust funds solvent.

In the State of Ohio, sources of funds include general funds, the gas tax, sales tax, license fees, vehicle registration, and tax on the sale of new and used vehicles. Debate over increasing the gas tax remains a hot topic, as the last increase occurred in 2003, when it was raised to 28 cents per gallon. In addition to the previously mentioned sources, other less-traditional mechanisms for funding include Tax Increment Financing (TIFs), Transportation Improvement Districts (TIDs), and Joint Economic Development Districts (JEDDs). National discussions continue on public/private partnerships, congestion fees, vehicle miles traveled fees, and tolling as new funding sources. Eastgate and its planning partners are proactive in seeking additional funding to maintain the transportation system by participating in conversations at the local, state, and national levels on the need for sustained and increased funding.

Eastgate as an MPO receives set-asides and a sub-allocation of funds apportioned to the State of Ohio based on a formula that is called the Surface Transportation Block Grant (STBG) program as shown in **TABLE 17: MPO FUNDS**. The STBG promotes flexibility in state and local transportation decisions to better suit local needs. Under the FAST Act, the percentage of sub-allocated funding grows annually, providing slightly more funding to MPOs than in years prior. Additional funding sources are shown in **TABLE 18: OTHER FUNDING SOURCES**.

TABLE 17: MPO FUNDS	
CONGESTION MITIGATION AND AIR QUALITY (CMAQ)	These funds are used for projects that reduce vehicle tailpipe emissions. Examples of projects include roadway improvements that alleviate congestion, ITS, traffic signal upgrades, transit improvements, and bicycle and pedestrian facilities.
SURFACE TRANSPORTATION BLOCK PROGRAM (STBG)	These funds are used for a variety of maintenance and operations as well as expansion projects including roads, bridges, transit, and bicycle and pedestrian facilities.
TRANSPORTATION ALTERNATIVES SET ASIDE PROGRAM (TA)	These funds are used for on and off-road pedestrian and bicycle facilities, infrastructure projects that improve non-driver access to public transportation and enhanced mobility, environmental mitigation related to stormwater and habitat connectivity, recreational trail projects, and safe routes to school projects.

TABLE 18: OTHER FUNDING SOURCES	
FEDERAL	INFRASTRUCTURE FOR REBUILDING AMERICA (INFRA)
APPALACHIAN REGIONAL COMMISSION (ARC)	HUMAN RESOURCES & TRAINING (5314B)
ARTPLACE	INTERSTATE MAINTENANCE FUNDS
ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)	LOW OR NO EMMISSION VEHICLE DEPLOYMENT (5339C)
USDOT & FTA	MOBILE ON DEMAND SANDBOX PROGRAM
AD. TRANSPO & CONGESTION MGMT TECHNOLOGIES DEPLOYMENT	PILOT PROGRAM FOR TRANSIT-ORIENTED DEVELOPMENT PLANNING (5309)
BUSES & BUS FACILITIES (5339)	PUBLIC TRANSIT EMERGENCY RELIEF PROGRAM (5324)
CAPITAL INVESTMENT GRANT (5309)	PUBLIC TRANSPORTATION INNOVATION (5312)
ENHANCE MOBILITY FOR SENIORS & INDIVIDUALS WITH DISABILITIES (5310)	RIDES TO WELLNESS INITIATIVE

STATE OF GOOD REPAIR (5337)	COUNTY SURFACE TRANSPORTATION PROGRAM
TECHNICAL ASSISTANCE & STANDARDS DEVELOPMENT (5314A)	DIESEL EMISSION REDUCTION GRANTS
TRANSPO. INVESTMENT GENERATING ECONOMIC RECOVERY (TIGER)	ELDERLY & DISABLED TRANSIT FARE ASSISTANCE PROGRAM
TRANSIT COOPERATIVE RESEARCH PROGRAM (5312I)	FREIGHT PROGRAM
URBAN AREA FORMULA GRANTS (5307)	JOBS & COMMERCE
STATE	INTERSTATE MAINTENANCE
COUNTY ENGINEER'S ASSOCIATION	LOCAL MAJOR BRIDGE PROGRAM
GOVERNOR'S HIGHWAY SAFETY ASSOCIATION	MUNICIPAL BRIDGE PROGRAM
STATE & COMMUNITY HIGHWAY SAFETY GRANT PROGRAM (SECTION 402)	NOISE WALL
OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR)	OHIO BRIDGE PARTNERSHIP PROGRAM
CLEAN OHIO TRAILS FUND	OHIO COORDINATION PROGRAM
LAND WATER CONSERVATION FUND	OHIO TRANSIT PRESERVATION PARTNERSHIP PROGRAM (OTPPP)
NATUREWORKS	STATE INFRASTRUCTURE BANK
RECREATIONAL TRAILS	SAFE ROUTES TO SCHOOL PROGRAM (SRTS)
ODOT	SAFETY PROGRAM
AMISH BUGGY PROGRAM	TRANSPORTATION REVIEW ADVISORY COUNCIL (TRAC)
COUNTY HIGHWAY SAFETY PROGRAM	URBAN PAVING PROGRAM
COUNTY LOCAL BRIDGE PROGRAM	URBAN TRANSIT PROGRAM (UTP)

OHIO DEVELOPMENT SERVICES AGENCY (ODSA)
COMMUNITY DVPT BLOCK GRANT RESIDENTIAL PUBLIC INFRA PROGRAM
COMMUNITY DVPT BLOCK PUBLIC INFRASTRUCTURE GRANT PROGRAM
ROADWORK DEVELOPMENT (629)
THE OHIO PARKS AND RECREATION ASSOCIATION
CLEAN OHIO GREEN SPACE CONSERVATION FUND
LOCAL TRANSPORTATION IMPROVEMENT PROGRAM (LTIP)
SMALL GOVERNMENT PROGRAM
STATE CAPITAL IMPROVEMENT PROGRAM (SCIP)
OHIO RAIL DEVELOPMENT COMMISSION (ORDC)

Federal Financial Forecast

The MTP is required to be fiscally balanced, meaning the projects identified must be financially feasible based on estimating project costs and forecasted revenue through 2040. The development process for the *MTP 2040 Update* considers all projects and strategies proposed for funding that will use federal funds for eligible projects and activities related to highway, non-motorized, transit, and multimodal transportation, as identified under Title 23 United States Code (USC), and Title 49 USC Chapter 53, respectively.

Several key factors influence implementation of present and future transportation improvements within the region. Priority considerations include the available sources of funding, amount of funding allocated to the region, funding management, and inflation. The primary sources of revenues used to support the transportation system have been, and will continue to be, federal, state, and local governments.

Developing a financial forecast that covers such an extended timeframe is a challenging task, especially considering current economic uncertainty. Thus, assumptions were developed and a financial forecast was completed in consultation with the ODOT, area transit operators and Eastgate's local member communities.

Funding Programs

The following is a brief list of the federal transportation funding programs coordinated through Eastgate. The percentage listed after each program is the typical portion of a project eligible for federal funds. The remaining percentage must be covered by state or local funds.

Federal and State

- *National Highway Performance Program (NHPP)* - 80% NHPP provides support for the condition and performance of the National Highway System (NHS).

- Surface Transportation Block Grant Program (STBG) including Transportation Alternatives (TA) - 80% STBG provides flexible funding that may be used for projects to preserve and improve the conditions and performance of any federal-aid highway, bridge or tunnel on a public road, pedestrian and bicycle infrastructure, and transit capital projects. TA authorizes funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, and environmental mitigation related to stormwater and habitat connectivity.
- Highway Safety Improvement Program (HSIP) – 90% HSIP provides funding to reduce traffic fatalities and serious injuries.
- Congestion Mitigation/Air Quality (CMAQ) – 80% CMAQ funds can only be used for projects that help reduce traffic congestion and improve air quality. Examples of projects include signal upgrades, bus replacements, bike facilities, ITS improvements, etc.

Transit

- FTA Section 5307 Urban Area Formula Program – 80% 5307 provides funding for transit capital and operating assistance.
- FTA Section 5310 Elderly and Disabled Program – 80% 5310 provides capital and operating grants to assist private non-profit corporations and public agencies who offer coordinated transportation services that are planned, designed, and carreid out to meet the needs of senrios and individuals with disabilities. Examples of projects include transit capital, transit operating, vehicles, etc.
- FTA Section 5339 Bus and Bus Facilities Program – 80% 5339 provides capital to replace, rehabilitate, and purchase buses, vans, and related equipment as well as other items.

Revenue Sources for Highway

The Federal Highway Trust Fund provides the revenue for both highway and transit funding programs. Taxes on gasoline and diesel fuels are the main source of income for the Highway Trust Fund. As previously stated, the federal gasoline tax is 18.4 cents per gallon and 24.4 cents per gallon on diesel.

Federal funds are not the only source of revenue for implementing transportation projects in the Eastgate area. To receive federal funding, a match of state or local dollars must be included, which is typically 20%. State or local entities sponsoring a project will provide the funding needed to match federal dollars. State funds are generated from the state fuel tax. The state collects a fuel tax of 28 cents per gallon for gasoline or diesel. ODOT receives a portion of the state fuel tax revenue. The remaining revenue is shared by counties, municipalities, townships, and other state agencies. Some local entities receive additional revenue through additional fees, taxes, and incentives.

Forecast Methodology for Highway

Preparation for this financial plan revenue estimate included a review of historic data and trends. To date, Eastgate has not identified new revenue sources or strategies to fund projects and/or activities within the plan. Instead, Eastgate continues to use historic and/or traditional revenue datum and methodologies as identified in tables below. **Table 19: Historic Revenue By Fiscal Year & By Category For Highway** uses historical data obtained from Eastgate's *Annual List of Projects Report*. In this report, Eastgate identifies by fiscal year all federal, state, and local revenue sources that the region received. This information is presented in **Table 19** and provides the expected average revenue for all three funding sources for our region. **Table 20: Highway Funding Level Projections For 2019-2040,** projects all three averages to the out year of 2040. Also shown in **Table 20**, inflation rates of 2% per year were used in the financial assumptions, until 2021, and then 0% through 2040.

The FAST Act provides for highway, highway safety, and public transportation improvements through 2020. Beyond this point funding availability becomes more uncertain. Increasing revenues, based on the previously mentioned assumptions and at the annual levels calculated, will provide a conservative estimate of future revenue projections.

TABLE 19: HISTORIC REVENUE BY FISCAL YEAR & BY CATEGORY FOR HIGHWAY			
YEAR	FEDERAL	STATE	LOCAL
2006	$90,006,000	$15,751,050	$6,750,450
2007	$31,971,120	$5,594,946	$2,397,834
2008	$37,047,908	$6,483,383	$2,778,593
2009	$34,094,532	$5,966,534	$2,257,089
2010	$31,878,465	$5,578,731	$2,390,884
2011	$32,407,508	$5,671,313	$2,430,563
2012	$45,175,808	$7,905,766	$3,388,185
2013	$32,854,522	$5,749,541	$2,464,089
2014	$63,957,011	$11,192,476	$4,796,775
2015	$143,604,186	$25,130,732	$10,770,313
2016	$22,057,270	$3,860,011	$1,654,295
TOTAL	$565,054,330	$98,884,507	$42,379,074
AVERAGE	$51,368,575	$8,989,500	$3,852,643

TABLE 20: HIGHWAY FUNDING LEVEL PROJECTIONS FOR 2019 - 2040

TERM	YEAR	FEDERAL	GROWTH RATE	STATE	GROWTH RATE	LOCAL	GROWTH RATE
SHORT	AVERAGE	$51,368,575		$8,989,500		$3,852,643	
	2019	$52,395,497	2%	$9,079,395	1%	$3,852,643	0%
	2020	$53,443,865	2%	$9,170,189	1%	$3,852,643	0%
	2021	$54,512,743	2%	$9,262,891	1%	$3,852,643	0%
	2022	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
MEDIUM	2023	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2024	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2025	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2026	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2027	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2028	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2029	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2030	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
LONG	2031	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2032	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2033	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2034	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2035	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2036	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2037	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2038	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2039	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	2040	$54,512,743	0%	$9,262,891	0%	$3,852,643	0%
	TOTAL	$1,196,094,667		$203,487,401		$84,758,146	

Revenue Sources and Forecast Methodology for Transit

Federal and state funds received by WRTA and TCTB between 2009 and 2016 are shown in **TABLE 21: HISTORIC REVENUE BY FISCAL YEAR & BY CATEGORY FOR TRANSIT**. This includes state programs that were originally derived from federal funds, such as OTPPP. These historic values were used to calculate an average amount, shown at the bottom of **TABLE 22: TRANSIT FUNDING LEVEL PROJECTIONS FOR 2019 - 2040**.

WRTA has a local dedicated sales tax, which mostly funds all their operating expenses. The transit system also receives additional funding sources to support operating expenses. These additional funding sources include investment income, fare-box revenue, wage attachment fees, advertising revenue, rental income, and grants from ODOT's Office of Transit

TCTB utilizes local funding sources, and available grants through ODOT's UTP, the Elderly and Disabled Grant, and OTPPP to support the operating and capital expenses associated with Capital Cost of Contracting. Most of the local funds that support TCTB come from local participating municipalities who contribute one dollar per resident, transit fares, contract services, and ODOT discretionary and formula grant programs. These historic values were used to calculate an average local amount, shown at the bottom of **Table 22.**

The growth rates used to forecast transit funding were assumed to be the same as the assumptions used for FHWA funding, which were just over 2% until 2021 and then 0% through 2040. The WRTA and TCTB averages were combined and the growth rate was applied to the historical average and compounded to determine the total cumulative 2040 forecast of available funds.

In **Table 18**, projects both average federal/state and local to the out year of 2040.The growth rates used to forecast transit funding were assumed to be the same as highway federal assumption, which were just over 2% until 2021 and then 0% through 2040. The WRTA and TCTB averages were combined and the growth rate was applied to the historical average and compounded to determine the total cumulative 2040 forecast of available funds.

TABLE 21: HISTORIC REVENUE BY FISCAL YEAR & BY CATEGORY FOR TRANSIT				
YEAR	FEDERAL & STATE		LOCAL	
	WRTA	TCTB	WRTA	TCTB
2009	$3,034,365	$470,000	$5,612,408	$751,603
2010	$2,963,302	$565,148	$6,903,659	$678,603
2011	$3,155,468	$601,324	$7,490,559	$678,603
2012	$4,640,605	$688,725	$7,706,480	$678,603
2013	$4,407,836	$945,482	$7,996,937	$768,363
2014	$4,246,871	$1,233,656	$8,568,592	$768,363
2015	$4,206,681	$1,094,601	$8,635,531	$768,363
2016	$4,233,144	$896,163	$8,846,255	%5,860,864
TOTAL	$30,888,272	$6,495,099	$61,760,421	$5,860,854
AVERAGE	$3,861,034	$811,887	$7,720,053	$732,608

TABLE 22: TRANSIT FUNDING LEVEL PROJECTIONS FOR 2019 - 2040					
TERM	YEAR	FEDERAL & STATE	GROWTH RATE	LOCAL	GROWTH RATE
	AVERAGE	$4,672,921		$8,452,661	
SHORT	2019	$4,766,379	2%	$8,621,714	2%
	2020	$4,861,707	2%	$8,794,148	2%
	2021	$4,958,941	2%	$8,970,031	2%
	2022	$5,058,120	0%	$9,149,432	0%
MEDIUM	2023	$5,058,120	0%	$9,149,432	0%
	2024	$5,058,120	0%	$9,149,432	0%
	2025	$5,058,120	0%	$9,149,432	0%
	2026	$5,058,120	0%	$9,149,432	0%
	2027	$5,058,120	0%	$9,149,432	0%
	2028	$5,058,120	0%	$9,149,432	0%
	2029	$5,058,120	0%	$9,149,432	0%
	2030	$5,058,120	0%	$9,149,432	0%
LONG	2031	$5,058,120	0%	$9,149,432	0%
	2032	$5,058,120	0%	$9,149,432	0%
	2033	$5,058,120	0%	$9,149,432	0%
	2034	$5,058,120	0%	$9,149,432	0%
	2035	$5,058,120	0%	$9,149,432	0%
	2036	$5,058,120	0%	$9,149,432	0%
	2037	$5,058,120	0%	$9,149,432	0%
	2038	$5,058,120	0%	$9,149,432	0%
	2039	$5,058,120	0%	$9,149,432	0%
	2040	$5,058,120	0%	$9,149,432	0%
	TOTAL	$110,691,307		$200,225,101	

Integrated Forecast

The forecast methodology projects that funding from 2019 to 2040 will result in $1.795 billion in transportation investment as shown in **Table 23: FINANCIAL FORECAST FOR 2040 UPDATE**. The majority, or nearly $1.5 billion, is projected for highway projects from federal, state, and local funds. $310.9 million is projected for transit projects. Total revenues are projected at $1.795 billion for the integrated forecast.

Eastgate solicited, received, and reviewed 353 projects, totalling $542.5 million. Having such a large gap between funding and costs in the *MTP Update* is unusual and a result of several factors. A number of partnering organizations experienced staff changes and were not able to provide Eastgate with information in a timely manner. Additionally, local governments not having adequate revenues for local match was another factor. In the near future (FY 2019), Eastgate will implement a number of actions to improve the quality and quantity of projects. First, Eastgate will work with its local governments on comprehensive plans to identify local priorities and potential new projects. Second, Eastgate will utilize the TAMP to identify additional projects. And third, Eastgate is developing an online project submission portal to encourage planning partners to identify and share project ideas. The portal in term will allow Eastgate to better assist in developing projects. By improving project solicitation and development, Eastgate will be able to reevaluate and improve its procedures for selecting and prioritizing major capital investment projects. As performance measure targets are adopted, assessment and prioritization processes will occur, such as safety, infrastructure condition, and congestion reduction.

TABLE 23: FINANCIAL FORECAST FOR 2040 UPDATE

	HIGHWAY	TRANSIT	TOTAL
FEDERAL	$1,196,094,667	$110,691,307	$1,306,785,974
STATE	$203,487,401		$203,487,401
LOCAL	$84,758,146	$200,225,101	$284,983,247
TOTAL	$1,484,340,214	$310,916,408	$1,795,229,662

Recommended Fiscally Constrained MTP

The vision of the MPO is to strengthen the established transportation network through preservation, efficiency, collaboration, and modal choice. This vision is reflected in the goals under the themes of Economy, Mobility, Resiliency, Safety, System Performance, and Technology. The recommended financially constrained MTP considers the choices that need to be made to support this vision through appropriate investments in the transportation system over the twenty-year time horizon. The MTP aims to maximize the safety, and efficiency of our existing transportation network, while bringing it into a state-of-good repair. The recommended financially constrained MTP was created by assessing needs, forecasting revenue, allocating the forecasted revenue to types of projects, evaluating and selecting major regional projects, and then identifying options to close the funding gap. At the heart of this process is an analysis of the assets and their performance, which is monitored through data collection. Anything that can't be afforded beyond the fiscally constrained MTP is kept for future consideration and alternative funding sources are assessed.

2040 MTP Update
Snapshot

$632.1 Million

353 Projects

24 Bridge Replacements

16 Active Transportation Projects

67% Maintenance & Operations

9 Intersection Enhancements

76 Transit Enhancements

11 Signal Upgrades

CURRENTLY PROGRAMMED PROJECTS: FISCAL YEARS 2018 - 2022

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
103933	MAH	Garfield Street Sidewalks	Install new sidewalk on the east side of Garfield ST & NS of Como AVE	TAP	$204,000	2019	City of Struthers
98980	MAH	Federal Street / Market Street	Resurface Federal ST from Phelps ST to Walnut ST; resurface Market ST from Front ST to Commerce ST	STBG	$400,000	2018	City of Youngstown
103932	MAH	Harding Elementary Sidewalks	Sidewalk reconstruction near Harding Elementary	TAP	$211,785	2019	City of Youngstown
104659	MAH	Fifth Avenue	Resurface & install landscaped median from Federal ST to Madison AVE EXPY	STBG	$2,949,053	2019	City of Youngstown
104645	MAH	Rayen Avenue (SR-289)	Resurface from MLK BLVD to Watt ST	STBG	$700,000	2020	City of Youngstown
104866	MAH	Commerce (CR -0151)	Resurface from Fifth AVE to Federal ST	STBG	$540,000	2020	City of Youngstown
102542	MAH	Youngstown Signals	Signal upgrade at 17 locations throughout the city	CMAQ	$2,710,779	2021	City of Youngstown
104646	MAH	Himrod Avenue / Indianola Avenue	Resurface Himrod AVE from Lane AVE to Oak ST; resurface Indianola AVE from Market St to South AVE	STBG	$2,710,779	2021	City of Youngstown
104652	MAH	Front Street	Resurface & install landscaped median between Marshall ST & South AVE	STBG	$1,220,000	2021	City of Youngstown
-	MAH	Eastgate FY18 - 21 Air Quality	Eastgate FY18-21 Air Quality Program	SPR	$152,000	2018-2021	Eastgate
-	MAH	Eastgate FY18-21 Rideshare Program	Eastgate FY18 - 21 Rideshare	SPR	$60,000	2018-2021	Eastgate
-	MAH	Eastgate FY18 - 21 RTPP	Eastgate FY18-21 Regional Transportation Planning Program Supplemental Funding	SPR	$100,000	2018-2021	Eastgate
101897	MAH	Mahoning / Victoria Signal	Austintown TWP - install signal at the intersection of Mahoning AVE and Victoria RD	STBG	$220,000	2018	MAH C Engineer
103454	MAH	Mahoning Avenue (CR-0018 00.96) Causeway	Milton TWP - install curb and gutter drainage system to prevent further causeway embankment erosion from roadway runoff	TAP	$250,000	2018	MAH C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
98840	MAH	Lowellville Road Bridge	Village of Lowellville - replace Lowellville RD BR over Hines Run	BRC	$1,062,158	2019	MAH C Engineer
99802	MAH	Western Reserve Road Roundabout	Springfield TWP - construct roundabout at 5 leg intersection where Western Reserve RD, North Lima RD, and Springfield RD intersect	CMAQ	$1,285,742	2019	MAH C Engineer
102004	MAH	E Meridian Road Upgrade (Meridian Road Phase II)	Austintown TWP - road upgrade from I-680 to Trumbull County Line	STBG	$2,475,000	2020	MAH C Engineer
80674	MAH	Western Reserve Road (Phase I)	Boardman TWP - widening from Hitchcock RD to SR-7	CMAQ	$6,868,550	2021	MAH C Engineer
95446	MAH	South Avenue (CR-0151 03.57)	Boardman TWP - intersection improvements and signalization upgrade from Matthews RD to Midlothian BLVD	CMAQ	$4,323,281	2021	MAH C Engineer
104607	MAH	Hopkins Road Bridge Replacement	Boardman TWP - replacement of Hopkins RD BR with a 40' single span prestressed box beam structure	STBG	$815,000	2021	MAH C Engineer
104657	MAH	Mahoning Avenue (CR-18)	Austintown TWP - resurface from Meander Reservoir BR to Meridian RD	STBG	$3,000,000	2021	MAH C Engineer
104591	MAH	Bridge Painting, Phase II	Mahoning County - paint of four structures with minor structural repair	STBG	$1,960,000	2022	MAH C Engineer
104658	MAH	South Avenue (CR-151)	Boardman TWP - resurface from Western Reserve RD to Presidential DR	STBG	$1,300,000	2022	MAH C Engineer
103794	MAH	E Cohasset Drive, Phase II	Mill Creek Park - rehabilitation of a 1.07 mile section of East Cohasset DR	TAP	$364,100	2018	Mill Creek MetroParks
85005	MAH	MetroParks Bikeway (PH III)	Green TWP - construction of 6.25 mile multi-use trail from Western Reserve RD to SR-14	CMAQ	$3,586,452	2019	Mill Creek MetroParks
104602	MAH	Idora Bridge	Mill Creek Park - improvements to the Idora BR	STBG	$250,000	2019	Mill Creek MetroParks
103283	MAH	Dobbins Road Sidewalk	Construct new sidewalk on SS of Dobbins RD	TAP	$164,000	2018	Poland Township
80192	MAH	I-680/164 Interchange	Beaver TWP - construct interchange at IR-680 and SR-164	HSIP	$12,770,000	2018	Poland Township
102017	MAH	IR-680 14.50 / 15.60 (mines)	Beaver TWP - remediate mine voids under IR-680	SP	$2,643,900	2019	State

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
103720	MAH	SR-46 14.67	Austintown TWP - intersection improvements at SR-46 and Mahoning AVE	HSIP	$1,400,000	2019	State
102103	MAH	SR-46 16.64	Austintown TWP - restripe and reconfigure lanes along SR 46 from Lou Ida BLVD to County Line RD	HSIP	$3,500,000	2020	State
104651	MAH	McGaffney Avenue Extension	Construct new roadway approximately 590 feet long for industrial development	ARC	$500,000	2019	Village of Lowellville
101773	MAH	12th Street (Sebring)	Resurface12th ST from 2,000 feet north of US-62 to 500 feet north of West Pine Lake RD	STBG	$650,000	2018	Village of Sebring
101759	TRU	Main Street (Cortland)	Resurface from McCleary Jacoby ST to ET, and Walnut ST to SR-11	STBG	$510,000	2019	City of Cortland
104626	TRU	Mecca Street (Cortland)	Resurface from Wakefield DR to Cortland North Corp Limit	STBG	$580,000	2021	City of Cortland
94376	TRU	IR-80 02.04 Landscaping	Landscape and sign enhancement of IR-80 at US-422	TAP	$83,000	2019	City of Girard
104643	TRU	Trumbull Avenue (Girard)	Resurface from US-422 to Girard East Corp Limit	STBG	$465,286	2019	City of Girard
104644	TRU	East Liberty Street (Girard)	Resurface from US-422 to Girard East Corp Limit	STBG	$564,810	2020	City of Girard
93385	TRU	Greenway Trailhead	Trailhead construction along the Great Ohio Lake to River Greenway	TAP	$580,625	2018	City of Warren
95844	TRU	US-422 13.00	Reconstruction of US-422 from Laird Ave to Ridge AVE	STBG	$3,850,000	2018	City of Warren
99581	TRU	Tod Avenue / Atlantic Street	Resurface Tod AVE from Market ST to Elm Hill DR; resurface Atlantic ST from Mahoning AVE to Elm RD	STBG	$1,125,000	2018	City of Warren
99595	TRU	Laird / Genesee / Woodland	Resurface Laird AVE from YNG RD to AT ST; resurface Genessee AVE from Market ST to Elm RD; resurface Woodland AVE from Elm RD to Perkinswood BLVD	STBG	$1,525,000	2019	City of Warren
104619	TRU	East Market Street (Warren)	Resurface from Main ST to the SR-82 interchange	STBG	$2,350,000	2021	City of Warren
104612	TRU	Reserve Avenue Bridges	Rehabilitation of Reserve AVE BRS	STBG	$865,000	2022	City of Warren
104622	TRU	Lovers Lane / Tod Avenue	Resurface Lovers LN from West Market ST to Parkman RD; resurface Tod AVE from Parkman RD to Crestwood DR	STBG	$524,000	2022	City of Warren

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
97934	TRU	Tibbetts Wick (CR-28)	Weathersfield TWP - construction of 550 foot westbound right turn lane on Tibbetts Wick	CMAQ	$1,410,425	2018	State
98773	TRU	Burnett East Road Bridge	Kinsman TWP - replace Burnett East RD BR over Sugar Creek	BRC	$847,000	2018	TRU C Engineer
98774	TRU	Morford Road Bridge	Kinsman TWP - replace Morford RD BR over Stratton Creek	BRC	$1,104,000	2019	TRU C Engineer
99586	TRU	North Road / North River Road	Howland TWP - intersection improvements, includes north and southbound dedicated turn lanes	CEAO	$449,667	2019	TRU C Engineer
104634	TRU	West Market Street (Warren Township)	Warren TWP - resurface from SR-5/82 interchange to Lovers LN	STBG	$1,060,399	2019	TRU C Engineer
104635	TRU	State Road (Champion)	Champion TWP - resurface from SR-45 to SR-305	STBG	$810,000	2019	TRU C Engineer
84727	TRU	Bedford Road (CR -175)	Brookfield TWP - widen from Stewart Sharon RD to US-62	STBG	$2,097,710	2020	TRU C Engineer
99577	TRU	North Road / Reeves Road	Howland TWP - intersection improvements, includes north and SB dedicated turn lanes	CEAO	$194,000	2020	TRU C Engineer
104636	TRU	Salt Springs Road (CR-64)	Weathersfield TWP - resurface from SR-46 to MC Line	STBG	$1,700,000	2020	TRU C Engineer
104656	TRU	Myron Street Bridge Replacement	City of Hubbard - replace the Myron Street BR	STBG	$1,185,000	2020	TRU C Engineer
102541	TRU	East Market Street / North Road	Howland TWP - intersection improvements at East Market ST and North RD, included exclusive WB right turn lane	CMAQ	$462,100	2021	TRU C Engineer
104613	TRU	Warner Road Bridge	Liberty TWP - replacement of Warner RD BR	BRC	$1,687,000	2021	TRU C Engineer
104641	TRU	Tibbetts Wick Road (CR-28)	Liberty TWP - resurface from SR-11 to SR-193	STBG	$576,400	2021	TRU C Engineer
104642	TRU	Niles Vienna Road (CR-56)	Howland / Vienna TWP - resurface from Niles East Corp Limit to Warren Sharon RD	STBG	$1,012,000	2022	TRU C Engineer
99804	TRU	Western Reserve Greenway (PH IV)	Trumbull County - construct Phase IV of the Western Reserve Greenway Bike Trail	CMAQ	$2,915,710	2020	Trumbull MetroParks
101707	TRU	Salt Springs / South Leavitt Road	Village of Lordstown - resurface Salt Springs RD from Elsworth Bailey RD to SR-45; resurface South Leavitt RD from Palmyra RD to Hewitt Gifford RD	STBG	$752,000	2018	Village of Lordstown

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	35' Bus Replacement	35' Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$3,908,700	2018	WRTA
-	MAH	Facility Improvements	Facility Improvements - Petroleum Product Storage Rehabilitation	FTA/ State	$300,000	2018	WRTA
-	MAH	Safety & Security	Safety & Security - Administration Surveillance System	FTA/ State	$35,000	2018	WRTA
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$150,000	2018	WRTA
-	MAH	Operations	Operations - Signage	FTA/ State	$200,000	2018	WRTA
-	MAH	35' Bus Replacement	35' Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$1,754,400	2019	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$91,800	2019	WRTA
-	MAH	Facility Improvements	Facility Improvements - HVAC	FTA/ State	$1,250,000	2019	WRTA
-	MAH	Shop Equipment	Shop Equipment	FTA/ State	$150,000	2019	WRTA
-	MAH	35' Bus Replacement	35' Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$1,328,700	2020	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$515,000	2020	WRTA
-	MAH	Facility Improvement	Facillity Improvement - Parking Lot	FTA/ State	$1,500,000	2020	WRTA
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$150,000	2020	WRTA
-	MAH	Maintenance Equipment	Maintenance Equipment - Sweeper	FTA/ State	$66,950	2020	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$416,000	2021	WRTA
-	MAH	Service/Support	Service/Support - Maintenance	FTA/ State	$93,600	2021	WRTA
-	MAH	Facility Improvement	Facillity Improvement	FTA/ State	$1,500,000	2021	WRTA
					$106,042,861		

SHORT TERM FUTURE PROJECTS: FISCAL YEARS 2022 - 2030

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	West Main Street Safety Upgrade, PH I	Widen & corridor improvements along West Main ST from Cardinal DR to Mill Creek Metroparks Bikeway	STBG	1,045,300	2022-2030	City of Canfield
-	MAH	West Main Street Safety Upgrade, PH II	Widen & corridor improvements along West Main ST from Mill Creek Metroparks Bikeway to SR-446	STBG	$2,220,040	2022-2030	City of Canfield
-	MAH	US-62 Safety Upgrade, Phase I	Safety upgrade along US-62	HSIP	$2,000,000	2022-2030	City of Canfield
-	MAH	US-62 Safety Upgrade, Phase II	Safety upgrade along US-62	HSIP	$2,200,000	2022-2030	City of Canfield
-	MAH	US-224 Access Management Plan	Installation of new pedestrian lighting along North Broad ST from Dartmouth AVE to North Corp Limit	TAP	$400,000	2022-2030	City of Canfield
-	MAH	Wetmore Drive Bridge	Study on improving the operation of US-224 from Palmyra RD to SR-11	STBG	$100,000	2022-2030	City of Canfield
-	MAH	Street Sign Upgrade	Minor bridge repairs to the Wetmore Drive BR over Yellow Creek	STBG	$220,000	2022-2030	City of Struthers
-	MAH	Signal Upgrade	Replacement of existing street signs throughout the City of Struthers	HSIP	$1,500,000	2022-2030	City of Struthers
-	MAH	State Street Public Parking	Construction of a public parking lot along State ST	STBG	$350,000	2022-2030	City of Struthers
-	TRU	High Street / Main Street	Resurface of High ST from South Mecca ST to Phillips Rice RD; Main ST from Mecca ST to High ST	STBG	$700,000	2022-2030	City of Cortland
-	TRU	Main Street	Resurface of W Main ST from McCleary Jacoby RD to N Mecca ST; E Main ST from N High ST to E Corp Limit	STBG	$600,000	2022-2030	City of Cortland
-	TRU	US-422 (Parkman / Market / South)	Resurface of Parkman RD from Summit ST to W Market ST; W Market ST from Parkman RD to S ST; S ST from Market ST to Chestnut AVE	STBG	$1,406,886	2022-2030	City of Warren
-	TRU	Citywide Traffic Signals	Improve traffic signals in the City of Warren	CMAQ	$1,238,060	2022-2030	City of Warren
-	TRU	Central Business District Streets	Resurface of five street segments in the central business district	STBG	$1,738,950	2022-2030	City of Warren

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	SR-45 (Tod / Summit / Mahoning)	Resurface of Tod AVE from S Corp Limit to Summit ST; Summit ST from Tod AVE to Mahoning AVE; Mahoning AVE from Summit ST to N Corp Limit	STBG	$1,492,565	2022-2030	City of Warren
-	TRU	Park / Atlantic / Larchmont / Perkinswood	Resurface of four street segments in the City of Warren	STBG	$2,152,325	2022-2030	City of Warren
-	TRU	US-422 (Parkman) / SR 169 (Niles)	Resurface of Parkman RD from West Corp Limit to Summit ST; Niles RD from South ST to South Corp Limit	STBG	$1,900,200	2022-2030	City of Warren
-	TRU	Palmyra / Highland / Main / Pine	Resurface of four street segments in the City of Warren	STBG	$3,131,520	2022-2030	City of Warren
-	TRU	US-422 (YNG Road - Ridge to N)	Resurface of US-422 from Ridge AVE to North RD	STBG	$1,142,315	2022-2030	City of Warren
-	TRU	West Market	Resurface of West Market ST from West Corp Limit to Main ST	STBG	$1,730,250	2022-2030	City of Warren
-	TRU	US-422 (YNG Road - Laird to Ridge)	Resurface of US-422 from Laird AVE to Ridge AVE	STBG	$2,495,150	2022-2030	City of Warren
-	TRU	Layer Road Bridge Replacement	Replacement of WAR #01 BR	STBG	$765,000	2022-2030	TRU C Engineer
-	TRU	Thompson Clark Bridge Replacement	Replacement of BRI #08 BR	STBG	$855,000	2022-2030	TRU C Engineer
-	TRU	Housel Craft Road Bridge	Replacement of FAR #16 BR	STBG	$1,030,000	2022-2030	TRU C Engineer
-	TRU	Carson Salt Springs Road Bridge Replacement	Replacement of LOR #12 BR	STBG	$1,060,000	2022-2030	TRU C Engineer
-	TRU	Carson Salt Springs Road Bridge Replacement	Replacement of LOR #12 BR	STBG	$1,060,000	2022-2030	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Kibler Toot Road Bridge Replacement	Replacement of WAR #12 BR	STBG	$1,060,000	2022-2030	TRU C Engineer
-	TRU	Hyde Shaffer Road Bridge Replacement	Replacement of BRI #13 BR	STBG	$1,060,000	2022-2030	TRU C Engineer
-	TRU	West Market Street Bridge Replacement	Replacement of WAR #23 BR	STBG	$1,925,000	2022-2030	TRU C Engineer
-	TRU	Selkirk Bush Road Bridge Replacement	Replacement of NEW #15 BR	STBG	$880,000	2022-2030	TRU C Engineer
-	TRU	Bradley Brownlee Road Bridge Replacement	Replacement of HAR #23 BR	STBG	$820,000	2022-2030	TRU C Engineer
-	TRU	West Market Street Bridge Rehabilitation	Rehabilitation of WCY# 03 BR	STBG	$1,000,000	2022-2030	TRU C Engineer
-	TRU	Tibbetts Wick Road	Resurface Tibbetts Wick RD in Liberty and Weathersfield TWP	STBG	$445,683	2022-2030	TRU C Engineer
-	TRU	Tibbetts Wick Road	Resurface Tibbetts Wick RD in Liberty and Weathersfield TWP	STBG	$445,683	2022-2030	TRU C Engineer
-	TRU	Tibbetts Wick Road	Resurface of Tibbetts Wick RD in Liberty TWP	STBG	$430,899	2022-2030	TRU C Engineer
-	TRU	Trumbull Avenue	Resurface of Trumbull AVE in Liberty TWP	STBG	$182,504	2022-2030	TRU C Engineer
-	TRU	Trumbull Avenue	Resurface of Trumbull AVE in Liberty TWP	STBG	$182,504	2022-2030	TRU C Engineer
-	TRU	Logan Way	Resurface of Logan Way in Liberty TWP	STBG	$769,302	2022-2030	TRU C Engineer
-	TRU	Logan Way	Resurface of Logan Way in Liberty TWP	STBG	$511,120	2022-2030	TRU C Engineer
-	TRU	Heaton North Road	Resurface of Heaton North RD in Howland TWP	STBG	$376,708	2022-2030	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Heaton North Road	Resurface of Heaton North RD in Howland TWP	STBG	$779,364	2022-2030	TRU C Engineer
-	TRU	Ohltown McDonald Road	Resurface of Ohltown McDonald RD in Weathersfield TWP	STBG	$798,802	2022-2030	TRU C Engineer
-	TRU	Watson Marshall Road	Resurface of Watson Marshall RD in Weathersfield TWP	STBG	$148,231	2022-2030	TRU C Engineer
-	TRU	Salt Springs Road	Resurface of Salt Springs RD in Weathersfield TWP	STBG	$1,470,602	2022-2030	TRU C Engineer
-	TRU	Austintown Warren Road	Resurface of Austintown Warren RD in Warren & Weathersfield TWP	STBG	$1,398,893	2022-2030	TRU C Engineer
-	TRU	Austintown Warren Road	Resurface of Austintown Warren RD in Weathersfield TWP	STBG	$1,177,240	2022-2030	TRU C Engineer
-	TRU	West Park Avenue	Resurface of West Park AVE in Weathersfield TWP	STBG	$564,178	2022-2030	TRU C Engineer
-	TRU	Niles Warren River Road	Resurface of Niles Warren River RD in Howland TWP	STBG	$450,655	2022-2030	TRU C Engineer
-	TRU	Niles Warren River Road	Resurface of Niles Warren River RD in Weathersfield TWP	STBG	$530,039	2022-2030	TRU C Engineer
-	TRU	Carson Salt Springs Road	Resurface of Carson Salt Springs RD in Weathersfield & Newton TWP	STBG	$874,305	2022-2030	TRU C Engineer
-	TRU	Palmyra Road	Resurface of Palmyra RD in Warren TWP	STBG	$450,635	2022-2030	TRU C Engineer
-	TRU	Leavitt Road	Resurface of Leavitt RD in Warren TWP	STBG	$833,967	2022-2030	TRU C Engineer
-	TRU	Leavitt Road	Resurface of Leavitt RD in Warren TWP	STBG	$248,935	2022-2030	TRU C Engineer
-	TRU	Leavitt Road	Resurface of Leavitt RD in Champion TWP	STBG	$611,191	2022-2030	TRU C Engineer
-	TRU	North River Road	Resurface of North River RD in Howland & Warren TWP	STBG	$892,427	2022-2030	TRU C Engineer
-	TRU	North River Road	Resurface of North River RD in Howland TWP	STBG	$796,109	2022-2030	TRU C Engineer
-	TRU	Park Avenue	Resurface of Park AVE in Champion & Warren TWP	STBG	$855,733	2022-2030	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	King Graves Road	Resurface of King Graves RD in Howland & Vienna TWP	STBG	$805,186	2022-2030	TRU C Engineer
-	TRU	King Graves Road	Resurface of King Graves RD in Vienna & Fowler TWP	STBG	$917,530	2022-2030	TRU C Engineer
-	TRU	Bedford Road	Resurface of Bedford RD in Brookfield TWP	STBG	$598,227	2022-2030	TRU C Engineer
-	TRU	Bedford Road	Resurface of Bedford RD in Brookfield TWP	STBG	$385,000	2022-2030	TRU C Engineer
-	TRU	Hoagland Blackstub Road	Resurface of Hoagland Blackstub RD in Bazetta TWP	STBG	$1,255,741	2022-2030	TRU C Engineer
-	TRU	Hoagland Blackstub Road	Resurface of Hoagland Blackstub RD in Bazetta TWP	STBG	$1,017,931	2022-2030	TRU C Engineer
-	TRU	Hoagland Blackstub Road	Resurface of Hoagland Blackstub RD in Mecca TWP	STBG	$1,035,599	2022-2030	TRU C Engineer
-	TRU	Painesville Warren State Road	Resurface of Painesville Warren State RD in Farmington and Southington TWP	STBG	$1,403,756	2022-2030	TRU C Engineer
-	TRU	Painesville Warren State Road	Resurface of Painesville Warren State RD in Southington TWP	STBG	$928,612	2022-2030	TRU C Engineer
-	TRU	Park Avenue	Resurface of Park AVE in Bazetta TWP	STBG	$406,513	2022-2030	TRU C Engineer
-	TRU	Elm Road	Resurface of Elm RD in Bazetta & Howland TWP	STBG	$962,466	2022-2030	TRU C Engineer
-	TRU	Warren Sharon Road	Resurface of Warren Sharon RD in Brookfield TWP	STBG	$1,964,960	2022-2030	TRU C Engineer
-	TRU	Warren Sharon Road	Resurface of Warren Sharon RD in Warren & Howland TWP	STBG	$1,616,141	2022-2030	TRU C Engineer
-	TRU	Warren Sharon Road	Resurface of Warren Sharon RD in Vienna TWP	STBG	$1,752,081	2022-2030	TRU C Engineer
-	TRU	Jones Road	Resurface of Jones RD in Liberty TWP	STBG	$291,792	2022-2030	TRU C Engineer
-	TRU	Ravenna-Warren Road	Resurface of Ravenna-Warren RD in Braceville & Newton TWP	STBG	$1,330,915	2022-2030	TRU C Engineer
-	TRU	Logangate Road	Resurface of Logangate RD in Liberty TWP	STBG	$535,012	2022-2030	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Ohltown Girard Road	Resurface of Ohltown Girard RD in Weathersfield TWP	STBG	$736,444	2022-2030	TRU C Engineer
-	TRU	Larchmont Avenue	Resurface of Larchmont AVE in Bazetta & Howland TWP	STBG	$907,231	2022-2030	TRU C Engineer
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$630,000	2022	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$141,750	2022	WRTA
-	MAH	Staff	Staff	FTA/ State	$168,000	2022	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$742,000	2023	WRTA
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$25,000	2023	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$96,300	2024	WRTA
-	MAH	Safety & Security	Safety & Security - Surveillance	FTA/ State	$58,500	2024	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$3,749,600	2026	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$545,000	2026	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$2,365,000	2027	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$440,000	2027	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$148,500	2027	WRTA
-	MAH	Service & Support	Service & Support - Maintenance	FTA/ State	$104,500	2027	WRTA
-	MAH	Maintenance Equipment	Maintenance Equipment - Lift Truck	FTA/ State	$33,000	2027	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$5,250,300	2028	WRTA

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$666,000	2028	WRTA
-	MAH	Safety & Security	Safety & Security - Surveillance	FTA/ State	$38,500	2028	WRTA
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$200,000	2028	WRTA
-	MAH	Shop Equipment	Shop Equipment	FTA/ State	$165,000	2029	WRTA
-	MAH	Facility Improvement	Facility Improvement	FTA/ State	$1,920,000	2029	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$4,334,400	2029	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$784,000	2029	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$100,800	2029	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$4,373,100	2030	WRTA
-	MAH	Facility Improvements	Facility Improvements	FTA/ State	$1,920,000	2030	WRTA
					$105,354,657		

LONG TERM FUTURE PROJECTS: FISCAL YEARS 2031 - 2040

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	M / T	Safety Initiative	Identify top safety priorities at various locations throughout Mahoning & Trumbull Counties	STBG	$8,000,000	2031-2040	Eastgate
-	MAH	SR-289	Resurface of Wilson AVE from North Corp Limit to South Corp Limit	STBG	$1,655,000	2031-2040	City of Campbell
-	MAH	West Main Street Safety Upgrade, PH III	Widening and corridor improvements along West Main ST from SR-446 to South Palmyra RD	STBG	$2,520,360	2031-2040	City of Canfield
-	MAH	US-62 Safety Upgrade, Phase III	Safety upgrade along US-62	HSIP	$2,400,000	2031-2040	City of Canfield
-	MAH	Belle Vista Avenue	Resurface from Mahoning AVE to Salt Springs RD	STBG	$530,000	2031-2040	City of Youngstown
-	MAH	City Signal Upgrade PH I	Comprehensive analysis and replacement of warranted signals at intersections on the south side of the city	CMAQ	$2,750,000	2031-2040	City of Youngstown
-	MAH	City Signal Upgrade PH II	Comprehensive analysis and replacement of warranted signals at intersections on the north side of the city	CMAQ	$2,750,000	2031-2040	City of Youngstown
-	MAH	City Signal Upgrade PH III	Comprehensive analysis and replacement of warranted signals at intersections on the west side of the city	CMAQ	$2,750,000	2031-2040	City of Youngstown
-	MAH	City Signal Upgrade Phase IV	Comprehensive analysis and replacement of warranted signals at intersections on the east side of the city	CMAQ	$2,750,000	2031-2040	City of Youngstown
-	MAH	Glenwood Avenue	Resurface from Warren AVE to Canfield RD	STBG	$533,000	2031-2040	City of Youngstown
-	MAH	Logan Avenue	Road upgrades from Andrews AVE to Belle AVE	STBG	$3,600,000	2031-2040	City of Youngstown
-	MAH	McGuffey Road	Resurface from Garland AVE to Early RD	STBG	$3,080,000	2031-2040	City of Youngstown
-	MAH	Salt Springs Road	Resurface from Meridian RD to SR-711	STBG	$840,000	2031-2040	City of Youngstown
-	MAH	South Avenue Bridge	Replacement of an existing structure	STBG	$2,750,000	2031-2040	City of Youngstown
-	MAH	Southern Boulevard	Resurface from Market ST to Midlothian BLVD	STBG	$400,000	2031-2040	City of Youngstown

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	SR-289	Resurface from US-422 to Fifth AVE	STBG	$1,500,000	2031-2040	City of Youngstown
-	MAH	IR-680 / Poland Avenue Interchange	Construction of new interchange between IR-680 and Poland AVE	STBG	$8,800,000	2031-2040	City of Youngstown
-	MAH	Kirk Road	Road upgrade from SR-46 to Raccoon RD	STBG	$5,000,000	2031-2040	MAH C Engineer
-	MAH	Mahoning Avenue Signal Upgrade	Upgraded signals from Wickliff Circle to Giant Eagle DR	CMAQ	$900,000	2031-2040	MAH C Engineer
-	MAH	Mathews Road	Road upgrade from CH-151 to Lemoyne	STBG	$3,000,000	2031-2040	MAH C Engineer
-	MAH	Raccoon Road	Widening of Raccoon RD from Falcon DR to Burkey RD	CMAQ	$1,800,000	2031-2040	MAH C Engineer
-	MAH	Western Reserve Road	Widen existing pavement from IR-680 to SR-170	STBG	$8,800,000	2031-2040	MAH C Engineer
-	MAH	Western Reserve Road Phase V	Widening from Market ST to IR-680	STBG	$18,000,000	2031-2040	MAH C Engineer
-	MAH	Shields Road	Widening from West BLVD to Market ST	STBG	$1,600,000	2031-2040	MAH C Engineer
-	MAH	Shields Road	Widening from West BLVD to Tippecanoe RD	STBG	$3,000,000	2031-2040	MAH C Engineer
-	MAH	Shields Road	Widening from Tippecanoe RD to Raccoon RD	STBG	$1,200,000	2031-2040	MAH C Engineer
-	MAH	Meridian Road Signal Upgrade	Upgrade signals from Burkey RD to Hendricks RD	CMAQ	$680,000	2031-2040	MAH C Engineer
-	MAH	North Lima Road	Replace BR between Spitler Road and Walker Mill RD	BR	$600,000	2031-2040	MAH C Engineer
-	MAH	Edgewood Street	Replace bridge west of Center ST	BR	$244,000	2031-2040	MAH C Engineer
-	MAH	Dividing Sycamore Bridge	Improve drainage, repair stone wingwalls, asphalt pavement improvement where needed	STBG	$80,000	2031-2040	Mill Creek MetroParks
-	MAH	Old Orchard Bridge	Rehabilitation of highway BR over tributary of Mill Creek	STBG	$165,000	2031-2040	Mill Creek MetroParks

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	Suspension Bridge	Rehabilitation of BR along Valley DR	STBG	$40,000	2031-2040	Mill Creek MetroParks
-	MAH	Ohio Turnpike & SR-11 Connector	Construct system-to-system interchange to improve freight / transportation movement	STBG	$20,000,000	2031-2040	State
-	MAH	McGaffney ST/ E Jackson Street Improvements	Roadway improvements to McGaffney ST and E Jackson ST	STBG	$543,200	2031-2040	Village of Lowellville
-	MAH	Stavich Bike Trail	Improve existing bike trail connecting the City of Struthers to New Castle	CMAQ	$567,861	2031-2040	Village of Lowellville
-	MAH	SR-170	Upgrades from US-224 to South Corp Limit	STBG	$326,000	2031-2040	Village of Poland
-	MAH	SR-170	Upgrades from US-224 to North Corp Limit	STBG	$304,000	2031-2040	Village of Poland
-	MAH	US-224	Safety upgrade from IR-680 to East Corp Limit	STBG	$960,000	2031-2040	Village of Poland
-	MAH	SR-616	Safety upgrade from US-224 to North Corp Limit	STBG	$210,000	2031-2040	Village of Poland
-	TRU	SR-11 & Niles Vienna RD Interchange	Construct new interchange along SR-11 near Niles Vienna RD	STBG	$21,000,000	2031-2040	-
-	TRU	SR-82 Southern Beltway	Construct southern portion of the SR-82 Beltway	STBG	$20,000,000	2031-2040	-
-	TRU	Mecca Street	Resurface of Mecca ST from Wakefield DR to North Corp Limit	STBG	$750,000	2031-2040	City of Cortland
-	TRU	High Street / Main Street	Resurface of High ST from South Mecca ST to Phillips Rice RD; Main ST from Mecca ST to High ST	STBG	$860,000	2031-2040	City of Cortland
-	TRU	SR-46 / High Street	Intersection improvements at SR-46 and High ST; widening of SR-46	STBG	$375,000	2031-2040	City of Cortland
-	TRU	SR-46	Resurface from Wakefield DR to City Limit	STBG	$600,000	2031-2040	City of Cortland
-	TRU	Girard Bike Trail PH I and II	Construct 10’ bike spur along abandoned B&O railline	CMAQ	$458,000	2031-2040	City of Girard
-	TRU	Highland Avenue	Resurface from Morris AVE to Churchill RD	STBG	$240,000	2031-2040	City of Girard
-	TRU	Mosier Road	Resurface from US-422 to East Corp Limit	STBG	$1,108,000	2031-2040	City of Girard

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Heaton North Road	Resurface of Heaton North RD from SR-169 to SR-422	STBG	$675,931	2031-2040	City of Niles
-	TRU	Niles Vienna Road / Warren Avenue	Resurface of Niles Vienna RD from SR-46 to SR-422; Warren AVE from Chestnut AVE to City Limits	STBG	$600,000	2031-2040	City of Niles
-	TRU	West Park / East State Street	Resurface of West Park from Main ST to City Limits; East State ST from Robbins AVE to Main ST	STBG	$776,724	2031-2040	City of Niles
-	TRU	Heaton North Road	Widening from SR-169 to Deforest Townline RD	STBG	$1,200,000	2031-2040	City of Niles
-	TRU	Heaton North Road	Widening from Deforest Townline RD to US-422	STBG	$1,300,000	2031-2040	City of Niles
-	TRU	SR-46 / Niles Vienna Road Intersection	Intersection improvements	CMAQ	$4,445,000	2031-2040	City of Niles
-	TRU	SR-46 / US-422 Intersection	Intersection improvements	CMAQ	$4,258,000	2031-2040	City of Niles
-	TRU	North Main Street	Resurface from SR-46 to North Corp Limit	STBG	$546,000	2031-2040	City of Niles
-	TRU	US-422	Resurface of US-422 from North RD to Niles Vienna RD	STBG	$2,250,000	2031-2040	City of Niles
-	TRU	Elm	Resurface of Elm RD from South Street to North River RD	STBG	$2,937,000	2031-2040	City of Warren
-	TRU	Lovers Lane / Tod / McMyler / Summit / Atlantic	Resurface of five street segments in the City of Warren	STBG	$3,781,474	2031-2040	City of Warren
-	TRU	Laird / Genesee / Woodland	Resurface of Laird AVE from Youngstown RD to Atlantic ST; Genessee AVE from Market ST to Elm RD; Woodland ST from Elm RD to Perkinswood BLVD	STBG	$2,375,900	2031-2040	City of Warren
-	TRU	East Market	Resurface of East Market ST from Mahoning AVE to Warren Sharon RD	STBG	$3,530,354	2031-2040	City of Warren
-	TRU	US-422 (Parkman / Market / South)	Resurface of Parkman RD from Summit ST to West Market ST; West Market ST from Parkman RD to South ST; South ST from Market ST to Chestnut AVE	STBG	$2,066,000	2031-2040	City of Warren

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Central Business District Streets	Resurface of five street segments in the central business district	STBG	$2,553,600	2031-2040	City of Warren
-	TRU	SR-45 (Tod / Summit / Mahoning)	Resurface of Tod AVE from South Corp Limit to Summit ST; Summit ST from Tod AVE to Mahoning AVE; Mahoning AVE from Summit ST to North Corp Limit	STBG	$2,630,250	2031-2040	City of Warren
-	TRU	Park / Atlantic / Larchmont / Perkinswood	Resurface of four street segments in the City of Warren	STBG	$3,160,675	2031-2040	City of Warren
-	TRU	US-422 (Parkman) / SR -169 (Niles)	Resurface of Parkman RD from West Corp Limit to Summit ST; Niles RD from South ST to South Corp Limit	STBG	$2,790,450	2031-2040	City of Warren
-	TRU	Palmyra / Highland / Main / Pine	Resurface of four street segments in the City of Warren	STBG	$4,598,640	2031-2040	City of Warren
-	TRU	High Street	Resurface from Mahoning AVE to Chestnut AVE	STBG	$350,000	2031-2040	City of Warren
-	TRU	Larchmont Avenue	Resurface from Elm RD to North Corp Limit	STBG	$3,500,000	2031-2040	City of Warren
-	TRU	Park Avenue	Resurface from Fulton ST to North Corp Limit	STBG	$750,000	2031-2040	City of Warren
-	TRU	Summit South	Resurface from Tod to Mahoning; Highland to Chestnut	STBG	$551,000	2031-2040	City of Warren
-	TRU	Mahoning Avenue	Resurface from South ST to North Corp Limit	STBG	$475,000	2031-2040	City of Warren
-	TRU	Tod Avenue	Resurface from Market ST to South Corp Limit	STBG	$350,000	2031-2040	City of Warren
-	TRU	SR-169	Resurface from US-422 to South Corp Limit	STBG	$1,200,000	2031-2040	City of Warren
-	TRU	US-422	Resurface of US-422 from North RD to Niles Vienna RD	STBG	$2,250,000	2031-2040	City of Warren
-	TRU	Niles Cortland Road Sidewalk, Phase I	Construction of new sidewalk along Niles Cortland RD from SR-82 to Squires LN	TAP	$934,560	2031-2040	Howland Township
-	TRU	Niles Cortland Road Sidewalk, Phase II	Construction of new sidewalk along Niles Cortland RD from Squires LN to North River RD	TAP	$827,200	2031-2040	Howland Township

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	IR-80 and SR-304 Interchange	Construct new interchange along IR-80 at SR-304	STBG	$22,000,000	2031-2040	Hubbard Township
-	TRU	SR-82 and Howland Wilson Intersection	Study of the Howland Wilson RD intersection with SR--82	HSIP	$2,000,000	2031-2040	State
-	TRU	SR-46 Widening	Widening of SR-46 from County Line RD to Prospect ST	HSIP	$10,000,000	2031-2040	State
-	TRU	IR-80 and US-62 Interchange	Update / reconfigure interchange to improve flow and safety	HSIP	$3,000,000	2031-2040	State
-	TRU	Golden Triangle Intersection Improvement	Improvement to the intersection of Larchmont AVE, Bronze RD, and Overland RD	CMAQ	$1,344,722	2031-2040	TRU C Engineer
-	TRU	West Park Avenue Bridge Replacement	Replacement of WEA# 13 BR	STBG	$880,000	2031-2040	TRU C Engineer
-	TRU	McCleary Jacoby Road	Replacement of BAZ #11 BR	STBG	$1,025,000	2031-2040	TRU C Engineer
-	TRU	Oakfield North Road Bridge Replacement	Replacement of BRI #06 BR	STBG	$825,000	2031-2040	TRU C Engineer
-	TRU	Hallock Young Road Bridge Replacement	Replacement of NEW #13 BR	STBG	$880,000	2031-2040	TRU C Engineer
-	TRU	Painesville-Warren State Road Bridge Replacement	Replacement of SOU #26 BR	STBG	$1,030,000	2031-2040	TRU C Engineer
-	TRU	Jacobs Road	Resurface of Jacobs RD in Hubbard Township	STBG	$570,404	2031-2040	TRU C Engineer
-	TRU	Tibbetts Wick Road	Resurface of Tibbetts Wick RD in Liberty Township	STBG	$554,627	2031-2040	TRU C Engineer
-	TRU	Logan Way	Resurface of Logan Way in Liberty Township	STBG	$880,259	2031-2040	TRU C Engineer
-	TRU	Logan Way	Resurface of Logan Way in Liberty Township	STBG	$585,555	2031-2040	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Heaton North Road	Resurface of Heaton North RD in Howland TWP	STBG	$413,282	2031-2040	TRU C Engineer
-	TRU	Heaton North Road	Resurface of Heaton North RD in Howland TWP	STBG	$860,242	2031-2040	TRU C Engineer
-	TRU	Niles Vienna Road	Resurface of Niles Vienna RD in Howland, Vienna, & Weathersfield TWP	STBG	$1,397,448	2031-2040	TRU C Engineer
-	TRU	Ohltown McDonald Road	Resurface of Ohltown McDonald RD in Weathersfield TWP	STBG	$879,415	2031-2040	TRU C Engineer
-	TRU	Watson Marshall Road	Resurface of Watson Marshall RD in Weathersfield TWP	STBG	$163,190	2031-2040	TRU C Engineer
-	TRU	Austintown Warren Road	Resurface of Austintown Warren RD in Warren & Weathersfield TWP	STBG	$1,542,705	2031-2040	TRU C Engineer
-	TRU	West Park Avenue	Resurface of West Park AVE in Weathersfield TWP	STBG	$618,952	2031-2040	TRU C Engineer
-	TRU	Niles Warren River Road	Resurface of Niles Warren River RD in Howland TWP	STBG	$497,421	2031-2040	TRU C Engineer
-	TRU	Niles Warren River Road	Resurface of Niles Warren River RD in Weathersfield TWP	STBG	$583,529	2031-2040	TRU C Engineer
-	TRU	Carson Salt Springs Road	Resurface of Carson Salt Springs RD in Weathersfield and Newton TWP	STBG	$958,372	2031-2040	TRU C Engineer
-	TRU	Palmyra Road	Resurface of Palmyra RD in Hubbard TWP	STBG	$503,136	2031-2040	TRU C Engineer
-	TRU	Leavitt Road	Resurface of Leavitt RD in Warren TWP	STBG	$936,246	2031-2040	TRU C Engineer
-	TRU	Leavitt Road	Resurface of Leavitt RD in Warren TWP	STBG	$319,166	2031-2040	TRU C Engineer
-	TRU	Leavitt Road	Resurface of Leavitt RD in Champion TWP	STBG	$686,862	2031-2040	TRU C Engineer
-	TRU	North River Road	Resurface of North River RD in Howland & Warren TWP	STBG	$996,399	2031-2040	TRU C Engineer
-	TRU	North River Road	Resurface of North River RD in Howland TWP	STBG	$886,235	2031-2040	TRU C Engineer
-	TRU	Park Avenue	Resurface of Park AVE in Champion & Warren Township	STBG	$938,015	2031-2040	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	King Graves Road	Resurface of King Graves RD in Howland & Vienna TWP	STBG	$904,875	2031-2040	TRU C Engineer
-	TRU	King Graves Road	Resurface of King Graves RD in Vienna & Fowler TWP	STBG	$1,029,006	2031-2040	TRU C Engineer
-	TRU	Bedford Road	Resurface of Bedford RD in Brookfield TWP	STBG	$655,749	2031-2040	TRU C Engineer
-	TRU	Hoagland Blackstub Road	Resurface of Hoagland Blackstub RD in Bazetta TWP	STBG	$1,400,635	2031-2040	TRU C Engineer
-	TRU	Hoagland Blackstub Road	Resurface of Hoagland Blackstub RD in Bazetta TWP	STBG	$1,134,266	2031-2040	TRU C Engineer
-	TRU	Hoagland Blackstub Road	Resurface of Hoagland Blackstub RD in Mecca TWP	STBG	$1,153,953	2031-2040	TRU C Engineer
-	TRU	Painesville Warren State Road	Resurface of Painesville Warren State RD in Champion TWP	STBG	$1,146,999	2031-2040	TRU C Engineer
-	TRU	Painesville Warren State RD	Resurface of Painesville Warren State RD in Southington TWP	STBG	$1,051,259	2031-2040	TRU C Engineer
-	TRU	West Market Street	Resurface of West Market ST in Warren TWP	STBG	$762,379	2031-2040	TRU C Engineer
-	TRU	Elm Road	Resurface of Elm RD in Bazetta and Howland TWP	STBG	$1,053,264	2031-2040	TRU C Engineer
-	TRU	Warren Sharon Road	Resurface of Warren Sharon RD in Brookfield TWP	STBG	$2,146,901	2031-2040	TRU C Engineer
-	TRU	Warren Sharon Road	Resurface of Warren Sharon RD in Warren & Howland TWP	STBG	$1,780,748	2031-2040	TRU C Engineer
-	TRU	Warren Sharon Road	Resurface of Warren Sharon RD in Vienna TWP	STBG	$1,952,319	2031-2040	TRU C Engineer
-	TRU	Logangate Road	Resurface of Logangate RD in Liberty TWP	STBG	$612,177	2031-2040	TRU C Engineer
-	TRU	Ohltown Girard Road	Resurface of Ohltown Girard RD in Weathersfield TWP	STBG	$821,419	2031-2040	TRU C Engineer
-	TRU	Larchmont Avenue	Resurface of Larchmont AVE in Bazetta & Howland TWP	STBG	$993,634	2031-2040	TRU C Engineer
-	TRU	Hallock Young Road	Resurface of Hallock Young RD from Ellsworth-Bailey RD to Tod AVE	STBG	$1,415,557	2031-2040	TRU C Engineer

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	TRU	Salt Springs Road	Resurface of Salt Springs RD from Highland AVE to Village Limits	STBG	$375,862	2031-2040	Village of Lordstown
-	TRU	Ellsworth Bailey Road	Resurface of Ellsworth Bailey RD from Lyntz Townline RD to Palmyra RD	STBG	$438,505	2031-2040	Village of Lordstown
-	TRU	Austintown Warren Road	Resurface from Yerk Young to Village Limits	STBG	$334,000	2031-2040	Village of Lordstown
-	TRU	Downtown Street Scape	Enhance the downtown area of Lordstown	TAP	$866,000	2031-2040	Village of Lordstown
-	TRU	Hallock Young Road	Resurface from SR-45 to Warren Austintown RD	STBG	$768,000	2031-2040	Village of Lordstown
-	TRU	Lordstown Bike Trail	Construct 10’ wide asphalt bike bath along right-of-way owned by Lordstown	CMAQ	$3,500,000	2031-2040	Village of Lordstown
-	TRU	Lordstown Sidewalk	Install 2.25 miles of sidewalk throughout the village	TAP	$533,000	2031-2040	Village of Lordstown
-	TRU	Traffic Signal Upgrade	Replacement of old signals along Hallock Young / Ellsworth Bailey	CMAQ	$1,275,000	2031-2040	Village of Lordstown
-	TRU	SR-534 Relocation	Relocate SR-534 from Ridge RD to 1st Street	CMAQ	$410,000	2031-2040	Village of Newton Falls
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$1,960,800	2031	WRTA
-	MAH	Service & Support	Service & Support - Maintenance	FTA/ State	$102,600	2031	WRTA
-	MAH	Facility Improvements	Facility Improvements	FTA/ State	$1,920,000	2031	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$1,483,500	2032	WRTA
-	MAH	29’ Bus Replacement	29’ Medium Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$1,035,000	2032	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$575,000	2032	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$155,250	2032	WRTA
-	MAH	Staff	Staff	FTA/ State	$184,000	2032	WRTA

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$150,000	2032	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$464,000	2033	WRTA
-	MAH	Operations	Operations - Signage	FTA/ State	$230,000	2033	WRTA
-	MAH	Facility Improvements	Facility Improvements	FTA/ State	$345,000	2033	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$702,000	2034	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$105,300	2034	WRTA
-	MAH	Safety & Security	Safety & Security - Surveillance	FTA/ State	$64,350	2034	WRTA
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$200,000	2034	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$826,000	2035	WRTA
-	MAH	Facility Improvments	Facility Improvements	FTA/ State	$2,250,000	2035	WRTA
-	MAH	Maintenance Equipment	Maintenance Equipment - Sweeper	FTA/ State	$76,992	2035	WRTA
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$145,000	2036	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$162,000	2037	WRTA
-	MAH	Service & Support	Service & Support - Maintenance	FTA/ State	$114,000	2037	WRTA
-	MAH	Safety & Security	Safety & Security	FTA/ State	$104,400	2037	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$605,000	2038	WRTA
-	MAH	Safety & Security	Safety & Security - Surveillance	FTA/ State	$42,350	2038	WRTA

CONTINUED

PID	COUNTY	PROJECT NAME	PROJECT DESCRIPTION	FUNDING SOURCE	TOTAL COST	CONST. YEAR	SPONSOR
-	MAH	Planning	Planning - Architectural & Engineering Services	FTA/ State	$200,000	2038	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$4,196,800	2039	WRTA
-	MAH	29’ Bus Replacement	29’ Medium Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$1,098,000	2039	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$488,000	2039	WRTA
-	MAH	Modified Vans	Modified Vans Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$109,800	2039	WRTA
-	MAH	Shop Equipment	Shop Equipment	FTA/ State	$181,500	2039	WRTA
-	MAH	Facility Improvements	Facility Improvements - HVAC	FTA/ State	$1,500,000	2039	WRTA
-	MAH	35’ Bus Replacement	35’ Heavy Duty Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$2,644,500	2040	WRTA
-	MAH	Light Transit Vehicle	LTV Rolling Stock Replacement - Vehicle Capital Improvements	FTA/ State	$738,000	2040	WRTA
					$331,114,010		

IMPLEMENTATION & MONITORING STRATEGY

Performance Measures

MAP-21 and the FAST Act place significant emphasis on incorporating performance management into the planning and programming process. MAP-21 established national performance goals in seven key areas that have been continued under the FAST Act. The performance areas under MAP-21 are:

- **Safety:** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition:** To maintain the highway infrastructure asset system in a state of good repair.
- **Congestion Reduction:** To achieve a significant reduction in congestion on the National Highway System.
- **System Reliability:** To improve the efficiency of the surface transportation system.
- **Freight Movement and Economic Vitality:** To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental Sustainability:** To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced Project Delivery Delays:** To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The FAST Act makes no changes to the performance management provisions established by MAP-21 except it has simplified the freight performance target, adjusted the timeframe for states and MPOs to make progress toward meeting their performance targets under the NHP, and modified the timeframe for reviewing penalties for the state's interstate pavement. The implementation of these performance targets will occur through FHWA-established targets; establishment of targets for state DOTS and MPOs; funding for recipients to develop strategic and/or tactical plans; reports on progress and effectiveness; and accountability and transparency as outlined by the Transportation Performance Management (TPM) page of the FHWA.

States are required to establish targets in addition to incorporating the national performance targets into the long-range transportation plan. Each MPO is to establish performance targets that address national performance measures where applicable for tracking progress towards attainment of critical outcomes for the region over a four-year period. MPOs must agree to plan and program projects so that they contribute toward the accomplishment of the state DOT's target or commit to a quantifiable target for the MPO. Eastgate intends to adopt ODOT's performance targets through resolution as appropriate. Eastgate must describe the performance measures and targets in the MTP; evaluate the condition and performance of the transportation system for targets; and describe anticipated effects of the TIP toward achieving the performance targets.

INVESTMENT DECISIONS

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.

AIMED AT A BETTER PERFORMING TRANSPORTATION SYSTEM

Setting targets, developing plans, reporting results, and being accountable for performance.

FOR CONNECTED & PRODUCTIVE COMMUNITIES

Focusing on the efficient delivery of goods and safe, reliable journeys to work, to school, to shopping, to community activities.

SOURCE: FHWA

At the time of adopting this MTP Update, FHWA has published all final rules, but MPOs are only required to address safety before May 20, 2019. In August 2017, ODOT established state targets in its annual HSIP report for CY 2018. MPOs are required to establish HSIP targets within 180 days of the state. These targets include a one percent reduction in the number of fatalities; rate of fatalities per one-hundred million VMT; number of serious injuries; rate of serious injuries per one-hundred million VMT; and number of non-motorized fatalities and non-motorized serious injuries. ODOT'S targets are based on a 1% reduction; however, the actual CY 2018 safety targets are 1,051 fatalities; 9,033 serious injuries; 0.91 fatality rate; 8.01 serious injury rate; and 840 non-motorized fatalities and serious injuries. Emphasis areas of ODOT include improving data, reducing roadway crashes such as roadway departure, intersections, rear-end, and highway/railroad crossing; address high risk drivers such as young drivers, impaired driving, low seat belt use, distracted driving, older drivers, and excessive speed; and targeting motorcycle and bicycle riders, pedestrians, and commercial vehicles. Eastgate adopted ODOT's targets for the HSIP on January 29th, 2018. Eastgate will work towards planning and programming projects that contribute towards the accomplishment of ODOT's CY 2018 targets.

Eastgate will continue to identify performance measures and appropriate indicators to not only fulfill requirements of the FAST Act but also to show progress on achieving the *MTP 2040 Update's* goals as defined in the Vision & Goals. The development of FAST Act and MPO-specific metrics will lead to the future development of the MTP, as well as the following:

- Regional goals, objectives and performance measurements
- Socio-economic trends and their impact on transportation
- Evaluation of the current system and future needs
- Listing of eligible regionally significant transportation projects
- Evaluation of the future transportation system assuring that it will be fiscally balanced, meet federal requirements regarding air quality and social equity
- Implementation strategies

PROJECT IMPACTS: ENVIRONMENTAL JUSTICE

The *2040 MTP Update* identifies needed investments for maintaining, operating, and improving the region's multimodal transportation network through the year 2040. As previously outlined in the *Mobility* chapter, environmental justice is a framework to ensure that the benefits of regional transportation investments are shared by minority and low-income populations, and that these groups do not bear undo burdens of such investments. Environmental justice is required under Executive Order 12898. An environmental justice analysis was conducted for the *2040 MTP Update* to ensure that minority populations and low-income populations are fully considered and are allowed to participate in developing transportation policies and investments. Along with Executive Order 12898, the following are considered for this analysis:

- Title VI of the Civil Rights Act of 1964
- National Environmental Policy Act of 1970
- 23 USC 109(h), Federal-Aid Highway Act of 1970
- 23 CFR 771, Environmental Impact and Related Procedures of 1987
- TA 6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) documents of 1987
- Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970, amended in 1987
- Clean Air Act Amendments of 1990
- Intermodal Surface Transportation Efficiency Act of 1991
- Transportation Equity Act for the 21st Century of 1998
- Safe, Accountable, Flexible, Efficient, Transportation Equity Act of 2005
- Moving Ahead for Progress in the 21st Century Act of 2012 (P.L. 112-141)
- Fixing America's Surface Transportation Act of 2015 (P.L. 114-94)
- 7 CFR 658, Farmland Protection Policy Act of 1981, amended in 1994
- Federal Highway Administration Environmental Policy Statements of 1990 and 1994
- Department of Transportation Order on Environmental Justice of 1996
- President's Council of Sustainable Development of 1993
- Executive Order 12898 "Federal Action to Address Environmental Justice in Minority Populations & Low-Income Populations" of 1994
- Executive Order 13166 "Limited English Proficiency" of 2000

Title VI of the Civil Rights Act of 1964 ensures that "no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Similarly, Executive Order 12898 strengthens Title VI by stating that "each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportional high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

Public Transit Component

Eastgate's evaluation and analysis of environmental justice for public transit takes the above fundamental principles to ensure that transportation planning decisions made by local communities and stakeholders avoid, minimize, or mitigate any social, economic, and environmental consequences. As previously described, in the Eastgate Region there are two transit systems that operate in Mahoning and Trumbull Counties: WRTA and TCTB. Eastgate in association with its planning partners strive to enhance the mobility needs of all individuals. Eastgate's ongoing Title VI activities and environmental justice public transportation analysis evaluate how well public transportation meet the needs of minority populations and low-income populations. **EXHIBIT AE: TRANSIT ENVIRONMENTAL JUSTICE FOR MAHONING COUNTY** and **AF: TRANSIT ENVIRONMENTAL JUSTICE FOR TRUMBULL COUNTY** outline existing fixed routes in red. Areas shaded green represent complimentary paratransit service, or all access. Also included in the figures are maps that represent the percentage of minority populations, and the percentage of low-income populations served by fixed-route and ADA all-access service in each county. This analysis coincides with some of FTA's Title VI reporting requirements that are used by transit systems to identify demographic service profiles. A full summary of minority population and low-income population are available in **Table 24: MINORITY POPULATION AND LOW-INCOME POPULATION FOR MAHONING COUNTY** and **25: MINORITY POPULATION AND LOW-INCOME POPULATION FOR TRUMBULL COUNTY.**

Eastgate continues to monitor, document, and map transit demographic and service profile overlays that serve transit trip generators on fixed-route and complementary all access services as required by ADA. The ADA service area is defined by a 3/4 of a mile boundary around a fixed-route service line, as illustrated in **EXHIBIT AM** and **AN**. This measurement is a recommended standard for a reasonable distance to access transportation for all transit users under ADA. Eastgate's use of superimposed overlay mapping helps identify transit needs that are often influenced by social and economic issues that affect minority populations and low-income populations. This analysis can easily recognize the interconnectedness of housing, healthcare, employment, social, economic, environmental, and other needs that have impact on the quality of life of individuals. Further demographic analysis may be found on Eastgate's website.

Eastgate, in association with its planning partners, WRTA, TCTB, and local communities have strived to enhance the mobility needs of all individuals living in the region.

Minority Populations

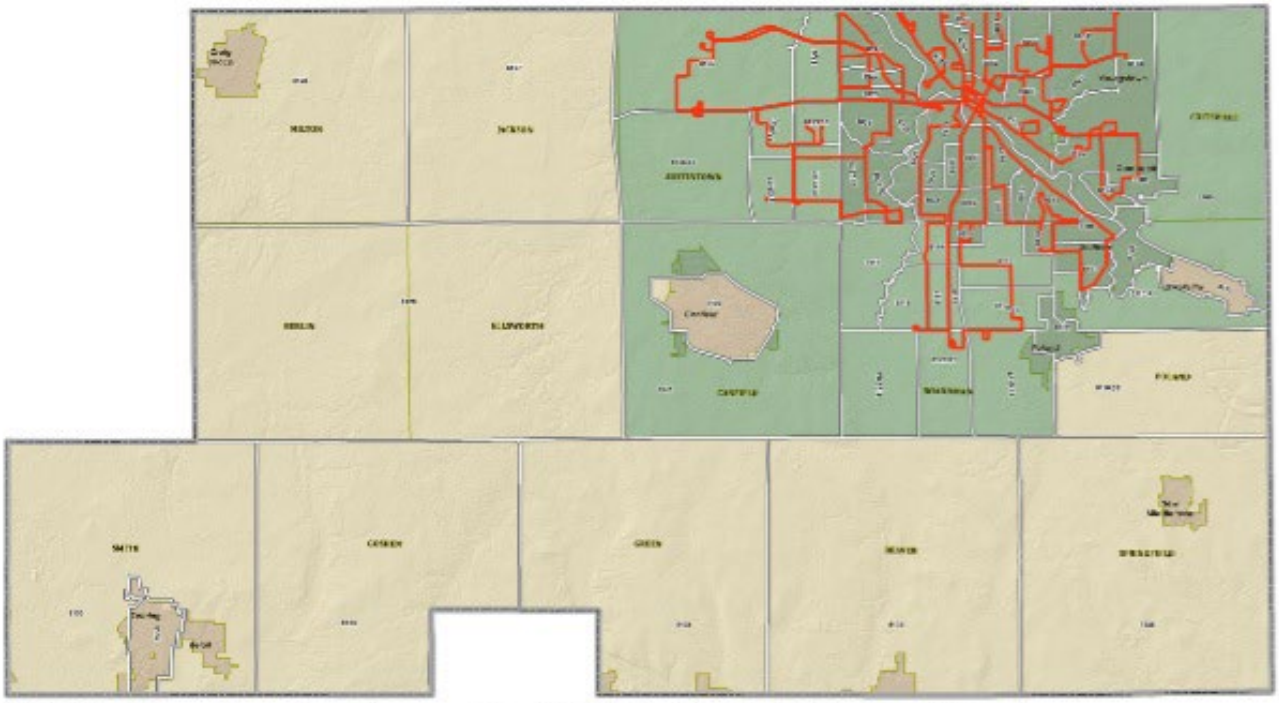
The minority population served by fixed-route and ADA all access service is identified by census tracts in **Exhibit AD** and **AE**. The exhibits also show the total population of each county, the total population served by fixed-route and ADA all access, and the percentage of minority populations served by fixed-route and ADA all access. According to 2015 5-Year ACS estimates, in Mahoning County 96.0% of minority populations and in Trumbull County 81.6% of minority populations have access to these services.

Low-Income Populations

The low-income population served by fixed-route and ADA all access service is identified by census tracts in **Exhibit AD** and **AE**. The exhibits also show the total population of each county, the total population served by fixed-route and ADA all access, and the percentage of low-income populations served by fixed-route and ADA all access. According to 2015 5-Year ACS estimates, 86.8% in Mahoning County and 65.7% in Trumbull County of low-income populations have access to fixed-route and ADA all access. Low-income is defined as at or below the per person poverty rate.

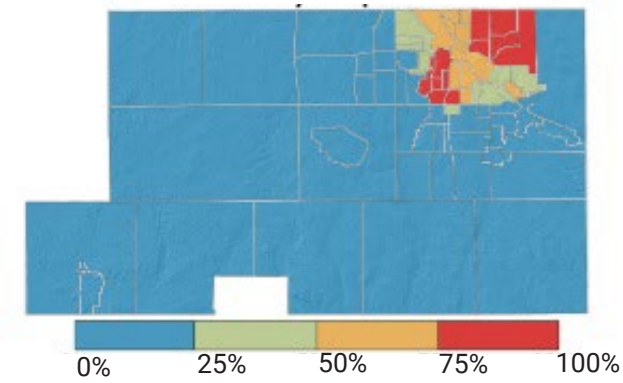
The exhibits indicate that minority populations and low-income populations are being served by fixed route and all access (ADA complimentary paratransit) in Mahoning and Trumbull counties. Eastgate also takes into consideration demographic mapping layers when analyzing future transit projects. In addition to minority populations and low-income populations, Eastgate reviews transit connectivity by census tract for job hubs and other transit trip generators. Eastgate has also conducted a multi-modal pedestrian accessiblity analysis of sidewalks, crosswalks, and ADA ramps using aerial photography and GIS mapping. This data is used to evaluate pedestrian accessibility to transit services and identifies the gaps in the transportation network that corrrelate with future funding to promote sustainable and healthy communities.

EXHIBIT AE: TRANSIT ENVIRONMENTAL JUSTICE ANALYSIS FOR MAHONING COUNTY

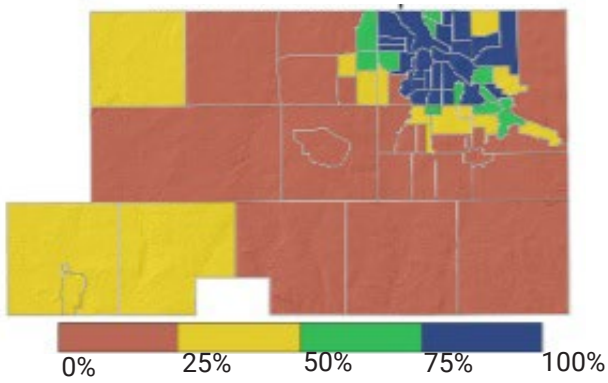


Highlighted Census Tracts (green) represents tracts that fall within the ADA all access boundary. The all access boundary is a .75 mile buffer around the WRTA fixed route (red).

MINORITY POPULATION



LOW INCOME POPULATION



TOTAL COUNTY POPULATION	TOTAL POPULATION SERVED BY FIXED ROUTE & ADA	PERCENTAGE OF POPULATION SERVED BY FIXED ROUTE & ADA
234,550	178,569	76.1%
TOTAL COUNTY MINORITY POPULATION	**TOTAL MINORITY POPULATION SERVED BY FIXED ROUTE & ADA**	**PERCENTAGE OF MINORITY POPULATION SERVED BY FIXED ROUTE & ADA**
54,127	51,950	96.0%
TOTAL COUNTY* POPULATION BELOW POVERTY LEVEL	**TOTAL POPULATION BELOW POVERTY LEVEL SERVED BY FIXED ROUTE & ADA**	**PERCENTAGE OF BELOW POVERTY LEVEL SERVED BY FIXED ROUTE & ADA**
40,841	35,461	86.8%

SOURCE: AMERICAN COMMUNITY SURVEY

TABLE 24: MINORITY POPULATION AND LOW-INCOME POPULATION FOR MAHONING COUNTY

CENSUS TRACT	WHITE	BLACK AFRICAN	HISPANIC LATINO	AMERICAN INDIAN ALASKA NATIVE	ASIAN	NATIVE HAWAIIAN OTHER PACIFIC ISLANDER	SOME OTHER	TWO OR MORE	TOTAL MINORITY	PERCENT* POVERTY	TOTAL POPULATION
8003	237	994	81	0	0	0	0	115	1.190	37.6%	1,427
8004	44	838	22	0	0	0	0	84	944	16.2%	988
8005	562	1,907	1,586	10	34	0	9	98	3,644	62.1%	4,206
8006	154	697	398	0	9	0	16	86	1,206	56.7%	1,360
8010	541	641	204	0	0	0	0	81	926	47.5%	1,467
8011	996	1,051	294	5	9	0	0	146	1,505	46.8%	2,501
8012	924	489	174	0	20	0	0	102	785	23.8%	1,709
8013	1,378	779	189	5	19	0	0	86	1,078	43.7%	2,456
8014	2,078	100	62	0	0	0	0	19	181	16.8%	2,259
8015	1,057	774	97	6	17	0	0	102	996	23.0%	2,053
8016	616	1,760	336	0	8	0	0	293	2,397	56.9%	3,013
8017	266	431	253	0	0	0	0	66	750	66.3%	1,016
8021	98	714	57	0	0	0	0	35	806	32.2%	904
8023	177	379	228	57	15	0	0	13	692	52.5%	869
8024	262	1,833	205	0	0	0	0	148	2,186	41.0%	2,448
8025	235	1,218	103	0	0	0	0	14	1,335	51.3%	1,570
8026	1,353	362	166	16	14	0	24	48	630	33.7%	1,983
8027.01	2,765	127	131	0	0	0	0	36	204	12.0%	3,059
8027.02	2,444	249	87	0	0	0	0	50	386	7.2%	2,830
8028	1,974	309	217	46	0	0	0	0	572	21.4%	2,546
8029	1,788	672	112	0	0	0	6	41	831	42.4%	2,619
8030	1,408	349	93	0	0	0	0	44	486	31.4%	1,894
8040	1,056	1,055	74	0	54	0	0	59	1,242	45.9%	2,298
8041	444	728	15	0	0	0	0	9	752	22.3%	1,196
8042	704	1,323	121	0	47	0	10	120	1,621	20.7%	2,325
8043	331	463	92	8	0	0	0	10	573	51.1%	904
8101	2,916	490	403	0	0	0	0	134	1,027	19.3%	3,943
8102	1,236	561	446	40	0	0	0	57	1,104	26.1%	2,340
8103	605	757	331	0	0	3	0	96	1,187	44.1%	1,792
8106	2,605	76	247	0	0	0	0	63	386	24.1%	2,991
8107	5,109	4	63	0	13	0	0	53	133	11.9%	5,242
8108	2,043	87	120	5	5	0	0	22	239	21.5%	2,282
8109	1,942	161	40	17	0	0	0	5	223	8.1%	2,165
8110.01	3,750	6	109	0	24	0	18	12	169	2.8%	3,919
8112	2,377	0	18	0	0	0	0	6	24	2.8%	2,401

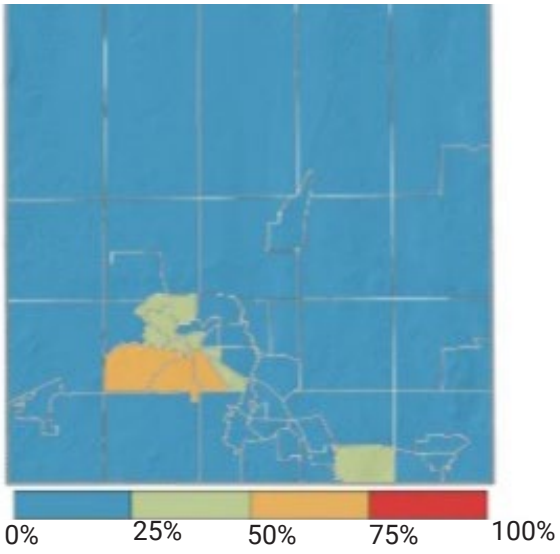
CONTINUED

CENSUS TRACT	WHITE	BLACK AFRICAN	HISPANIC LATINO	AMERICAN INDIAN ALASKA NATIVE	ASIAN	NATIVE HAWAIIAN OTHER PACIFIC ISLANDER	SOME OTHER	TWO OR MORE	TOTAL MINORITY	PERCENT* POVERTY	TOTAL POPULATION
8113	5,290	557	789	0	0	0	0	42	1,388	15.6%	6,678
8114	2,502	557	87	0	59	0	7	108	818	19.4%	3,320
8115	5,276	77	135	0	9	0	0	56	285	4.3%	5,561
8116	3,156	196	115	0	9	0	0	20	340	7.3%	3,496
8117	2,356	132	27	0	18	0	0	103	280	9.0%	2,636
8118	1,291	79	78	0	0	0	0	47	204	17.8%	1,495
8119.01	3,883	117	198	0	13	0	0	57	385	6.9%	4,268
8119.02	3,028	13	28	0	249	0	0	83	373	3.0%	3,401
8120.01	4,882	183	169	0	63	0	0	106	521	7.9%	5,403
8120.02	3,747	132	41	0	51	0	0	22	246	4.5%	3,993
8121	8,723	169	131	38	337	0	0	108	783	5.4%	9,506
8123.01	3,622	228	132	0	0	0	0	32	392	20.5%	4,014
8123.02	5,252	507	194	0	112	0	0	60	873	10.1%	6,125
8124	2,567	219	193	0	11	0	0	34	457	21.4%	3,024
8125	4,715	278	60	0	17	0	20	79	454	6.0%	5,169
8126.01	3,293	545	168	0	92	0	0	37	842	16.2%	4,135
8126.02	4,770	281	15	0	14	10	0	52	372	5.0%	5,142
8126.03	7,923	313	96	0	108	0	0	115	632	6.5%	8,555
8137	754	1,448	570	24	0	0	19	65	2,126	58.7%	2,880
8138	554	2,129	384	0	0	0	7	38	2,558	36.0%	3,112
8139	117	1,520	0	0	0	0	0	37	1,557	36.2%	1,674
8140	914	1,980	324	0	47	0	0	130	2,481	54.9%	3,395
8141	1,529	805	98	79	51	0	0	50	1,083	55.0%	2,612
TOTAL	126,619	34,849	11,206	356	1,556	13	136	3,834	51,950	20.6%	178,569

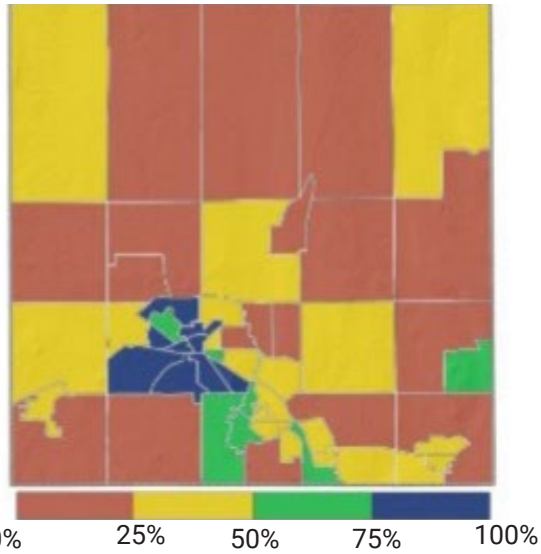
EXHIBIT AF: TRANSIT ENVIRONMENTAL JUSTICE ANALYSIS FOR TRUMBULL COUNTY

Highlighted Census Tracts (green) represents tracts that fall within the ADA all access boundary. The all access boundary is a .75 mile buffer around the WRTA fixed route (red).

MINORITY POPULATION



LOW INCOME POPULATION



TOTAL COUNTY POPULATION	TOTAL POPULATION SERVED BY FIXED ROUTE & ADA	PERCENTAGE OF POPULATION SERVED BY FIXED ROUTE & ADA
206,373	98,850	47.9%
TOTAL COUNTY MINORITY POPULATION	**TOTAL MINORITY POPULATION SERVED BY FIXED ROUTE & ADA**	**PERCENTAGE OF MINORITY POPULATION SERVED BY FIXED ROUTE & ADA**
25,534	20,830	81.6%
TOTAL COUNTY* POPULATION BELOW POVERTY LEVEL	**TOTAL POPULATION BELOW POVERTY LEVEL SERVED BY FIXED ROUTE & ADA**	**PERCENTAGE OF BELOW POVERTY LEVEL SERVED BY FIXED ROUTE & ADA**
34,912	22,949	65.7%

TABLE 25: MINORITY POPULATION AND LOW-INCOME POPULATION FOR TRUMBULL COUNTY

CENSUS TRACT	WHITE	BLACK AFRICAN	HISPANIC LATINO	AMERICAN INDIAN ALASKA NATIVE	ASIAN	NATIVE HAWAIIAN OTHER PACIFIC ISLANDER	SOME OTHER	TWO OR MORE	TOTAL MINORITY	PERCENT* POVERTY	TOTAL POPULATION
9203	2,511	213	37	0	54	0	0	115	419	10.1%	2,930
9204	1,840	533	79	0	0	0	0	63	675	28.0%	2,515
9205	340	592	0	2	0	0	0	42	636	62.1%	976
9206	1,461	2,066	124	0	10	0	0	113	2,313	56.0%	3,774
9207	2,148	2,102	137	17	0	0	0	127	2,383	33.1%	4,531
9208	1,521	429	87	0	0	0	0	204	720	68.7%	2,241
9209	1,862	1,288	145	0	35	0	8	180	1,656	34.3%	3,518
9210	3,333	1,768	11	0	0	0	12	270	2,061	23.6%	5,394
9211	3,148	807	0	18	7	0	0	144	976	43.2%	4,124
9212	1,431	374	143	0	0	0	0	78	595	37.6%	2,026
9214	3,088	88	61	0	0	0	0	38	187	8.6%	3,275
9215	4,529	159	136	0	0	0	0	46	341	12.3%	4,870
9216	2,827	884	118	0	0	0	0	195	1,197	36.8%	4,024
9317	1,681	216	107	0	0	0	0	11	334	16.8%	2,015
9319	3,991	1,500	133	0	314	0	0	161	2,108	16.4%	6,099
9320	5,217	470	0	24	0	0	0	171	665	9.0%	5,882
9322	2,314	98	144	0	75	0	0	81	398	19.7%	2,712
9323	5,430	61	75	0	0	0	0	81	217	14.4%	5,647
9325	3,064	31	80	0	0	0	0	21	132	14.1%	3,196
9326	3,111	103	0	0	17	0	0	36	156	18.0%	3,267
9327.01	5,405	402	42	0	66	0	0	195	705	19.3%	6,110
9327.02	2,189	92	36	0	0	0	0	22	150	14.6%	2,339
9328.01	2,608	239	105	0	0	0	0	0	344	27.7%	2,952
9329	2,304	68	27	0	16	0	0	0	111	11.7%	2,415
9333.01	2,687	17	40	0	0	0	0	0	57	26.4%	2,744
9333.02	4,373	71	40	0	0	0	0	10	121	9.0%	4,494
9338	1,786	770	98	0	0	0	0	41	909	43.5%	2,695
9339	1,821	156	5	0	10	0	0	93	264	28.6%	2,085
TOTAL	78,020	15,597	2,010	61	604	0	20	2,538	20,830	24.0%	98,850

Highway Component

Eastgate's evaluation and analysis of environmental justice for public highway segments takes the above fundamental principles to ensure that transportation planning decisions made by local communities and stakeholders avoid, minimize, or mitigate any social, economic, and environmental consequences.

Step 1 - Public Outreach

The objective of Eastgate's public outreach is to make every attempt to involve all stakeholders regardless of their demographic composition, and in particular, those that may be directly impacted because of a highway improvement. With the signing of Presidential Executive Order 12898, Eastgate has adopted an aggressive one-on-one approach. Eastgate approaches the communities to inform stakeholders who traditionally tend not to become involved through the regular informational or public involvement process. Eastgate updated its PPP as part of the *MTP 2040 Update* and will evaluate its performance on an annual basis. Eastgate has begun to more intentionally attend neighborhood and local government meetings. Additionally, Eastgate has added capacity to the CAB. This new capacity has tripled participation and led to the creation of new resources, including an orientation guide to the MPO for citizens and detailed information on proposed projects. Eastgate staff has also undertaken two-day Race, Equity and Inclusion (REI) training by the Racial Equity Institute to assess systematic decision-making by the MPO that may exclude all voices.

Step 2 - Demographic Profile

Based on data from the American Community Survey 5-year estimates 2015 (ACS), Eastgate focused on two population groups, minority populations and low-income residents. The profile summarizes the data for both population groups by U.S. Census Tract. The U.S. Census Bureau defines a census tract as a geographic region defined for the purpose of taking a census. Usually these coincide with the limits of cities, towns, and other administrative areas and several tracts commonly exist within a county. There are 125 census tracts in Mahoning and Trumbull County.

Although minority and low-income individuals live throughout the entire Eastgate area, many are concentrated in specific locations and neighborhoods. A person is counted as a member of a minority group if he or she claimed any of the following: Black, American Indian, Alaskan Native, Asian, Native Hawaiian, Other Pacific Islander, or Hispanic. Based on data used in this analysis, minorities comprise 18.1% of the Eastgate population. Therefore, any census tract with a percentage of population considered minority that is above 18.1% is considered to have

a regionally significant concentration of minority population. These census tracts are shown in **EXHIBIT AG: HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS**. A similar approach was taken to establish regionally significant concentrations of low income populations. Based on the data used in the five year 2011 - 2015 ACS, it was determined that the regional poverty rate was 17.7% of the population. Therefore, any census tract with a percentage of population considered in poverty that was above 17.7% was considered to have a regionally significant concentration of low income population. These census tracts are shown in **EXHIBIT AG**.

Step 3 - Environmental Effects

To comply with Presidential Executive Order 12898, a list of project control variables was established to qualitatively evaluate the environmental effects of projects that are located in high minority or low-income areas. To accomplish this, the statement "How will this project impact the following?" was subjectively applied to these areas. The variables chosen were:

- Air, noise, water
- Safety
- Congestion
- Aesthetics
- Natural environment
- Character of existing community
- Economic vitality
- Businesses
- Residents
- Accessibility

Step 4 - Analysis of Environmental Effects

To apply the control variables, a list of highway projects that had potential effects on high minority or low-income populations had to be generated. To accomplish this task, *2040 MTP Update* projects were overlaid onto the high minority or low-income census tract maps. Projects were reviewed, and their specific locations were determined. If a project was determined to be located in an area identified as a regionally significant concentration of high minority of low income people, further analysis was conducted. Projects not located in these areas were exempt from further analysis.

The potential environmental effects of highway projects are displayed in **TABLES 26: HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS FOR MAHONING COUNTY** and **27: HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS FOR TRUMBULL COUNTY**. Projects that are deemed to have a positive effect are represented by a **+** symbol, whereas projects expected to produce a negative effect are represented by a **-** symbol. Projects that were determined to have a neutral effect are left blank in the tables.

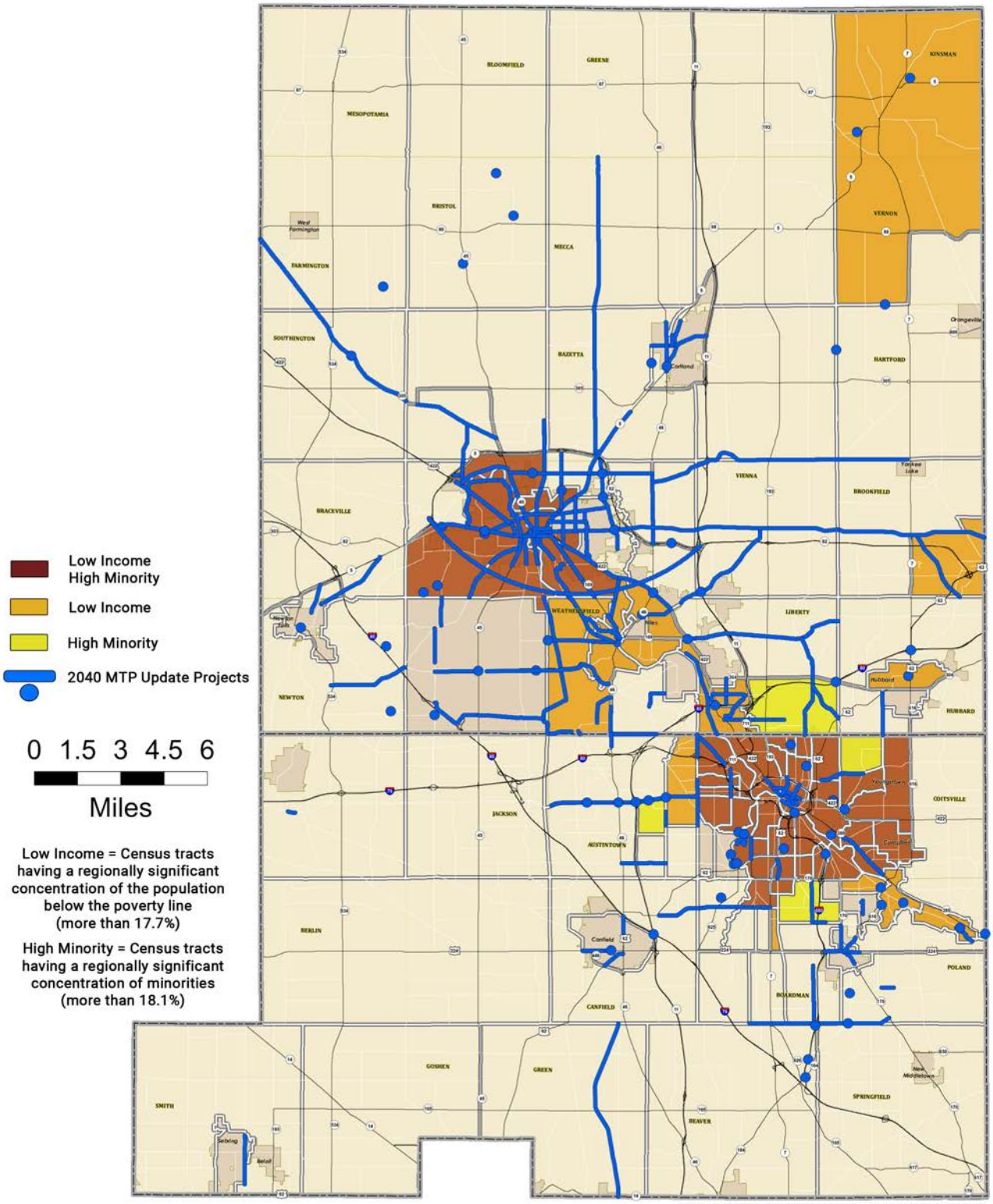
EXHIBIT AG shows all 271 projects listed in the *2040 MTP Update*. These projects are placed over Mahoning and Trumbull counties' census tracts that were identified as having a regionally significant concentration of low income, high minority, or both as previously described. Of the 271 projects, 144 were shown to have some impact in one of these census tracts.

When analyzing the 144 projects, Eastgate considered the ten variables previously mentioned and found that none of the projects would have a profound, negative impact on the census tract it was in. With most of the projects being resurfacings or bridge rehabilitation, Eastgate determined each project to have various positive impacts to the environmental justice variables chosen.

Public Transparency

Eastgate has a thorough selection process with all of its project applications regardless of funding source. An important factor is the project's potential effects on surrounding communities that fall within an EJ census tract. With the assistance of environmental experts, the CAB, and other interested parties, Eastgate analyzes the project to determine all impacts, whether positive or negative. As with all transportation projects, Eastgate assures the community being affected is well informed and well represented in any public involvement process.

EXHIBIT AG: HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS



Source: American Community Survey 2015 5 Year Estimates - 1-2018

TABLE 26: HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS FOR MAHONING COUNTY

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
95446	South AVE (CR 0151 03.57)	Boardman TWP - intersection imp and signalization upgrade from Mathews RD to Midlothian BLVD	High Minority						+			+	+
98840	Lowellville RD Bridge	Village of Lowellville - replace Lowellville RD Bridge over Hines Run	Low Income					+					+
98980	Federal ST / Market ST	City of Youngstown - resurfacing Federal ST from Phelps ST to Walnut ST; resurfacing Market ST from Front ST to Commerce ST	Low Income / High Minority				+						+
102004	Meridian RD Upgrade (Meridian RD Phase II)	Austintown TWP - road upgrade from I-680 to Trumbull County Line	Low Income / High Minority										+
102542	Youngstown Signals	City of Youngstown - signal upgrade at 17 locations throughout the city	Low Income / High Minority	+		+			+				
103794	E Cohasset DR, Phase II	Mill Creek Park - rehabilitation of a 1.07 mile section of East Cohasset DR	Low Income / High Minority	+									
103932	Harding Elementary Sidewalks	City of Youngstown - sidewalk reconstruction near Harding Elementary	Low Income / High Minority	+								+	+
104591	Bridge Painting, Phase II	Mahoning County - painting of four structures with minor structural repair	Low Income / High Minority		+								
104602	Idora Bridge	Mill Creek Park - improvements to the Idora Bridge	Low Income / High Minority		+			+					+
104645	Rayen AVE (SR289) Youngstown	City of Youngstown - resurfacing from MLK BLVD to Watt ST	Low Income / High Minority										+
104646	Himrod AVE / Indianola AVE	City of Youngstown - resurfacing Himrod AVE from Lane AVE to Oak ST; resurfacing Indianola AVE from Market ST to South AVE	Low Income / High Minority										+
104651	McGaffney AVE Extension	Village of Lowellville - construct new roadway approximately 590 feet long for industrial development	Low Income	+			+						+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
104652	Front ST (Youngstown)	City of Youngstown - resurfacing and installing landscaped median between Marshall ST and South AV	Low Income / High Minority	+	+		+						+
104657	Mahoning AVE (CR 18)	Austintown TWP - resurfacing from Meander Reservoir Bridge to Meridian RD	Low Income / High Minority										+
104659	Fifth Avenue (Youngstown)	City of Youngstown - resurfacing and installing landscaped median from Federal ST to Madison AVE Expressway	Low Income / High Minority	+	+		+						+
104866	Commerce (CR 0151)	City of Youngstown - resurfacing from Fifth AVE to Federal ST	Low Income / High Minority	+	+		+						+
-	Belle Vista AVE	Resurfacing from Mahoning AVE to Salt Springs RD	Low Income / High Minority										+
-	Dividing Sycamore Bridge	Improve drainage, repair stone wingwalls, asphalt pavement improvement where needed	Low Income / High Minority			+					+		+
-	Edgewood ST	Replace bridge west of Center ST	Low Income / High Minority	+									+
-	Glenwood AVE	Resurfacing from Warren AVE to Canfield RD	Low Income / High Minority										+
-	IR-680/Poland AVE Interchange	Construction of new interchange between IR-680 and Poland AVE	Low Income / High Minority	+			+		+	+			
-	Logan AVE	RD upgrades from Andrews AVE to Belle AVE	Low Income / High Minority										+
-	Mahoning AVE Signal Upgrade	Upgraded signals from Wickliff Circle to Giant Eagle DR	High Minority	+		+			+				
-	Mathews RD	RD upgrade from CH 151 to Lemoyne	High Minority										+
-	McGaffney ST / East Jackson ST Improvements	Roadway improvements to McGaffney ST and East Jackson ST	High Minority										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	McGuffey RD	Resurfacing from Garland AVE to Early RD	Low Income / High Minority										+
-	Meridian RD Signal Upgrade	Upgrade signals from Burkey RD to Hendricks RD	Low Income	+		+			+				
-	North Lima RD	Widening of Raccoon RD from Falcon DR to Burkey RD	Low Income	+									+
-	Raccoon RD	City of Youngstown - resurfacing from Fifth AVE to Federal ST	Low Income				+		+				+
-	Salt Springs RD	Resurfacing from Meridian RD to SR-711	Low Income / High Minority										+
-	Shields RD	Widening from West BLVD to Market ST	Low Income / High Minority				+		+				+
-	Shields RD	Widening from West BLVD to Tippecanoe RD	Low Income / High Minority				+		+				+
-	South Avenue Bridge	Replacement of an existing structure	Low Income / High Minority	+	+								+
-	Southern BLVD	Resurfacing from Market ST to Midlothian BLVD	Low Income / High Minority										+
-	SR-289	Resurfacing of Wilson AVE from North Corp Limit to South Corp Limit	Low Income / High Minority										+
-	SR-289	Resurfacing from US-422 to Fifth AVE	Low Income / High Minority										+
-	State ST Public Parking	Construction of a public parking lot along State ST	Low Income	+			+					+	
-	Wetmore Drive Bridge	Minor bridge repairs to the Wetmore DR Bridge over Yellow Creek	Low Income	+	+			+					+

TABLE 27: HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS FOR TRUMBULL COUNTY

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
84727	Bedford RD (CR 175)	Brookfield TWP - widening from Stewart-Sharon RD to US-62	Low Income									+	+
93385	Greenway Trailhead	City of Warren - trailhead construction along the Great Ohio Lake to River Greenway	Low Income / High Minority	+							+		
94376	IR-80 02.04 Landscaping	City of Girard - landscaping and signing enhancement of IR-80 at US-422	Low Income		+					+	+		
95844	US-422 13.00	City of Warren - reconstruction of US-422 from Laird AVE to Ridge AVE	Low Income / High Minority										+
98773	Burnett East RD Bridge	Kinsman TWP - replace Burnett East RD Bridge over Sugar Creek	Low Income					+				+	+
98774	Morford RD Bridge	Kinsman TWP - replace Morford RD Bridge over Stratton Creek	Low Income					+				+	+
99581	Tod AVE / Atlantic ST	City of Warren - resurfacing Tod AVE from Market ST to Elm Hill DR; resurfacing Atlantic ST from Mahoning AVE to Elm RD	Low Income / High Minority									+	+
99595	Laird / Genesee / Woodland	City of Warren - resurfacing Laird AVE from Youngstown RD to Atlantic ST; resurfacing Genessee AVE from Market ST to Elm RD; resurfacing Woodland AVE from Elm RD to Perkinswood BLVD	Low Income / High Minority									+	+
99804	Western Reserve Greenway (Phase IV)	Trumbull County - construct Phase IV of the Western Reserve Greenway Bike Trail	Low Income / High Minority	+					+		+	+	
104612	Reserve AVE Bridges	City of Warren - rehabilitation of Reserve AVE Bridges	Low Income / High Minority					+				+	+
104619	East Market ST (Warren)	City of Warren - resurfacing from Main ST to the SR-82 interchange	Low Income / High Minority				+						+
104622	Lovers LN/ Tod AVE	City of Warren - resurfacing Lovers LN from West Market ST to Parkman RD; resurfacing Tod AVE from Parkman RD to Crestwood DR	Low Income / High Minority									+	+
104634	West Market ST (Warren TWP)	Warren TWP - resurfacing from SR-5/82 interchange to Lovers LN	Low Income / High Minority				+					+	+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
104636	Salt Springs RD (CR 64)	Weathersfield TWP - resurfacing from SR-46 to Mahoning County Line	Low Income / High Minority									+	+
104643	Trumbull AVE (Girard)	City of Girard - resurfacing from US-422 to Girard East Corp Limit	Low Income / High Minority				+					+	+
104644	East Liberty ST (Girard)	City of Girard - resurfacing from US-422 to Girard East Corp Limit	Low Income				+					+	+
104656	Myron ST Bridge Replacement	City of Hubbard - replacing the Myron ST Bridge	Low Income					+				+	+
-	Austintown-Warren RD	Resurfacing of Austintown-Warren RD in Warren and Weathersfield TWP	High Minority										+
-	Austintown-Warren RD	Resurfacing of Austintown-Warren RD in Weathersfield TWP	Low Income										+
-	Austintown-Warren RD	Resurfacing of Austintown-Warren RD in Warren and Weathersfield TWP	Low Income / High Minority										+
-	Austintown-Warren RD	Resurfacing from Yerk Young to Village Limits	Low Income										+
-	Bedford RD	Resurfacing of Bedford RD in Brookfield Township	Low Income / High Minority										+
-	Bedford RD	Resurfacing of Bedford RD in Brookfield Township	Low Income / High Minority										+
-	Bedford RD	Resurfacing of Bedford RD in Brookfield Township	Low Income										+
-	Carson Salt Springs RD	Resurfacing of Carson Salt Springs RD in Weathersfield and Newton TWP	Low Income / High Minority										+
-	Carson Salt Springs RD	Resurfacing of Carson Salt Springs RD in Weathersfield and Newton TWP	Low Income										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	Carson Salt Springs RD Bridge Replacement	Replacement of LOR #12 Bridge	Low Income / High Minority	+									
-	Central Business District Streets	Resurfacing of five street segments in the central business district	Low Income				+						+
-	Central Business District Streets	Resurfacing of five street segments in the central business district	Low Income / High Minority				+						+
-	East Market	Resurfacing of East Market ST from Mahoning AVE to Warren Sharon RD	Low Income / High Minority										+
-	Girard Bike Trail Phases I and II	Construct 10' bike spur along abandoned B&O railline	Low Income	+	+	+			+			+	
-	Golden Triangle Intersection Improvement	Improvement to the intersection of Larchmont AVE, Bronze RD, and Overland RD	Low Income / High Minority	+			+						+
-	Hallock Young RD Bridge Replacement	Replacement of NEW #13 Bridge	Low Income	+									+
-	Heaton North RD	Resurfacing of Heaton North RD from SR-169 to SR-422	Low Income / High Minority										+
-	Heaton North RD	Widening from SR-169 to Deforest Townline RD	Low Income / High Minority						+				+
-	Heaton North RD	Widening from Deforest Townline RD to US-422	Low Income / High Minority						+				+
-	High ST	Resurfacing from Mahoning AVE to Chestnut AVE	Low Income										+
-	Highland AVE	Resurfacing from Morris AVE to Churchill RD	Low Income										+
-	Hyde Shaffer RD Bridge Replacement	Replacement of #13 Bridge	Low Income / High Minority	+									+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	IR-80 and SR-304 Interchange	Construct new interchange along IR-80 at SR-304	High Minority				+		+	+			
-	Jones RD	Resurfacing of Jones RD in Liberty Township	Low Income										+
-	Kibler Toot RD Bridge Replacement	Replacement of WAR #12 Bridge	Low Income / High Minority	+									+
-	Laird / Genesee / Woodland	Resurfacing of Laird AVE from Youngstown RD to Atlantic ST; Genessee AVE from Market ST to Elm RD; Woodland ST from Elm RD to Perkinswood BLVD	Low Income / High Minority										+
-	Larchmont AVE	Resurfacing from Elm RD to North Corp Limit	Low Income / High Minority										+
-	Leavitt RD	Resurfacing of Leavitt RD in Warren TWP	Low Income										+
-	Leavitt RD	Resurfacing of Leavitt RD in Warren TWP	Low Income / High Minority										+
-	Leavitt RD	Resurfacing of Leavitt RD in Warren TWP	Low Income / High Minority										+
-	Logan Way	Resurfacing of Logan Way in Liberty TWP	Low Income										+
-	Logan Way	Resurfacing of Logan Way in Liberty TWP	Low Income										+
-	Logan Way	Resurfacing of Logan Way in Liberty TWP	High Minority										+
-	Logan Way	Resurfacing of Logan Way in Liberty TWP	High Minority										+
-	Logangate RD	Resurfacing of Logangate RD in Liberty TWP	Low Income										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	North River RD	Resurfacing of North River RD in Howland TWP	Low Income / High Minority										+
-	North River RD	Resurfacing of North River RD in Howland and Warren TWP	Low Income / High Minority									+	+
-	North River RD	Resurfacing of North River RD in Howland TWP	Low Income / High Minority										+
-	Ohltown McDonald RD	Resurfacing of Ohltown McDonald RD in Weathersfield TWP	High Minority										+
-	Ohltown McDonald RD	Resurfacing of Ohltown McDonald RD in Weathersfield TWP	Low Income										+
-	Palmyra / Highland / Main / Pine	Resurfacing of four street segments in the City of Warren	Low Income / High Minority										+
-	Palmyra / Highland / Main / Pine	Resurfacing of four street segments in the City of Warren	Low Income / High Minority										+
-	Palmyra RD	Resurfacing of Palmyra RD in Warren TWP	Low Income / High Minority										+
-	Palmyra RD	Resurfacing of Palmyra RD in Warren TWP	Low Income / High Minority										+
-	Park / Atlantic / Larchmont / Perkinswood	Resurfacing of four street segments in the City of Warren	Low Income / High Minority										+
-	Park / Atlantic / Larchmont / Perkinswood	Resurfacing of four street segments in the City of Warren	Low Income / High Minority										+
-	Park AVE	Resurfacing of Park AVE in Champion and Warren TWP	Low Income / High Minority										+
-	Park AVE	Resurfacing from Fulton ST to North Corp Limit	Low Income / High Minority										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	Salt Springs RD	Resurfacing of Salt Springs RD from Highland AVE to Village Limits	Low Income										+
-	Selkirk Bush RD Bridge Replacement	Replacement of NEW #15 Bridge	Low Income / High Minority	+									+
-	SR-169	Resurfacing from US-422 to South Corp Limit	Low Income / High Minority										+
-	SR-45 (Tod / Summit / Mahoning)	Resurfacing of Tod AVE from South Corp Limit to Summit ST; Summit ST from Tod AVE to Mahoning AVE; Mahoning AVE from Summit ST to North Corp Limit	Low Income / High Minority										+
-	SR-45 (Tod / Summit / Mahoning)	Resurfacing of Tod AVE from South Corp Limit to Summit ST; Summit ST from Tod AVE to Mahoning AVE; Mahoning AVE from Summit ST to North Corp Limit	Low Income / High Minority										+
-	SR-46	Resurfacing from Wakefield DR to City Limit	Low Income										+
-	SR-46 Widening	Widening of SR-46 from County Line RD to Prospect ST	Low Income				+		+				+
-	Summit South	Resurfacing from Tod to Mahoning; Highland to Chestnut	Low Income / High Minority										+
-	Tod AVE	Resurfacing from Market ST to South Corp Limit	Low Income										+
-	Trumbull AVE	Resurfacing of Trumbull AVE in Liberty TWP	Low Income / High Minority										+
-	Trumbull AVE	Resurfacing of Trumbull AVE in Liberty TWP	Low Income / High Minority										+
-	US-422	Resurfacing of US-422 from North RD to Niles Vienna RD	Low Income										+
-	US-422	Resurfacing of US-422 from North Road to Niles Vienna R	Low Income / High Minority										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	US-422 (Parkman / Market / South)	Resurfacing of Parkman RD from Summit ST to West Market ST; West Market ST from Parkman RD to South ST; South ST from Market ST to Chestnut AVE	Low Income										+
-	US-422 (Parkman / Market / South)	Resurfacing of Parkman RD from Summit ST to West Market ST; West Market ST from Parkman RD to South ST; South ST from Market ST to Chestnut AVE	Low Income / High Minority										+
-	US-422 (Parkman) / SR-169 (Niles)	Resurfacing of Parkman RD from West Corp Limit to Summit ST; Niles RD from South ST to South Corp Limit	Low Income / High Minority										+
-	US-422 (Parkman) / SR-169 (Niles)	Resurfacing of Parkman RD from West Corp Limit to Summit ST; Niles RD from South ST to South Corp Limit	Low Income / High Minority										+
-	US-422 (Youngstown RD-Laird to Ridge)	Resurfacing of US-422 from Laird AVE to Ridge AVE	Low Income / High Minority										+
-	US-422 (Youngstown RD - Ridge to North)	Resurfacing of US-422 from Ridge AVE to North RD	Low Income / High Minority										+
-	Warren Sharon RD	Resurfacing of Warren Sharon RD in Brookfield TWP	Low Income										+
-	Warren Sharon RD	Resurfacing of Warren Sharon RD in Brookfield TWP	Low Income										+
-	West Market	Resurfacing of West Market ST from West Corp Limit to Main ST	Low Income / High Minority										+
-	West Market ST Bridge Rehabilitation	Rehabilitation of WCY# 03 Bridge	Low Income / High Minority	+									+
-	West Market ST Bridge Rehabilitation	Replacement of WAR #23 Bridge	Low Income / High Minority	+									+
-	West Park / East State ST	Resurfacing of West Park from Main ST to City Limits; East State ST from Robbins AVE to Main ST	Low Income										+
-	West Park AVE	Resurfacing of West Park AVE in Weathersfield TWP	Low Income / High Minority										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	Logangate RD	Resurfacing of Logangate RD in Liberty TWP	High Minority										+
-	Lordstown Bike Trail	Construct 10' wide asphalt bike bath along right-of-way owned by Lordstown	Low Income	+	+	+			+			+	
-	Lovers LN / Tod / McMyler / Summit / Atlantic	Resurfacing of five street segments in the City of Warren	Low Income / High Minority										+
-	Mahoning AVE	Resurfacing from South ST to North Corp Limit	Low Income / High Minority										+
-	Main ST	Resurfacing of West Main ST from McCleary Jacoby RD to North Mecca ST; East Main ST from North High ST to East Corp Limit	Low Income										+
-	Mosier RD	Resurfacing from US-422 to East Corp Limit	Low Income										+
-	Niles Vienna RD / Warren AVE	Resurfacing of Niles Vienna Road from SR\-46 to SR-422; Warren AVE from Chestnut AVE to City Limits	Low Income										+
-	Niles Warren River RD	Resurfacing of Niles Warren River RD in Howland TWP	#N/A										+
-	Niles Warren River RD	Resurfacing of Niles Warren River RD in Weathersfield TWP	#N/A										+
-	Niles Warren River RD	Resurfacing of Niles Warren River RD in Howland TWP	Low Income / High Minority										+
-	Niles Warren River RD	Resurfacing of Niles Warren River RD in Weathersfield TWP	Low Income / High Minority										+
-	North Main ST	Resurfacing from SR-46 to North Corp Limit	Low Income										+
-	North River RD	Resurfacing of North River RD in Howland and Warren TWP	Low Income / High Minority										+

CONTINUED

PID	ROUTE	LOCATION & TERMINI	EJ DESIGNATION	EJ CONTROL VARIABLES									
				ACCESSIBILITY	AESTHETICS	AIR NOISE WATER	BUSINESSES	CHARACTER	CONGESTION	ECONOMIC VITALITY	ENVIRONMENT	RESIDENTS	SAFETY
-	West Park AVE	Resurfacing of West Park AVE in Weathersfield TWP	Low Income										+
-	West Park AVE Bridge Replacement	Replacement of WEA# 13 Bridge	Low Income	+									+

Overall Work Program

In addition to adopting and implementing the performance measures, Eastgate is committed to carrying out the implementation of the MTP through the TIP and OWP. The OWP is developed annually and address all aspects of the MPO's planning process on a continuous basis. Examples of activities in the OWP include short range planning activities such as congested intersection studies and safety audits; surveillance of the federal-aid system through variable data collection and asset management; air quality monitoring, transit system compliance, rideshare advocacy, and service. Eastgate will continue to strengthen the OWP to develop the *MTP 2050* in 2023 through actions that may include more robust scenario planning, considerations for demographic changes, social determinants of health, and policy recommendations for CAVs. Below, in E***XHIBIT AP: ELEMENTS OF OWP,*** are some of the elements under which Eastgate determines the planning activities of the MPO.

EXHIBIT AP: ELEMENTS OF OWP

APPENDICES

APPENDIX A: ACRONYMS

3-C: Continuing, Cooperative & Comprehensive Transportation Planning Process

ACS: American Community Survey

ADA: Americans with Disabilities Act

ADAAG: Americans with Disabilities Act Accessibility Guidelines

ADHS: Appalachian Development Highway System

ARC: Appalachian Regional Commission

CAA: Clean Air Act

CAAA: Clean Air Act Amendments

CAV: Connected & Autonomous Vehicle

CBD: Central Business District

CEDS: Comprehensive Economic Development Strategy

CFR: Code of Federal Regulations

CMAQ: Congestion Mitigation & Air Quality Improvement

CMP: Congestion Management Process

CNT: Center for Neighborhood Technology

CO: Carbon Monoxide

CO^2: Carbon Dioxide

COG: Council of Government

DDMS: Destination Dynamic Message Signs

DOT: Department of Transportation

EDA: Economic Development Administration

EJ: Environmental Justice

EPA: Environmental Protection Agency

EPAC: Environmental Planning Advisory Committee

FAST Act: Fixing America's Surface Transportation Act

FHWA: Federal Highway Administration

FTA: Federal Transit Administration

FY: Fiscal Year

GHG: Greenhouse Gases

GIS: Geographic Information Systems

GPB: General Policy Board

HSIP: Highway Safety Improvement Program

HSTP: Human Services Transportation Plan

INFRA: Infrastructure for Rebuilding America

IoT: Internet of Things

IRI: International Roughness Index

ITS: Intelligent Transportation Systems

JEDD: Joint Economic Development District

LEHD: Longitudinal Employer-Household Dynamics

LOS: Levels of Service

LTIP: Local Transportation Improvement Program

M&O: Management & Operations

MAP-21: Moving Ahead for Progress in the 21st Century

MCRPC: Mercer County Regional Planning Commission

MOU: Memorandum of Understanding

MPO: Metropolitan Planning Organization

MSA: Metropolitan Statistical Area

MTP: Metropolitan Transportation Plan

NBI: National Bridge Inventory

NAAQS: National Ambient Air Quality Standards

NEPA: National Environmental Policy Act

NHPP: National Highway Performance Program

NHS: National Highway System

NO_2: Nitrogen Dioxide

NOx: Nitrogen Oxides

NRAC: Natural Resource Assistance Council

O_2: Ozone

OARC: Ohio Association of Regional Councils

ODOT: Ohio Department of Transportation

ODNR: Ohio Department of Natural Resources

ODPS: Ohio Department of Public Safety

ODSA: Ohio Development Services Agency

OEPA: Ohio Environmental Protection Agency

OPWC: Ohio Public Works Commission

ORC: Ohio Revised Code

OTPPP: Ohio Transit Preservation Partnership Program

OVI: Operating a Vehicle Impaired

OWP: Overall Work Program

Pb: Lead

PHED: Peak Hour Excessive Delay

PIAM: Project Impact Analysis Matrix

PM: Particulate Matter

PPP: Public Participation Process

REI: Race, Equity and Inclusion

RTPO: Regional Transportation Planning Organization

RWIS: Road/Weather Information Systems

SAFETEA-LU: Safe, Accountable, Flexible, Efficient Transportation Equity Act

SCIP: State Capital Improvements Program

SHSP: Strategic Highway Safety Plan

SIP: State Implmentation Plan

SO^2: Sulfer Dioxide

SOV: Single Occupancy Vehicle

SRTS: Safe Routes to Schools

STBG: Surface Transportation Block Grant

STIP: Statewide Transportation Improvement Program

SVSS: Shenango Valley Shuttle Services

TAC: Technical Advisory Committee

TAM: Transportation Asset Management

TAMP: Transportation Asset Management Plan

TCTB: Trumbull County Transit Board

TCTS: Trumbull County Transit System

TDM: Transportation Demand Management

TDP: Transit Development Program

TID: Transportation Improvement District

TIGER: Transportation Investment Generating Economic Recovery

TIF: Tax Increment Financing

TIM: Traffic Incident Management

TIMS: Transportation Information Mapping System

TIP: Transportation Improvement Program

TMA: Transportation Management Area

TPM: Transportation Performance Management (TPM)

TRAC: Transportation Review Advisory Council

TRB: Transportation Research Board

TSMO: Transportation System Management and Operations

TSP: Transportation Safety Planning

UFAS: Uniform Federal Accessibility Standards

USC: United States Code

UTP: Urban Transit Program

VMT: Vehicle Miles Traveled

VOCs: Volatile Organic Compounds

WRTA: Western Reserve Transit Authority

APPENDIX B: PERFORMANCE REPORTS

SAFETY PERFORMANCE REPORT - 2017

Safety Performance Management Measures

MAP-21 and the FAST Act established new safety performance management requirements to ensure that state DOTs and MPOs choose the most efficient investments for federal transportation funds. Per Federal Rule 23 CFR 450; states and MPOs are now required to establish targets for five safety performance measures applicable to all public roads. The performance measures are shown in **FIGURE 1**.

FIGURE 1

- NUMBER OF FATALITIES
- NUMBER OF SERIOUS INJURIES
- FATALITY RATE
- SERIOUS INJURY RATE
- NUMBER OF NON-MOTORIZED FATALITIES & SERIOUS INJURIES

MPOs must establish targets for their respective areas within 180 days of the state's establishment of targets. MPOs may choose to establish targets by either agreeing to plan and program projects so that they contribute toward the accomplishment of the state DOT targets or committing to a quantifiable target for their metropolitan planning area. For each CY 2018 performance measure, ODOT has set targets based on a statewide 1% annual reduction for each performance measure and there are numeric targets for each of the Safety performance measures.

On January 29th, 2018, the General Policy Board of the Eastgate Regional Council of Governments passed a resolution to support ODOT's statewide safety targets and to plan and program projects so that they contribute toward the accomplishment of the ODOT safety targets for that performance measure as outlined in **FIGURE 2**.

Ohio's 2017 Performance Results

In accordance with federal legislation, Ohio uses a five-year rolling average to calculate historical crash trends and targets. A rolling average is used to better predict long-term crash trends by smoothing out short-term, year-to-year fluctuations. Data on fatalities, serious injuries and respective targets was obtained from the Ohio Department of Public Safety crash data and the Fatality Analysis Reporting System. ODOT's targets reflect a 1% reduction goal for the rolling average for each performance measure. **FIGURE 2** reflects the state's targets for fatalities, serious injuries, fatality rate*, serious injury rate*, and the number of non-motorized fatal/serious injuries with the asterisk indicating the rate per 100 million vehicle miles traveled.

FIGURE 2

OHIO'S 2017 SAFETY PERFORMANCE MEASURE TARGETS

	2016	2017	CY 2016 ROLLING AVERAGE 2012-2016	CY 2017 TARGET	CY 2017 ACTUAL	CY 2017 TREND/ TARGET MET?	CY 2018 TARGET
FATALITIES	1,133	Data will be finalized by ODOT and added to the report in April 2018	1,072.6	1,061.9	Data will be finalized by ODOT and added to the report in April 2018		1,051
SERIOUS INJURIES	9,207		9,216.4	9,124.2			9,033
FATALITY RATE*	0.956		0.936	0.927			0.91
SERIOUS INJURY RATE*	7.769		8.046	7.966			8.01
NON-MOTORIZED FATAL/ SERIOUS INJURIES	884		856.4	847.8			840

*** Rate per 100 million vehicle miles traveled.**

ODOT also sets targets for fatalities and serious injuries within thirteen traffic safety emphasis areas as defined in their Strategic Highway Safety Plan. These targets are self-imposed and are not required performance measures as determined by the FAST Act. ODOT's emphasis area targets are outlined in **FIGURE 3.**

FIGURE 3

OHIO'S 2017 SAFETY EMPHASIS AREA TARGETS

		2016	2017	CY 2016 ROLLING AVERAGE 2012-2016	CY 2017 TARGET	CY 2017 ACTUAL	CY 2017 TREND/ TARGET MET?	CY 2018 TARGET
INTERSECTION	FATAL	304	Data will be finalized by ODOT and added to the report in April 2018	261.4	258.8	Data will be finalized by ODOT and added to the report in April 2018		Data will be finalized by ODOT and added to the report in April 2018
	SERIOUS	3,640		3,508.8	3,473.7			
DEPARTURE	FATAL	571		558.6	553			
	SERIOUS	3,152		3,322.2	3,289			
WORK ZONE	FATAL	28		22.2	22			
	SERIOUS	186		156.4	154.8			
REAR END	FATAL	55		59.2	58.6			
	SERIOUS	1,238		1,214	1,201.9			
MOTORCYCLE	FATAL	199		159.4	157.8			
	SERIOUS	997		993.6	983.7			
PEDESTRIAN	FATAL	140		111.2	110.1			
	SERIOUS	555		527.2	521.9			
BICYCLE	FATAL	18		18.4	18.2			
	SERIOUS	167		193.4	191.5			
COMMERCIAL	FATAL	143		157.6	156			
	SERIOUS	759		742	734.6			
NO RESTRAINT	FATAL	357		387.2	383.3			
	SERIOUS	1,495		1,538.2	1,522.8			
ALCOHOL	FATAL	346		351.8	346			
	SERIOUS	1,275		1,381.4	1,367.6			
SPEED	FATAL	389		344.2	340.8			
	SERIOUS	2,064		2,118.4	2,097.2			
YOUNG DRIVER	FATAL	340		335.4	332			
	SERIOUS	3,464		3,521.8	3,464			
OLDER DRIVER	FATAL	252		228.4	226.1			
	SERIOUS	1,726		1,616.4	1,600.2			

Eastgate Safety Projects And Programs

Eastgate's Safety Program and TIP support the state's statewide CY2018 safety targets by planning and programing projects which improve traffic safety in the region. Eastgate also maintains strong relationships with state and local safety stakeholders which work together toward reducing fatalities and serious injuries in the region.

Eastgate is an active participant in the Safe Communities Coalitions and Fatal Review Committees for both Mahoning and Trumbull counties. The coalitions bring together safety stakeholders that aim to improve traffic safety by targeting specific crash emphasis areas, reviewing fatal crashes to determine preventative measures, and providing educational information to the public. Coalition members include the National Highway Traffic Safety Administration, Ohio State Highway Patrol, ODOT, Bureau of Motor Vehicles, county engineers, city engineers and administrators, hospital officials, and police and fire departments.

Eastgate's Safety Program offers valuable services to the region which are used to improve safety on all public roads. Eastgate offers historical crash research, collision diagramming, trend assessment, safety audits, and GIS visualization by request. Eastgate also regularly publishes a *Regional Safety Study* and *County Alcohol Reports*.

The *Regional Safety Study* evaluates crash trends in the region, tracks ODOT emphasis area crashes, and identifies intersection and segment priority locations. The *County Alcohol Reports* are distributed to community officials, Safe Communities Coalitions, and the State Highway Patrol for use in enforcement planning and trend identification.

Eastgate's TIP includes projects which will improve safety in the region. Eastgate works with ODOT and local officials to identify, apply for, and program projects through ODOT's HSIP, as well as other funding sources available through Eastgate. **FIGURE 4** lists selected projects in Eastgate's 2018-2021 TIP and the anticipated effect on safety.

FIGURE 4

SAFETY PROJECTS IN EASTGATE'S 2018-2021 TIP			
PID	**PROJECT**	**DESCRIPTION**	**ANTICIPATED EFFECT ON SAFETY**
80192	MAH I-680/164 Interchange	Construct a new interchange at IR-680 in Beaver Township	Reduction of seroius injury and angle crashes.
95446	MAH South Avenue	Intersection improvements and signalization upgrade from Mathews RD to Midlothian BLVD in Boardman Township	Reduction of rear end crashes.
102103	MAH SR-46	Restripe and reconfigure lanes along SR-46 from Lou Idea BLVD to County Line RD in Austintown Township	Reduction of serious injury, rear end. and left turn crashes.
103720	MAH SR-46	Intersection improvements at SR-46 and Mahoning AVE in Austintown Township	Reduction of serious injury, rear end, left turn, and angle crashes.
104740	TRU East Market Street	Installing 2 traffic signals to allow left turns off of SR-82 EB off-ramp to E. Market ST	Reduction of serious injury, rear end, and angle crashes.
107273	MAH Raccoon RD	Intersection improvements and signal upgrades at Raccoon RD and New RD	Reduction of driveway related angle crashes.

Eastgate Crash Trends

Eastgate is not required to set specific numeric performance targets for the MPO area because Eastgate has elected to support ODOT's statewide targets. Eastgate chose to support ODOT's targets rather than establish its own in order to keep the state targets as the primary focus for the agency and its members and partners. The state will be assessed annually by FHWA to determine if it has met or made significant progress toward meeting HSIP targets, while MPOs will not be directly assessed. Because of this, Eastgate will promote and work toward statewide reduction targets.

However, Eastgate's crash trends are evaluated to be sure the region is supporting the state towards meeting its targets. Eastgate is currently in line with and/or surpassing comparable state reduction percentages. To self-evaluate progress toward supporting the state's targets, Eastgate monitors crash data to ensure that fatality and injury trends in the MPO region are declining. Eastgate uses data provided by ODOT, obtained from the Ohio Department of Public Safety state crash data and the Fatality Analysis Reporting System, and ODOT's 5-year rolling average methodology to ensure that the region is trending downward. Eastgate's average 5-year rolling average reduction rate shows a trend of more than a 2% reduction for each performance measure, which surpasses the state's overall 1% reduction used to calculate state targets. **FIGURE 5** outlines the trends in the MPO area for each performance measure. 2017 data will be finalized by ODOT in April 2018 and will be added to this report when available.

FIGURE 5

EASTGATE TRENDS						
	2016	2017	AVERAGE REDUCTION REND FOR ROLLING AVERAGE REDUCTION RATE	CY 2016 ROLLING AVERAGE 2012-2016	CY 2017 ROLLING AVERAGE 2013-2017	TREND
FATALITIES	33	Data will be finalized by ODOT and added to the report in April 2018	2.2%	39.8	Data will be finalized by ODOT and added to the report in April 2018	Data will be finalized by ODOT and added to the report in April 2018
SERIOUS INJURIES	256		2.2%	293		
FATALITY RATE*	.68		2.8%	0.84		
SERIOUS INJURY RATE*	5.26		2.28%	6.175		
NON-MOTORIZED FATAL/SERIOUS INJURIES	20		3.12%	24.2		

Figures **6** through **10** show graphical trends for each performance measure as applied to Eastgate's area. The graphs identify the numerical value for each measure by year, a prediction based on a 10-year trendline, the 5-year rolling average by year, the predicted trend based on the average 5-year rolling average reduction rate, and a linear trend based on the numerical value for each performance measure. The graphs were provided to the MPOs by ODOT and modified for style and clarity.

FIGURE 6

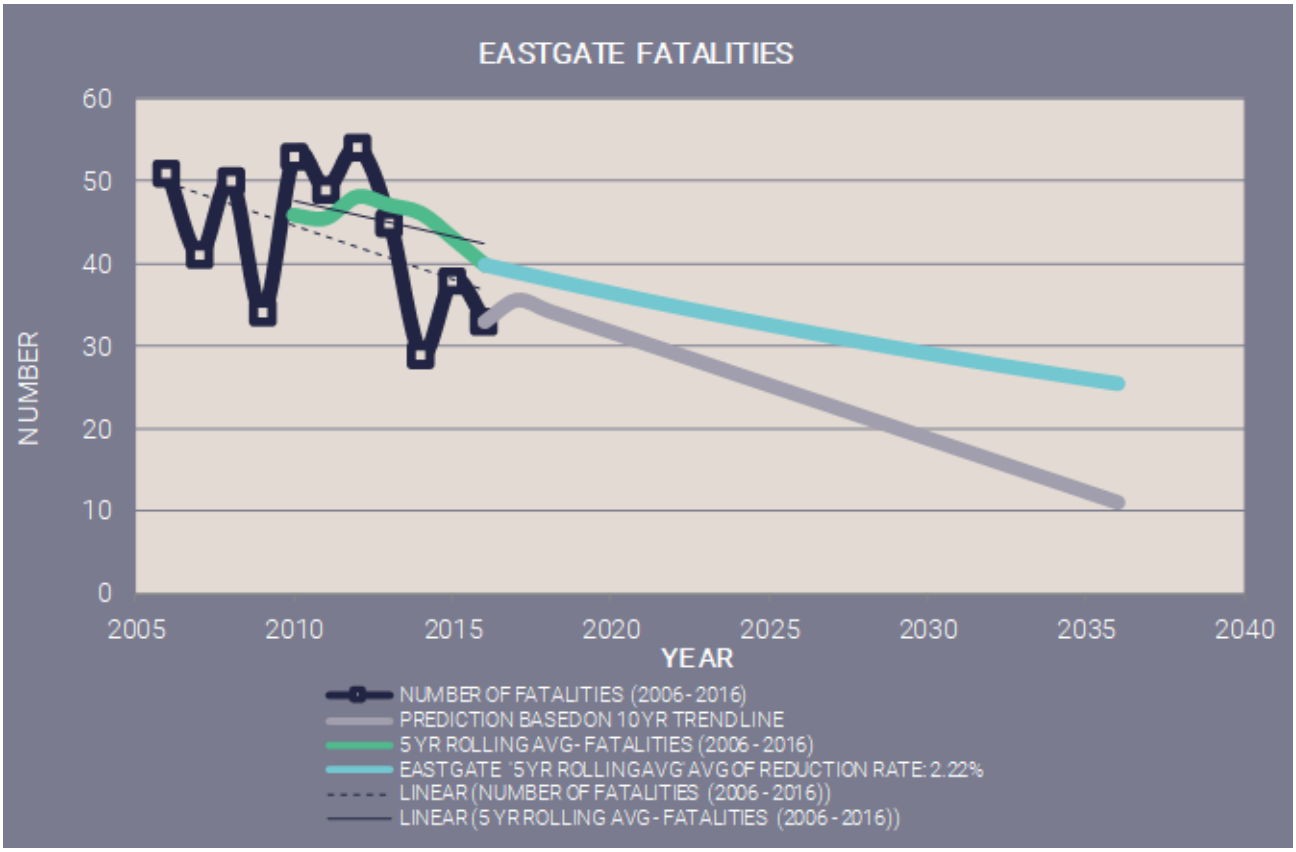


FIGURE 7

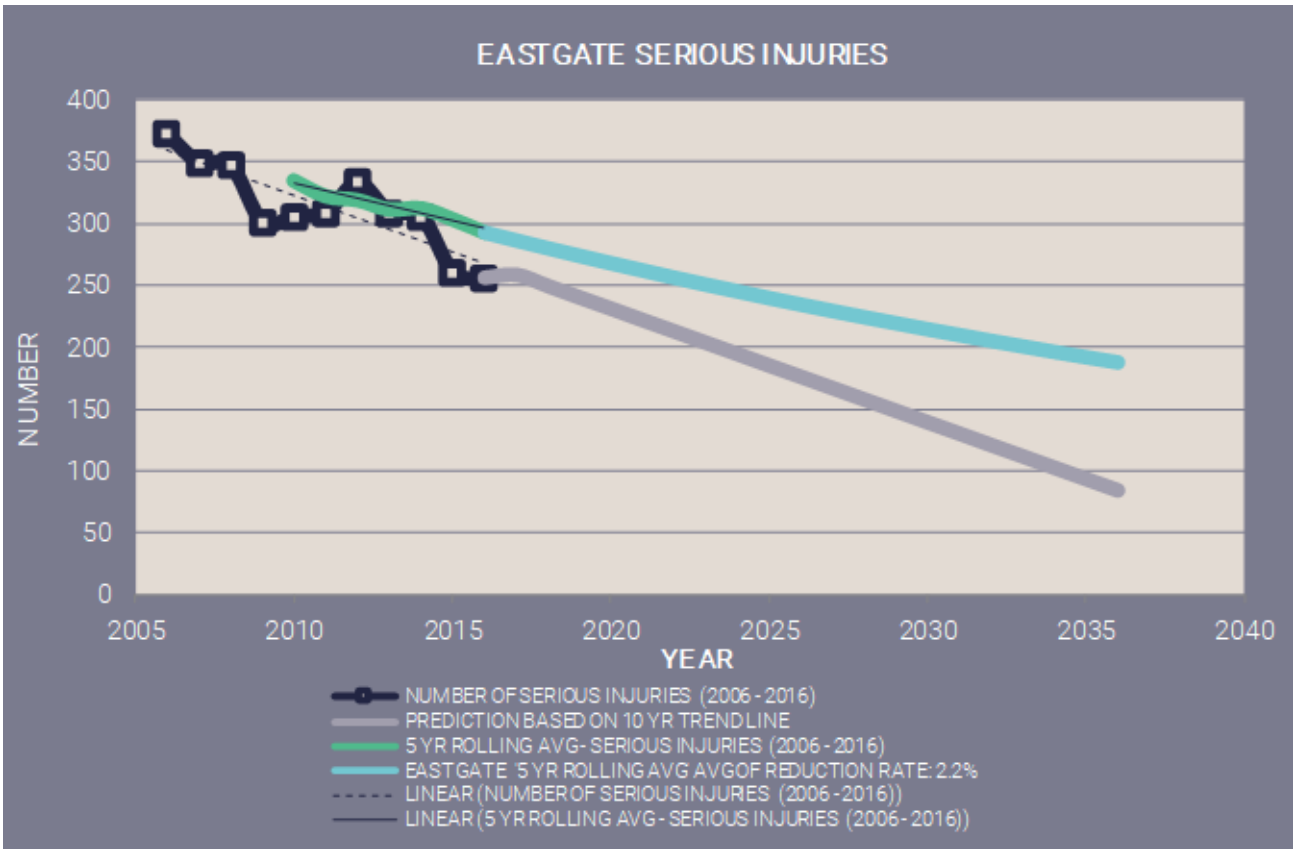


FIGURE 8

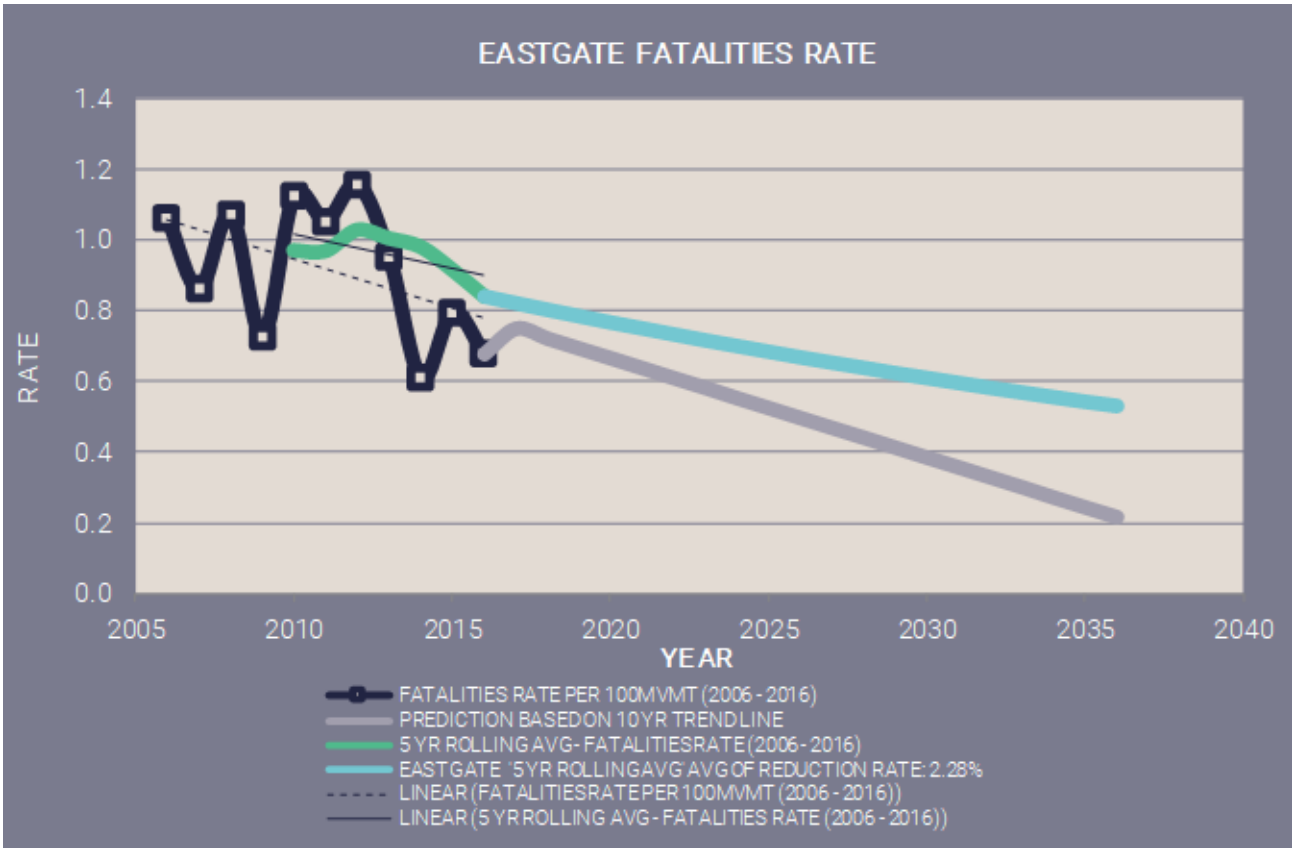


FIGURE 9

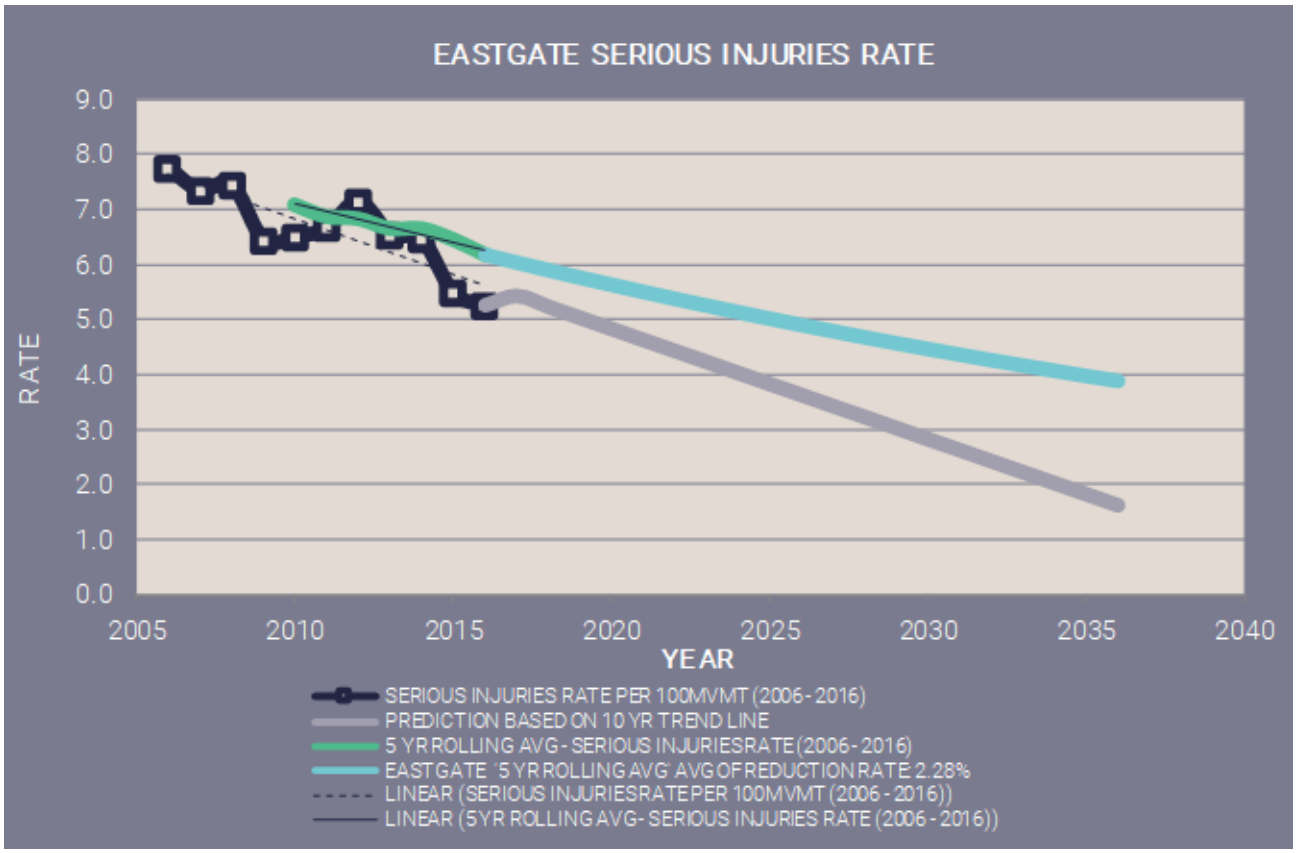
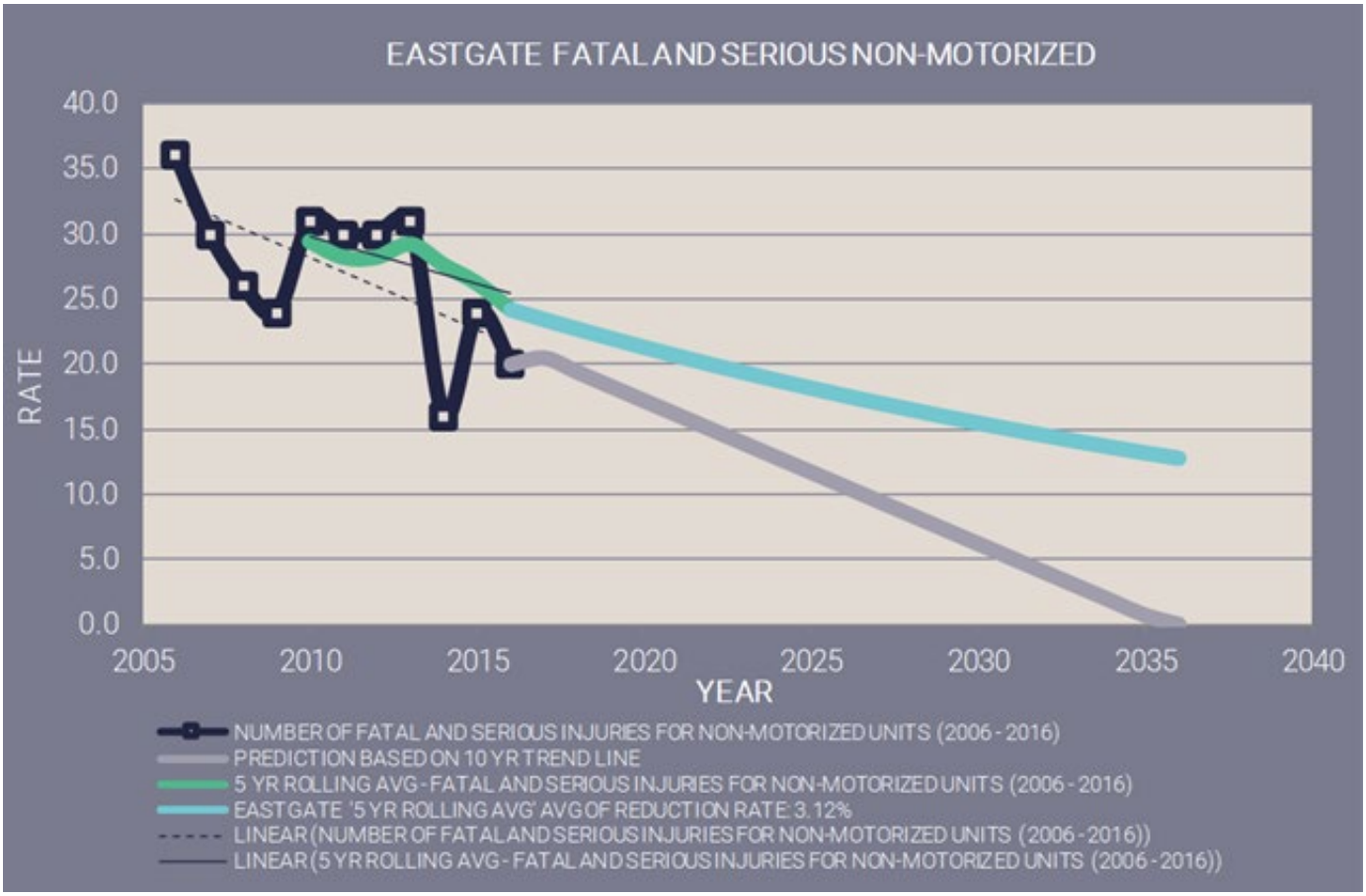


FIGURE 10


EASTGATE FATAL AND SERIOUS NON-MOTORIZED
RATE
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
2005
2010
2015
2020
2025
2030
2035
2040
YEAR
NUMBER OF FATAL AND SERIOUS INJURIES FOR NON-MOTORIZED UNITS (2006 - 2016)
PREDICTION BASED ON 10 YR TREND LINE
5 YR ROLLING AVG - FATAL AND SERIOUS INJURIES FOR NON-MOTORIZED UNITS (2006 - 2016)
EASTGATE '5 YR ROLLING AVG' AVG OF REDUCTION RATE: 3.12%
LINEAR (NUMBER OF FATAL AND SERIOUS INJURIES FOR NON-MOTORIZED UNITS (2006 - 2016))
LINEAR (5 YR ROLLING AVG - FATAL AND SERIOUS INJURIES FOR NON-MOTORIZED UNITS (2006 - 2016))

APPENDIX C: PUBLIC PARTICIPATION PROCESS (PPP)

Eastgate supports early and ongoing public involvement in developing the Metropolitan Transportation Plan, the Transportation Improvement Program and all other program activities. Public involvement is a vital component in transportation planning. Public participation provides citizens a way to voice ideas and needs, access to the decision-making process, and information on the transportation planning process.

Eastgate maintains a Public Participation Process (PPP) to engage the public in developing and updating transportation planning efforts. The PPP provides a variety of means for early and continuing public involvement.

The public outreach methods utilized to update Eastgate's 2040 Metropolitan Transportation Plan (2040 MTP) was consistent with Eastgate's PPP through the following staff activities:

- Eastgate staff kept the agency's Technical Advisory Board (TAC) appraised of initial draft document release;
- The plan and a draft list of projects and major transportation issues were discussed at the December 2017 Citizen's Advisory Board (CAB) meeting;
- A January 5th, 2018 press release was issued to advertise the public involvement period and the availability of the draft report;
- The draft MTP was made available on agency social media outlets such as Facebook, Twitter, and Eastgate's website.

All comments received were addressed by Eastgate and are included in Appendix C.

The public comment period was extended twice, each time for a two-week period. The first extension occurred on March 1st, 2018, to adress the inclusion of the Environmental Justice section of the document. The second extension occurred on June 18th, 2018 to address Air Quality Conformity. Eastgate did not receive additional comments during the extension of the public comment period.

PUBLIC NOTICE
Today's Date: January 5th, 2018
Contact: Ken Sympson, Director of Transportation
Eastgate Regional Council of Governments
234-254-1502, ksympson@eastgatecog.org

PUBLIC COMMENT SOUGHT FOR 2040 METROPOLITAN TRANSPORTATION PLAN UPDATE
Metropolitan Transportation Plan Outlines Transportation Priorities & Projects

(Youngstown, OH, January 5, 2018) – Eastgate Regional Council of Governments invites comment on the 2040 Metropolitan Transportation Plan Update. The plan identifies strategies and projects for maintaining and improving the transportation system over a twenty-year horizon for Mahoning and Trumbull counties. Every five years, Eastgate is required to update this document by identifying trends, working with stakeholders to develop a collective vision and goals, and by recommending strategies.

The 2040 Metropolitan Transportation Plan Update includes a list of 353 projects, resulting in over $632.1 million in infrastructure investment. Projects include roadway resurfacing, bridge replacement, intersection enhancements, technology upgrades, bicycle and pedestrian improvements, and others.

The public is encouraged to comment on the draft until close of business on Friday, February 16th. Comments can be submitted by email to Ken Sympson, Director of Transportation, phone (234) 254-1502, or in-person during normal business hours at Eastgate's office (10th Floor, 100 East Federal Street, Youngstown). More information is available on Eastgate's website: http://eastgatecog.org/home

The document is available here (link: http://eastgatecog.org/docs/default-source/mtp-update/mtp-2040-update.pdf).

PUBLIC NOTICE
Today's Date: March 1st, 2018
Contact: Ken Sympson, Director of Transportation
Eastgate Regional Council of Governments
234-254-1502, ksympson@eastgatecog.org

PUBLIC COMMENT PERIOD EXTENDED FOR 2040 METROPOLITAN TRANSPORTATION PLAN UPDATE

Metropolitan Transportation Plan Outlines Transportation Priorities & Projects

(Youngstown, OH, March 1, 2018) – Eastgate Regional Council of Governments invites comment on the 2040 Metropolitan Transportation Plan Update. The plan identifies strategies and projects for maintaining and improving the transportation system over a twenty-year horizon for Mahoning and Trumbull counties. Every five years, Eastgate is required to update this document by identifying trends, working with stakeholders to develop a collective vision and goals, and recommending strategies to help achieve the vision.

The 2040 Metropolitan Transportation Plan Update includes a list of 353 projects, resulting in over $632.1 million in infrastructure investment. Projects include roadway resurfacing, bridge replacement, intersection enhancements, technology upgrades, bicycle and pedestrian improvements, and others.

The public is encouraged to comment on the draft until close of business on Friday, March 16th. Comments can be submitted by email to Ken Sympson, Director of Transportation, phone (234) 254-1502, or in-person during normal business hours at Eastgate's office (10th Floor, 100 East Federal Street, Youngstown). More information is available on Eastgate's website: eastgatecog.org

You can view the document in its entirety at: eastgatemtp.

PUBLIC NOTICE
Today's Date: June 18, 2018
Contact: Ken Sympson, Director of Transportation
Eastgate Regional Council of Governments
234-254-1502, ksympson@eastgatecog.org

PUBLIC COMMENT PERIOD EXTENDED FOR 2040 METROPOLITAN TRANSPORTATION PLAN UPDATE

(Youngstown, OH, June 18, 2018) – Eastgate Regional Council of Governments invites comment on the 2040 Metropolitan Transportation Plan Update. The plan identifies strategies and projects for maintaining and improving the transportation system over a twenty-year horizon for Mahoning and Trumbull counties. Every five years, Eastgate is required to update this document by identifying trends, working with stakeholders to develop a collective vision and goals, and recommending strategies to help achieve the vision.

The 2040 Metropolitan Transportation Plan Update includes a list of 353 projects, resulting in over $632.1 million in infrastructure investment. Projects include roadway resurfacing, bridge replacement, intersection enhancements, technology upgrades, bicycle and pedestrian improvements, and others.

The public is encouraged to comment on the draft until close of business on Friday, July 2nd. Comments can be submitted by email to Ken Sympson, Director of Transportation, phone (234) 254-1502, or in-person during normal business hours at Eastgate's office (10th Floor, 100 East Federal Street, Youngstown). More information is available on Eastgate's website: http://eastgatecog.org

The document is available here (link: http://eastgatecog.org/mtp2040update

Public Comments:

January 5th, 2018: I went through the 2040 MTP and it looks great. I attached a copy of page 17 showing a spot where some text is overlapping. *Issue resolved.*

Comments from FHWA:
January 25th, 2018: I wanted to confirm what we discussed this morning concerning the Eastgate 2040 draft MTP Update and the EJ analysis.
1) Eastgate will update the EJ Analysis to cover the project list in the MTP Update (including transit projects) as soon as possible. The EJ analysis will be identical in format to the EJ analysis in the 2018-2021 TIP, but covering all 635 projects. For transit projects, there are only capital (improvements/replacements) projects with no route changes. The EJ analysis will be in two sections within an additional chapter to the current draft MTP update – one for the transit projects and the other covering the highway projects. The information will include methodology, data tables and accompanying maps.
2) Eastgate will submit the EJ Analysis for FHWA/FTA review and comment.
3) Once you have received FHWA/FTA comments and incorporated any changes, you will post the additional chapter on your website and extend the public comment period for an additional two weeks.
4) Present the added EJ analysis and any modifications to the document to the Eastgate Board and TAC.
5) Eastgate will update the EJ Analysis to cover the project list in the MTP Update (including transit projects) as soon as possible. The EJ analysis will be identical in format to the EJ analysis in the 2018-2021 TIP, but covering all 635 projects. For transit projects, there are only capital (improvements/replacements) projects with no route changes. The EJ analysis will be in two sections within an additional chapter to the current draft MTP update – one for the transit projects and the other covering the highway projects. The information will include include methodology, data tables and accompanying maps.
6) Eastgate will submit the EJ Analysis for FHWA/FTA review and comment.
7) Once you have received FHWA/FTA comments and incorporated any changes, you will post the additional chapter on your website and extend the public comment period for an additional two weeks.
8) Present the added EJ analysis and any modifications to the document to the Eastgate Board and TAC. *Each item has been addressed.*

Responses to Eastgate's EJ Analysis received March 6th, 2018: The EJ Analysis meets the requirements but you need to detail the public outreach involved. Under "Step 1 – Public Outreach" – It is stated "Eastgate has adopted an aggressive one-on-one approach. Eastgate approaches the communities to inform stakeholders who traditionally tend not to become involved through the regular informational or public involvement process." This would lead one to believe that although you have claimed adopting an "aggressive one-on-one approach," in reality, you are only using the "…regular informational or public involvement process." What are the types of activities that make your "aggressive" and go after the "stakeholders who traditionally tend not to become involved"? Does not have to be lengthy but it should be comprehensive.

Solution: Highly suggest inserting “Appendix 2, EASTGATE’s Public Participation Process” (literally, copy and paste wholesale), or, at a minimum, add the section on p. 15 of the Public Participation Policy in the draft Title VI Plan. *Eastgate added the PPP to the Introduction. Additional language was added in the EJ section on outreach.*

Responses to February 5th, 2018 comments. FHWA is in black, Eastgate is in green. Further comments received by FHWA on March 6th, 2018 are in blue. Eastgate is in green.

Listed below is a typo list and elements that need to be corrected/modified/expanded in this MTP update to avoid being non-compliant with 23 CFR 450. 234. Their correction/ modification or expansion does not require another extension of public involvement and the public comment period. Please send us the revised document reflecting their inclusion once these are completed.
Typo List:
p. 21 – the Exhibit should be “Exhibit I” or else you will have two “Exhibit G”s
p. 63 – exchange the word “industry” for the word “play” on line 11.
p. 67 – 3rd line – “as whown” should be “as shown”
p. 85 – 3rd para, 1st sentence – “…especially considering current economy economic uncertainty.”
p. 130 – 2nd para – “…an EJ filter for the public transit element can also be found on page 55.” – could not find this filter on this page or in that section. What is the correct page number?
p. 131 – last paragraph – it should be “TABLE 22 (not TABLE 21) HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS FOR MAHONING COUNT” and TABLE 23 (not TABLE 22) HIGHWAY ENVIRONMENTAL JUSTICE ANALYSIS FOR TRUMBULL COUNTY.”
p. 132 – It states “EXHIBIT A” SHOWS ALL 271 PROJECTS LISTED IN THE 2040 MTP Update.” But the Exhibit number for the map is “AO” (EXHIBIT A is on p. 7 and is the Eastgate Planning Area map).
Note: These elements must be added or expanded for this update. Again, these corrections/ modifications/ expansions do not require another extension of public involvement and the public comment period. Please send us the revised document reflecting their inclusion once these are completed.
p. 48 – Please add in the sentence “Eastgate’s EJ analysis is contained on pp. 122-146.” or something to that effect.
p. 155 - System Performance Report, paragraph 1, line 1-2: Please make the following changes to the first sentence – “the state’s goal of 1% statewide CY2018 safety annual reduction targets[…]” *Eastgate addressed this comments.*

General: Eastgate needs to provide more than simply defining concepts. They need to provide more detailed information and analysis results for the Eastgate area. Place information shown in the graphics into text and summarize or cite the graphics and how they clarify the information being provided in the document. We need to know what is happening in the Eastgate planning area – details about the transportation elements – both now and in the future and how these factors tie into the planning process. It is recommended to expand the discussions and summarize and cite the graphics in the text, not simply provide graphics with no explanation or tie-in to the document.

1. Eastgate will add the titles of exhibits when referenced and additional information when appropriate as recommended. The document was designed to be easily legible for members and the public, hence further detail on the planning process is available on Eastgate's website if a reader wishes to know more about a specific element of the planning process. – Met minimally.

Consideration of National Planning Factors:

pp. 38-39 Only the briefest coverage and no direct discussion of the National Planning factors themselves. Need to integrate and give details concerning the Planning factors and how they are incorporated into their vision and goals process.

Long and short range strategies/actions that provide for the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

2. The National Planning Factors were incorporated as a best practice from the Transportation Planning Process Briefing Book published by FHWA and FTA and reflects the level of detail in this publication. Eastgate will provide more context in the MTP Update. See vision and goals process below in 4. – Comment remains unresolved – see comment for #4 below.

Need better explanation and more detail as to what is being depicted in the graphics.

3. Eastgate will address. – Met minimally.

Both long and short range strategies/actions that provide for the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

pp. 38-78, pp. 38-39, pp. 40-78 and pp. 67-72 These sections are very general and do not provide the detail about the Eastgate planning process. They need to integrate the discussion from pp. 31-37 on travel demand (need more in-depth detail and discussion in this section to explain how this analysis ties into TIP and Plan development) with the Vision and Goals and then the "Gears." What specific programs are in use or being developed by Eastgate to help these "Gear" elements play their part in system interoperability both now and in the years to come, through 2040?

4. *The 2040 Metropolitan Transportation Plan Update is an update, hence the level of detail is less than the 2040 Metropolitan Transportation Plan. Eastgate works through ODOT for its travel demand model, therefore no modeling takes place at Eastgate. The details of the Update provide context on planning factors utilized by ODOT. Text will be added to clarify that travel demand and planning process are created and maintained by ODOT. In the 2040 Metropolitan Transportation Plan, there is no reference to a vision or goals. Through working with the TAC and structuring the Overall Work Program, it was decided to adopt the National Planning Factors to provide a framework for the Update in order to lay the groundwork for the 2050 Metropolitan Transportation Plan's planning process that will be strengthened by the Overall Work Program. The gears are a way to visualize and conceptualize how the National Planning Factors influence the Overall Work Program.* – Comment remains unresolved. Even though the level of detail may be less, the elements that are being discussed in the update are due full disclosure, clarity, ease of reading and the required detail to make their intent and function known to the audience. While ODOT does perform the modeling for the Eastgate area, the MPO must conduct transportation planning for the study area. ODOT does not conduct the planning process for the Eastgate study area, the MPO does. These are the elements that should be detailed in this section. While it is commendable that Vision and Goals were added in the update, you should explain the underlying reasoning and how they are connected to the National Planning Factors and the Eastgate planning process.

Latest estimates and assumptions for population, land use, travel, employment, congestion, and economic activity.
pp. 15-37 The basic elements are there but throughout each section - need to provide more detail and tie in graphics with text (summarize and cite the information in the graphics) to explain how these elements tie into Eastgate's planning process.
5. The elements provide context as to what is considered in the transportation planning process. Given that Eastgate utilizes ODOT's modelling and that Eastgate has non-competitive funding, the planning process is simple. – Comment remains unresolved. See comment #4.
pp. 34-38 – Explain the meaning of the sentence "Hence, the Travel Demand Model should be interpreted for smart decision-making rather than predicting the future." Exhibits R, S, T and U, and Table 10 still need better incorporation and detail of what points are being shown. Tell us what the graphics say – in words! What is/are the points being made with the data being displayed in the graphics?
The current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan.
pp. 31-37 and p. 84 There needs to be an expanded discussion of travel demand on the Eastgate system and how current data (ODOT and Eastgate) and travel demand modeling results impact project development, assessment and prioritization process.
6. Eastgate utilizes ODOT's model and has non-competitive funding, therefore travel demand does not influence project development, assessment and prioritization process. Eastgate relies on performance measures and available local match for project development. Until there is unmet need, Eastgate will continue its procedures. – Comment remains unresolved.
Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities (e.g., pedestrian walkways and bicycle facilities), and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. This includes due consideration of bicyclists and pedestrians per 23 U.S.C. 217(g).
pp. 67-72, p. 87 Existing and proposed transportation facilities are given only cursory review of their condition at present, let alone in the future. There is no assessment of transit facilities in this regard, except for revenue assessment. there is no needs analysis for any of the modes. There needs to be less definition of the concepts and more details about the existing and proposed transportation facilities.
7. Eastgate will fully consider this comment in the development of the 2050 Metropolitan Transportation Plan. In the Overall Work Program, Eastgate is in the process of developing a Transportation Asset Management Plan that will provide an assessment of highway infrastructure. Eastgate is also working closely with transit agencies as they assess their assets. Eastgate is undergoing through its Overall Work Program a review of existing and proposed transportation facilities, as population decline and minimal increase in travel demand pose obstacles in summarizing future needs. – Comment remains unresolved. Since this is an update these elements should be explained ahead of the next full MTP.

Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods

pp. 67-72, pp. 124-130 The operational and management strategies need to be expanded and provide details as to the current state of the system and future activities to provide for safety and mobility. While Eastgate does have a CMP (US Code, Title 23, CFR Section 450, Sub Part C, Section 450.320) it has not been updated since 2010 (7 years+) and there is very little information provided, not even a link. There is nothing on the current state of congestion in the Eastgate area and up-to-date information on transportation system performance, other than they state they have "conducted several time and delay studies for congested intersections and corridors in the region." What were the results of the studies?

They go one to state "These studies describe corridor conditions, travel movements, time delays, and levels of service." But they do not provide a summary of what and how the CMP ties into the planning process. What are the congestion management strategies they have put forward and how are these integrated into the funding and implementation stages?

They provide a map but do not provide an idea of what is being shown on it. They provide Eastgate's CMP objectives but no indication of what the changes over time have been, especially since the last update in 2010. How is Eastgate provided for congestion mitigation, especially in light of TPM requirements in the near future? CMP steps include 1) defining regional objectives, 2) Develop the CMP Network, 3) Develop Performance Measures, 4) Collect Data/Monitor system performance, 5) analyze congestion problems and needs, 6) Identify and assess strategies, 7) Program and implement strategies and 8) Evaluate strategy effectiveness. FHWA provides a Congestion Management Process Guidebook for assistance at: (https://ops.fhwa.dot.gov/plan4ops/focus_areas/planning_prog.htm).

8. Eastgate concurs with this comment and is addressing it in its Overall Work Program. Eastgate is in transition, given that it is in attainment and is adjusting from a four to five-year review. Hence, the development of any future CMP requires significant scrutiny, particularly as there is virtually no re-occurring congestion, so that it is aligned with the 2050 Metropolitan Transportation Plan. – Comment remains unresolved. Since this is an update these elements should be explained ahead of the next full MTP.

Regarding Safety, they have completed a Safety Performance Report (as appendix B). It is a fairly comprehensive report but there is little discussion of the results and findings so recommend expanding the discussion, summarizing and citing the graphics on pp. 129 and 130. In addition, as a point of clarification

– on pp. 125 and 128, ODOT's targets are the actual numbers (provided below for each performance measure to update the table on pg. 125), not the "statewide 1% annual reduction." The sentence on p. 124 that begins "MPOs may choose to… established DOT statewide safety targets." should read something to the effect "MPOs may choose to establish targets by either agreeing to plan and program projects so that they contribute toward the accomplishment of the stet DOT targets or committing to a quantifiable target for their metropolitan planning area." The next sentence should read "For each CY 2018 performance measure, ODOT has set targets based on a statewide 1% annual reduction for each performance measure and there are numeric targets for each of the Safety performance measures – Fatalities (1,050), Serious Injuries (9,033), Fatality Rate* (0.91), Serious Injury

Rate* (8.01), and number of Nonmotorized Fatal/Serious Injuries (840) With the asterisk indicating the rate per 100 million vehicle miles traveled.
Eastgate should be assessing and establishing a baseline that leads them to support ODOT's targets? The ODOT CY 2018 target numbers are provided to update the table. At this point, Eastgate should use the current assessment (baseline) and explain why/how these numbers lead them to support ODOT's target numbers. Recommend expanding the discussion and summarize and cite the graphics in the text. The table on p. 128 is the same as the one on p. 125 and should be showing Eastgate's information.
9. Language will be modified to reflect recommendations. – *Comments on updated draft language provided by Laura Toole (attached and below).
Consideration of the results of the congestion management process in TMAs
pp. 71-72 While Eastgate does have a CMP (US Code, Title 23, CFR Section 450, Sub Part C, Section 450.320) it has not been updated since 2010 (7 years+) and there is very little information provided, not even a link. There is nothing on the current state of congestion in the Eastgate area and up-to-date information on transportation system performance, other than they state they have "conducted several time and delay studies for congested intersections and corridors in the region." What were the results of the studies? They go one to state "These studies describe corridor conditions, travel movements, time delays, and levels of service." But they do not provide a summary of what and how the CMP ties into the planning process. What are the congestion management strategies they have put forward and how are these integrated into the funding and implementation stages? They provide a map but do not provide an idea of what is being shown on it. They provide Eastgate's CMP objectives but no indication of what the changes over time have been, especially since the last update in 2010. How is Eastgate provided for congestion mitigation, especially in light of TPM requirements in the near future? CMP steps include 1) defining regional objectives, 2) Develop the CMP Network, 3) Develop Performance Measures, 4) Collect Data/Monitor system performance, 5) analyze congestion problems and needs, 6) Identify and assess strategies, 7) Program and implement strategies and 8) Evaluate strategy effectiveness. FHWA provides a Congestion Management Process Guidebook for assistance at: (https://ops.fhwa.dot.gov/plan4ops/focus_areas/planning_prog.htm).
10. Please see number 8. – Comment remains unresolved. Since this is an update the transition should be explained ahead of the next full MTP.
Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters.
pp. 79-91, pp. 57-58 The Funding chapter needs to provide more detail on the process used to select present and future transportation improvements in the region. It is recommended to expand the discussion and summarize and cite the graphics in the text, not simply provide graphics with no explanation. The forecast methodology section needs to be simplified and made to be more understandable for the variety of readers. For example, expand the discussion of the current data (from ODOT and Eastgate data sources) and travel demand modeling results and how they influence/impact project development, assessment and prioritization processes (in this section and in the discussion on pp. 31-37). Provide an

overview of the funding sources and the types of projects involved (in text). Explain and provide detail on the short, medium and long term forecasts and how they affect the planning prioritization process.
Explain the graphic on p. 91 in detail and provide a table of revenue minus costs ($0 or greater). Provide information such as how many transit projects are there? Correct the apparent typo “87% Maintenance and Operations” to 67%.
11. Language will be modified to reflect recommendations. As previously stated, travel demand, assessment, and prioritization are not included in the Update because there is no current need. – Comment remains unresolved. The planning process, forecasting, project selection, funding sources, numbers and types of projects, etc. should be explained, regardless of it being viewed as not having a “current need.” Explain the graphic on p. 91 in detail and provide a table of revenue minus costs ($0 or greater). Provide information such as how many transit projects are in the program.
Transportation and transit enhancement activities
Transportation pp. 73-78 Transit - pp. 51-56, p. 83 and p. 87 Transportation – Only covered in the “Technology” section and little information is provided as to what Eastgate is currently working on possible future endeavors. Transit - Good discussion - need to enhance “readability” of graphics and tie them into the text.
12.Thank you for the comment. Eastgate relies on its planning partners for bringing forth future endeavors. – Met minimally
In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates.
pp. 93 – 115 Easy to read. Would like to see totals for each table/list.
13. Text will be modified to reflect recommendation. - completed
A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level
pp. 60 Good discussion but as Eastgate broached the subject - What are they doing to promote/advocate for the ecosystem approach. Need to explain the graphic and lace it in text.
14. Eastgate will further develop the ecosystem approach in the Overall Work Program for the 2050 Metropolitan Transportation Plan. Eastgate’s ecosystem approach is available through the Environmental Work Program, which may be incorporated into the Overall Work Program for the MPO at a future date. Comment remains unresolved. Since this is an update these elements should be explained ahead of the next full MTP.
A financial plan that demonstrates how the adopted transportation plan can be implemented (fiscal constraint)
pp. 79 – 91 Recommended Fiscally Constrained MTP section – develop text to explain/ reflect the information in the tables/graphics. expand the discussion and provide more details. Explain the graphic on p. 91 in detail and provide a table of revenue minus costs ($0 or greater). Provide information such as how many transit projects are there? Correct the apparent typo “87% Maintenance and Operations” to 67%.
15. Eastgate will address this comment. Comment remains unresolved. See comment #11.

Adequate public involvement consistent with public participation plan
p. 133, Appendix D This should be a component of the body of the Plan document, not just an appendix. While it is admirable that Eastgate updated its public participation process, (and web site link is provided), Eastgate needs to present/summarize its Public Involvement process. How are Civil Rights, EJ, ADA, etc. incorporated into the PI process (even for this plan update - i.e. meetings and reviews by committees and board, etc)?
16. The Public Participation Process is in draft form during the development of the 2040 Metropolitan Transportation Plan Update and hasn't been approved. Eastgate will provide more detail on the draft process and may amend the plan when the Public Participation Process is approved. Comment remains unresolved. Current statement is not acceptable and is non-compliant as this section is missing. Explain what Eastgate has been doing in the interim, what are the elements of your PI process? Otherwise, you are in noncompliance with the requirements of 23 CFR 450.234.
In areas of air quality concern (maintenance or nonattainment), a conformity determination by MPO.
p. 59 Good discussion and summary.
Includes consideration of all other federal laws per MPO's self-certification including Title VI and EJ. Specifically, an EJ analysis that meets the technical definition of EJ (low income or minority)
p. 46 Currently, there is minimal discussion of EJ/Civil Rights with the exception of ADA discussion on
p. 46 (graphic should be made more readable and explained in the text) in the document. Eastgate will submit the EJ analysis by the end of the week of January 29th and then after FHWA/FTA's review, will post the additional chapter on their website and extend the public comment period for an additional two weeks. They will present the added EJ analysis and any modifications to the document to their Board and TAC. - EJ Analysis meets the requirements but you need to detail the public outreach involved. Under "Step 1 – Public Outreach" – It is stated "Eastgate has adopted an aggressive one-on-one approach. Eastgate approaches the communities to inform stakeholders who traditionally tend not to become involved through the regular informational or public involvement process." This would lead one to believe that although you have claimed adopting an "aggressive one-on-one approach," in reality, you are only using the "…regular informational or public involvement process." What are the types of activities that make your "aggressive" and go after the "stakeholders who traditionally tend not to become involved"? Does not have to be lengthy but it should be comprehensive.
A copy of the comments made on individual pages will be provided with these comments.
17. Eastgate will address. -Some of these remain unresolved and are included with the typo list above.

*FHWA Comments on TPM in Eastgate's 2040 MTP
References, including pages and paragraphs are from the original draft for all sections except for the System Performance Report

General:
• Since the MTP is due prior to May 27, 2018, no changes are needed for approval of the MTP.

Good things that were included related to TPM:

- Megaregions, p. 44: Inclusion of sentence that indicates Eastgate will follow guidance from FHWA and ODOT in setting targets for performance measures for freight movement on the interstate system.
- Recommended Fiscally Constrained MTP, p. 91: Good discussion since performance measure areas are addressed in the paragraph.
- System Performance Report, p. 155 – 156: Inclusion of activities and projects.
- System Performance Report, p. 158 – 160: Inclusion of data projections

Changes that would need to be made to be compliant with the regulations:

- Why update the MTP, p. 14, first full paragraph, line 10: Please change the word "measures" to "targets" since the federal performance measures are established in the final rules, not by MPOs.
- Safety, p. 63, paragraph 2: Please change the word "measures" to "targets."
- Performance Measures, p. 117, paragraph 2, line 9: Please change the word "measures" to "targets."
- Performance Measures, p. 117, paragraph 2, line 9-11: Please change the last sentence to the following to more accurately capture the requirements. "Eastgate must describe the performance measures and targets in the MTP; evaluate the condition and performance of the transportation system for targets; and describe anticipated effects of the TIP toward achieving the performance targets."
- Performance Measures, p. 118, paragraph 2, line 3-4: ODOT's targets are based on a 1% reduction; however, the actual CY2018 safety targets are 1,051 fatalities; 9,033 serious injuries; 0.91 fatality rate; 8.01 serious injury rate; and 840 non-motorized fatalities and serious injuries. Please adjust the sentence to reflect this.
- System Performance Report, p. 155, paragraph 1, line 1-2: Please make the following changes to the first sentence – "the state's goal of 1% statewide CY2018 safety annual reduction targets[…]"

Changes that would be good to make, but do not impact compliance:

- Why update the MTP, p. 14, first full paragraph, line 9: Please change the word "measures" to "management."
- Pedestrian and Bicycle Facilities, p. 48, paragraph 3: Consider including information on the non-motorized safety measure and related target like the first bullet in the "good things" section of these comments.
- Park and Rides, p. 56: Consider including information on the PHED and non-SOV measures and related targets like the first bullet in the "good things" section of these comments.
- Safety, p. 63, paragraph 2: Please indicate there are also federal requirements that performance management must be included in the transportation planning process.
- Safety, p. 63, paragraph 2: Consider including information on the safety measures and related targets like the first bullet in the "good things" section of these comments.
- System Performance, p. 67-72: Consider including information on the bridge, pavement, and reliability measures and related targets like the first bullet in the "good things" section of these comments.
- Recommended Fiscally Constrained MTP, p. 91: This was good discussion, but could be taken a step further and specifically mentioned the performance measures and targets that were used in assessing the performance of the transportation system.

- Performance Measures, p. 116, paragraph 1, line 3: Please delete “with slight modification.”
- Performance Measures, p. 117, paragraph 1, line 5: Please change the word “measures” to “goals” or another word as the sentence currently reads “The implementation of these performance measures will occur through FHWA-established measures.”
- Performance Measures, p. 117, paragraph 1, line 6: Please change “targets for federal-aid highway funding recipients” to “establishment of targets by State DOTs and MPOs.”
- Performance Measures, p. 117, paragraph 1, line 6-7: What does “funding for recipients to develop strategic and/or tactical plans” refer to?
- Performance Measures, p. 117, paragraph 2, line 1: Please specify states are required to establish targets in addition to incorporating information in the long-range plan.
- Performance Measures, p. 117, paragraph 2, line 2-4: Please delete the sentence “The final rule on each of the seven areas prescribes a process for the state DOTs and MPOs to establish and report on targets, plans, progress, and accountability and transparency.” This information is contained more in the agreements between MPOs, State DOTs, and transit agencies and in the planning final rule than in the final rule for the measures. Additionally, there are not measures for all of the 7 national goals.
- Performance Measures, p. 118, paragraph 1: Consider moving this paragraph after the paragraph starting with “At the time […]” since it describes measures that are additional to the federal performance measures.
- Performance Measures, p. 118, paragraph 1: Please clarify that the “performance measures consistent with the FAST Act” are additional performance measures beyond the federally established measures. Please also clarify how these measures are consistent with the FAST Act.
- Performance Measures, p. 118, paragraph 2, line 1-2: All final rules have been published, but MPOs are only required to address safety before May 20, 2019. Please edit this sentence to clarify this.
- Performance Measures, p. 118, paragraph 2, line 2: Please clarify that ODOT calendar year 2018 safety targets were established in August 2017.
- Performance Measures, p. 118, paragraph 2, line 6: What emphasis areas is this sentence referring to?
- Performance Measures, p. 118, paragraph 2, line 11: Please clarify that supporting the state’s targets means that Eastgate agrees to plan and program projects so that they contribute toward the accomplishment of ODOT’s CY2018 targets.
- Performance Measures, p. 118, paragraph 2, line 11: The date of Eastgate’s target establishment is incorrect here.

Overall Work Program, p. 119, line 1: Please clarify Eastgate adopted targets and is implementing performance management.

Comments from FTA:
January 25th, 2018: Page 17 provides a nice brief discussion on the dilemma of an expanding urbanized area with declining population and the negative externalities including those that are transport-related. Yet, there is nothing concrete in the plan on the extent in which this problem is going to be addressed.
18. Eastgate will address through the Overall Work Program and the development of the 2050 Metropolitan Transportation Plan. Eastgate does not provide transit planning services, rather it works with transit providers. #18) Consider adding narrative related to the following in the updated MTP as to how an improvement can be made in the future MTP: In accordance with 23 CFR 450.324(j), it is recommended that scenario planning be integrated into future updates of the MTP beyond the existing investment options. Scenario planning evaluates the effects of alternative policies, plans and programs on future transportation and land uses for the region. This includes population and employment projections based on different assumptions for geographic distribution and densities. Selection of the preferred scenario should be based on targeted improvements to baseline conditions for the performance measures identified in 23 CFR 450.306(d). The planning partners are also encouraged to base the preferred scenario on improvements in comprehensive locally-determined metrics that address the planning factors at 23 CFR 450.306(b) and the Partnership for Sustainable Communities goals/ objectives.
Top of page 27, 1st sentence: Narrative reports percentages of households with vehicles but Table 7 shows the same information as the percentages without vehicles.
19. Comment will be addressed.
Page 27, 3rd paragraph: The last sentence is incomplete.
20. Comment will be addressed.
Page 28, Exhibit N: The last bullet "commute" should be "commuting."
21. Comment will be addressed.
Page 31: Suggest reporting on per capita VMT (PCVMT) trends as well. The metric provides further insight into performance related to the planning factor of promoting energy conservation. Additionally, PCVMT relates to the planning factors of transport M&O efficiency, resiliency and reliability in terms of how the system in concert with land use has/will minimize(d) the need to travel.
22. Eastgate is working with ODOT as ODOT develops its VMT measures.
Pages 45-46, Mobility section: The troubling statistic is provided that household transportation expenditures in the region are far beyond the level that is considered affordable. Page 51-2 discusses the struggle of transit operators to sufficiently serve the region and mentions transited related plans. However, apart from the MPO monitoring these sub-plans and encouraging transit-oriented development, the extent in which these problems will be addressed through plan implementation is unclear.
23. Eastgate will address through the Overall Work Program and 2050 Metropolitan Transportation Plan. Eastgate currently works in this space through its function as a Council of Governments and Economic Development District, hence it is not reflected in the Update for the MPO.

Page 46, Environmental Justice: A brief discussion is provided on the methodology used in considering environmental justice. However, there is not any analysis on the estimated impact to protected populations as a result of the plan.

24. Comment will be addressed. #24) Consider adding narrative related to the following in the updated MTP as to how an improvement can be made in the future MTP: It is recommended that the MPO improve transparency to the public in its environmental justice benefits and burdens analysis on impacts of both the existing transportation system and planned projects to minority and low income populations. This should include examination of travel times by mode to both employment and community amenities for these populations compared to the overall population. An example of best practices can be found in the Northwestern Indiana Regional Planning Commission (NIRPC) 2040 Comprehensive Regional Plan. Additionally, the proportion of these populations residing within a set distance of limited access highways should also be analyzed for disparities similar to the methodology used in the draft Minnesota 20-Year State Highway Investment Plan.

Page 55 Rideshare section: In the third to last sentence, "is" should be inserted between "which" and "operated."

25. Comment will be addressed.

Page 57 Resilience section: "CHG" should be "GHG." Discussion could include provisions on the extent in which GHG's will be reduced through plan implementation.

26. Comment will be addressed.

Page 59, Air Quality Conformity section: Discussion could include the extent in which the plan will impact/reduce criteria air pollutants.

27. Eastgate concurs with the comment and will review and address through the Overall Work Program.

Pages 61 and 62, Energy and Land Use sections: Information is provided on how the plan encourages policies to reduce the demand to travel using non-renewable resources. This could be improved to quantify improvements in related metrics expected as a result of plan implementation.

28. Eastgate concurs with the comment and will review and address through the Overall Work Program.

Page 71, CMP: It is mentioned that there will be future CMP updates identifying the cause of congestion, assessing mitigation strategies/alternatives, evaluating improvements, and integration of TSMO/TDM. It is assumed all of these things are already in the existing CMP. It would be beneficial to provide clarity on how these actions will be different from before based on experiences in recent years to improve the CMP.

29. Please see earlier comments on CMP.

Page 83, Transit section: Suggest providing the name of the FTA Section 5339 program listed.

30. Comment will be addressed.

Page 85, top of page: Portion of previous sentence is repeated.

31. Comment will be addressed.

Page 79-115, Funding: It is stated at the top of page 79 that the demand for funds is greater than supply. Subsequent pages provide system-level projections of revenues by year and the totals. The grand total of expected revenue is about $1.8 billion. More than 20 pages of expected costs by project are listed by year. Page 91 provides a snapshot which includes a

total of 353 projects costing $632.1 million and implies the plan is constrained. Thus, about 35 percent of the revenues are accounted for by costs in the plan. It is unclear how the financial plan is adequate to operate and maintain the system [23 CFR 450.324(f)(11)(i)] given the shortfall in programmed projects/costs and the contrasting assumption that needs are greater than expected revenues.

32. Comment will be addressed. Eastgate is in the process of developing a portal for project identification as well as communication plan in order to solicit new projects. Staff changes at partner planning agencies reduced the number of projects traditionally received by Eastgate for the Update. Alignment of revenues and need will be addressed in the 2050 Metropolitan Transportation Plan. #32) In accordance with 23 CFR 450.324(f)(11), the current MTP update should add other proposed major capital projects and non-regionally significant investment projects. Alternatively, the additional project costs can be generalized into investment categories. As a result, the total project or system-level estimates of costs should at least be equal to expected revenues. This should be accompanied by rationale as to why it is reasonable to conclude that there is sufficient funding to operate and maintain the transport system.

Pages 79-115, Funding: There is brief discussion on page 91 on evaluating/selecting projects. Public transparency could be improved by describing in detail the performance-based mechanism that is used during this process and how it was selected amongst others. Benefit-cost analysis is suggested.

33. Eastgate concurs. Eastgate is in the process of developing these mechanisms through performance measures. However, funding remains non-competitive. Benefit-cost analysis will be considered with new capacity projects. #33) (also related to CMP #'s 8, 10, 29) Consider adding narrative related to the following in the updated MTP as to how an improvement can be made in the future MTP: In accordance with 23 CFR 450.324(g)(2) (MTP) and 23 CFR 450.322 (CMP), it is recommended that the MPO reevaluate and improve its procedures for selecting and prioritizing major capital investment projects in the MTP. The chosen methodology should more transparently demonstrate inclusion of the CMP and performance measures as part of decision-making and integrate comprehensive/conventional benefit-cost analysis or a similar methodology to rate and rank proposed projects.

Pages 116-118, Performance-Based Planning: The FTA transit asset management final rule was issued on 7/26/16 (49 CFR 625 and 49 USC 5326). Per 23 CFR 450.340(f), a plan adopted after this date must reflect the performance-based provisions of 23 CFR 450. Since the expected plan adoption is before 7/26/18, it would be prudent to at least discuss progress to date and forthcoming by the planning partners in coordinating planning for transit asset management. Similar information should be provided for transit safety provisions pursuant to 49 USC 5329 even though a final rule has not been issued.

33. During the development of the draft Eastgate received on transit asset management plan. Transit asset management plans will be fully incorporated by the 2050 Metropolitan Transportation Plan.

*F*ebruary 7th, 2018:

The transit EJ section uses mapping and analysis to depict transit routes in association with population distributions based on race and income. Page 56 of the MTP states: According to 2015 ACS estimates, in Mahoning County 96.0% of minority populations and in Trumbull

County 81.6% of minority populations have access to these services…. According to 2015 ACS estimates, 86.8% in Mahoning County and 65.7% in Trumbull County of low-income populations have access to fixed-route and ADA all access. Low-income is defined as at or below the per person poverty rate. However, the table on page 58 shows the percentage of minority population served by fixed route and ADA in Trumbull County as 0%. It would helpful to include in the analysis/narrative, comparable data for the total populations from the tables, to make the point that there is better transit coverage for protected persons. *Each item has been addressed.*

The transit and highway EJ analysis could be improved by graphically depicting differences in travel times by the respective modes to major amenities/employment centers for protected populations against those times for the overall population. This could then be supplemented with analysis identifying concerns and demonstrating how the MTP is addressing them. An example of this is in NIRPC's MTP, Chapter II: Transportation section, pp. II-62 to II-77 (http://www.nirpc.org/wp-content/uploads/2017/01/ch.2_transportation.pdf). *Each item has been addressed.*

Performance measures could be used to track how the transportation and land use planning process together is improving conditions for minorities and low-income individuals. Suggested measures include: Gini coefficient (income disparity); Dissimilarity Index (racial segregation); proportion of protected populations residing adjacent to expressways compared to the overall population (noise/emissions impacts). Transparency of the analysis could be improved by elaborating on the consequences for these groups due to the chosen population and employment disbursement scenario of the MTP. *Each item has been addressed.*

APPENDIX D: AIR QUALITY ANALYSIS

Introduction

This section of the *2040 MTP Update* documents the air quality procedures and requirements that were complied with and were essential in demonstrating conformity to the SIP for achieving and maintaining NAAQS. This documentation is intended to substantiate the air quality conformity assumptions and analyses performed by ODOT's Division of Modeling and Forecasting, and Eastgate. The air quality analyses have determined the conformity status for the agency's *2040 MTP Update*, the determination of the conformity of the existing FY 2018-2021 TIP, and for the new FY 2020-2023 TIP which will be approved on July 1, 2019.

Collaboration for Eastgate's *2040 MTP Update* air quality conformity process was addressed through coordination with the U.S. EPA, OEPA, Ohio-FHWA, ODOT Central Office Division of Modeling/Forecasting and the Division of Statewide Planning/Research, and Eastgate. On June 8, 2018, an air quality interagency e-mail was sent between the above-named agencies, outlining Eastgate's 2040 MTP Update adoption and a new conformity finding. The purpose of the e-mail was to have concurrence from the group about Eastgate's air quality conformity process regarding the latest planning assumptions, emission modeling, conformity analyses years, plan schedule, public review and final plan approval timelines. The group confirmed the 8-Hour Ozone MTP and TIP Air Quality Conformity Parameters as shown below in **FIGURE 1.**

FIGURE 1

ATTAINMENT STATUS	1997 8-Hour Ozone Standard Maintenance Area
SIP STATUS	SIP Redesignation and Maintenance Plan Approval – June 15, 2018 72 FR 3290
8-HOUR GEOGRAPHY	Mahoning, Trumbull (within Eastgate MPO) & Columbiana Counties, OH
CONFORMITY TESTS	8-Hour budget tests of Eastgate *2040 MTP Update*; FY 2018-2021 and FY 2020-2023 TIP analyses year networks
ANALYSES YEARS	2018 Budget Year; 2020 Interim Year; 2030 Interim Year; 2040 Plan Horizon Year

Methodology

On-Road Emission Estimations: Eastgate utilizes a regional travel demand forecast model to simulate traffic in the area and to forecast traffic flows for given growth expectations. The models are primarily used as a long-range planning tool to evaluate the transportation system, including determination of locations where additional travel capacity may be needed and to determine the infrastructure requirements necessary to meet that need. It is also used as a tool for air quality purposes to estimate the total emissions of pollution caused by vehicles in the area.

The ozone-related portion of this air quality analysis has to demonstrate that daily VOC and NOx emissions from mobile sources will not exceed those established in the budget contained in the SIP for ozone, which sets the allowable limits for each pollutant in the Mahoning-Trumbull-Columbiana area.

Eastgate and ODOT are jointly responsible for travel demand modeling and air quality analysis for the Eastgate area. In January 2017, forecasted variables were approved as inputs to the model. In May 2018, ODOT updated the travel demand model. The air quality analyses documented in this appendix involve the use of the travel demand and emissions models to analyze future regional mobile source emissions. Trip tables have been created using the latest planning assumptions and are based on the most recent forecasts of land use and socioeconomic data produced by Eastgate.

Results

FIGURE 2 shows the results of the MOVES2014a analysis for the entire Mahoning-Trumbull-Columbiana ozone non-attainment area. This analysis must show that VOC and NOx emissions from mobile sources will not exceed those established in the budget contained in the SIP, which sets the allowable limits for each pollutant. **FIGURE 2** confirms ozone emissions do not exceed the budgets for either VOC or NOx.

To determine mobile source impacts on regional ozone all non-exempt projects have been coded into the regional transportation plan travel demand model networks for the analysis year of 2040. The projects coded in the 2040 network are listed in **FIGURE 3**.

FIGURE 2

MAH-TRU-COL MOBILE SOURCE OZONE EMISSIONS FORECASTS 1997 8-HOUR STANDARD OZONE BUDGET TESTS				
	2018 BUDGET	2020 EMISSIONS	2030 EMISSIONS	2040 EMISSIONS
EASTGATE MPO				
VOC		8.169	4.546	3.012
NOx		8.49	3.705	2.077
COLUMBIANA COUNTY				
VOC		1.393	0.776	0.529
NOx		2.143	0.900	0.529
TOTALS				
VOC	10.36	9.562	5.322	3.541
NOx	13.29	10.633	4.605	2.606

Note: Columbiana totals include off-model portions of Mahoning and Trumbull Counties

FIGURE 3

THE 2040 NETWORK INCLUDES ALL EXISTING FACILITIES PLUS THE FOLLOWING PROJECTS:		
COUNTY	PROJECT NAME	PROJECT DESCRIPTION
TRU	SR-11 & Niles-Vienna RD Interchange	New Interchange
TRU	SR-82 Southern Beltway	New Southern Beltway
TRU	IR-80 & SR-304 Interchange	New Interchange

Youngstown MPO Transportation Plan Update Air Quality Conformity Interagency Consultation

Attainment status: 1997 8-Hour Ozone Standard Maintenance Area
SIP Status: SIP Redesignation/Maintenance Plan approval – 6/15/07 72 FR 3290 1997
Ozone Geography: Mahoning, Trumbull (Eastgate MPO) & Columbiana Counties, OH

The Eastgate MPO is completing its five-year Transportation Plan update, with a June 30, 2018 MPO Board approval. The Plan horizon year is 2040. The Eastgate region is a US EPA 1997 Ozone maintenance area. Pursuant to FHWA's April 23, 2018 a new US DOT conformity determination is required for the Updated 2040 Transportation Plan and existing 2018 – 2021 Transportation Improvement Program.

Interagency consultation topics

- Latest planning assumptions
    - On January 17, 2017, Eastgate submitted the base year (2010) variables and projected variables to ODOT central office planning. Projected years included 2015, 2020, 2025, 2030, 2035, and 2040. A shapefile of Eastgate's traffic zones was also included. US Census data was used as well as the QCEW. Eastgate's transportation model is divided into 755 TAZ's. Eastgate collects the following data for each TAZ.

- Population
- Housing Units
- Labor Force
- Vehicles
- Income
- Hotel Rooms
- Employment – by sector
- School Enrollment

    - Spoke with ODOT central office planning on 4/27 - transit and roadway network update is current

- Latest emission modeling
    - Conformity analyses will utilize MOVES2014a
- Conformity tests – 1997 Ozone SIP budgets tests
- Analyzed, regionally significant projects list – 2040 MTP non-exempt projects listed in 2031- 2040 conformity years:
    - SR 11 and Niles Vienna Road Interchange - construct new interchange along SR 11 near Niles Vienna Road
    - SR 82 Southern Beltway - construct southern portion of the SR 82 Beltway
    - IR 80 and SR 304 Interchange - construct new interchange along IR 80 at SR 304
- Conformity Analysis/Determination schedule

- Eastgate Board Transportation Plan Update (Initial) Approval – 4/30/2018
- AQ conformity runs - ODOT central office planning is currently working on Eastgates AQ conformity runs and anticipated a two-week time frame for completion. Tentative completion date has been identified by 5/21/2018.
- Final Eastgate Conformity documentation recording emissions analysis methodology (Eastgate modeled area and Columbiana non-modeled area) and results.
- Upon completion of the Conformity Analysis/Determination Eastgate will incorporate the results into the document. Tentative completion date has been identified by 5/25/2018.
- Transportation Plan Public Involvement effort to review conformity results
- Eastgate will then follow its Public Participation Process and provide for a two-week public review period. Tentative two-week public review period would run from 5/28/2018 thru 6/11/2018.
- Final Transportation Plan Approval and Eastgate Transportation Plan/2018 – 2021 TIP Conformity determination
- Eastgate will expedite board approval with tentative approval date of 6/30/2018. Upon adoption, forward to ODOT/FHWA/EPA for approval, which is estimated to occur by 7/02/2018.

• Conformity Analysis Years
2020 1st Analysis Year (Current TIP Year)
2030 Interim analysis year
2040 Plan horizon year

FIGURE 4

1997 8-HOUR STANDARD OZONE BUDGET TESTS				
	2018 BUDGET	2020 EMISSIONS	2030 EMISSIONS	2040 EMISSIONS
EASTGATE MPO				
VOC				
NOx				
COLUMBIANA COUNTY				
VOC				
NOx				
TOTALS				
VOC	10.36			
NOx	13.29			

From: Dave.Moore1@dot.ohio.gov <Dave.Moore1@dot.ohio.gov>
Sent: Friday, May 11, 2018 10:10 AM
To: Ken Sympson <KSympson@eastgatecog.org>; Nino.Brunello@dot.ohio.gov; leigh.oesterling@dot.gov
Subject: FW: Eastgate Air Quality Conformity Interagency Consultation

Ken,

Reviewing the email stream, appears all interagency consultation agencies concur with Eastgate's approach for conducting the 1997 Ozone standard conformity analysis for the Eastgate 2040 Transportation Plan Update and 2018-2021 TIP. Please incorporate these consultation outcome in the conformity documentation and work with Nino to complete the analyses.

Thanks
DM

From: Maietta, Anthony [mailto:maietta.anthony@epa.gov]
Sent: Thursday, May 10, 2018 10:36 AM
To: Stemen, Carmen (FHWA) <carmen.stemen@dot.gov>; Ken Sympson <KSympson@eastgatecog.org>
Cc: Maleski, Michael <Michael.Maleski@epa.ohio.gov>; Arkell, Reginald (FTA) <reginald.arkell@dot.gov>; Mehlo, Noel <noel.mehlo@dot.gov>; Oesterling, Leigh <leigh.oesterling@dot.gov>; Moore, David <Dave.Moore1@dot.ohio.gov>; Brunello, Antonino <Nino.Brunello@dot.ohio.gov>; Stephen Zubyk <SZubyk@eastgatecog.org>; James Kinnick <jkinnick@eastgatecog.org>; Mehlo, Noel <noel.mehlo@dot.gov>
Subject: RE: Eastgate Air Quality Conformity Interagency Consultation

EPA concurs as well.

Thanks Carmen and everyone,

-Tony

Anthony Maietta
EPA Region 5
(312) 353-8777
maietta.anthony@epa.gov

From: Stemen, Carmen (FHWA) [mailto:carmen.stemen@dot.gov]
Sent: Thursday, May 10, 2018 9:11 AM
To: Ken Sympson <KSympson@eastgatecog.org>
Cc: Maietta, Anthony <maietta.anthony@epa.gov>; mike.maleski@epa.ohio.gov; Arkell, Reginald (FTA) <reginald.arkell@dot.gov>; Mehlo, Noel (FHWA) <Noel.Mehlo@dot.gov>; Oesterling, Leigh (FHWA) <Leigh.Oesterling@dot.gov>; Dave.Moore1@dot.ohio.gov; Nino.Brunello@dot.ohio.gov; Stephen Zubyk <SZubyk@eastgatecog.org>; James Kinnick <jkinnick@eastgatecog.org>; Mehlo, Noel (FHWA) <Noel.Mehlo@dot.gov>
Subject: RE: Eastgate Air Quality Conformity Interagency Consultation

Everyone,

With the added text, FHWA concurs with OEPA, concerning the Eastgate Transportation Plan Update Air Quality Conformity Interagency Consultation document. Thanks. -Carmen

Respectfully,

Carmen M. Stemen, MUP
Planning and Environment Specialist
FHWA Ohio Division - Work: 614-280-6848
e-mail: Carmen.Stemen@dot.gov

From: Ken Sympson [mailto:KSympson@eastgatecog.org]
Sent: Thursday, May 10, 2018 10:04 AM
To: Stemen, Carmen (FHWA) <carmen.stemen@dot.gov>
Cc: 'Maietta, Anthony' <maietta.anthony@epa.gov>; mike.maleski@epa.ohio.gov; Arkell, Reginald (FTA) <reginald.arkell@dot.gov>; Mehlo, Noel (FHWA) <Noel.Mehlo@dot.gov>; Oesterling, Leigh (FHWA) <Leigh.Oesterling@dot.gov>; Dave.Moore1@dot.ohio.gov; Nino.Brunello@dot.ohio.gov; Stephen Zubyk <SZubyk@eastgatecog.org>; James Kinnick <jkinnick@eastgatecog.org>; Mehlo, Noel (FHWA) <Noel.Mehlo@dot.gov>
Subject: RE: Eastgate Air Quality Conformity Interagency Consultation

All,

I have incorporated the comment below into the attached Eastgate Conformity Summary.

Thank You,

Ken Sympson
Director of Transportation
234.254.1502
eastgatecog.org

From: Stemen, Carmen (FHWA) <carmen.stemen@dot.gov>
Sent: Thursday, May 10, 2018 8:59 AM
To: Ken Sympson <KSympson@eastgatecog.org>
Cc: 'Maietta, Anthony' <maietta.anthony@epa.gov>; mike.maleski@epa.ohio.gov; Arkell, Reginald (FTA) <reginald.arkell@dot.gov>; Mehlo, Noel (FHWA) <Noel.Mehlo@dot.gov>; Oesterling, Leigh (FHWA) <Leigh.Oesterling@dot.gov>; Dave.Moore1@dot.ohio.gov; Nino.Brunello@dot.ohio.gov; Stephen Zubyk <SZubyk@eastgatecog.org>; James Kinnick <jkinnick@eastgatecog.org>
Subject: RE: Eastgate Air Quality Conformity Interagency Consultation

Ken,

Thank you for the opportunity to review. We find the document is complete except that a time frame for ODOT/FHWA/EPA approval needs to be added – suggest adding it to the "Final Transportation Plan Approval" line in the schedule (see text edit in the attached file). Thanks.
-Carmen

Respectfully,

Carmen M. Stemen, MUP
Planning and Environment Specialist
FHWA Ohio Division - Work: 614-280-6848
e-mail: Carmen.Stemen@dot.gov

From: Ken Sympson [mailto:KSympson@eastgatecog.org]
Sent: Tuesday, May 8, 2018 2:47 PM
To: Dave.Moore1@dot.ohio.gov; Nino.Brunello@dot.ohio.gov; Arkell, Reginald (FTA) <reginald.arkell@dot.gov>; Stemen, Carmen (FHWA) <carmen.stemen@dot.gov>; Oesterling, Leigh (FHWA) <Leigh.Oesterling@dot.gov>; mike.maleski@epa.ohio.gov; 'Maietta, Anthony' <maietta.anthony@epa.gov>
Cc: Stephen Zubyk <SZubyk@eastgatecog.org>; James Kinnick <jkinnick@eastgatecog.org>
Subject: Eastgate Air Quality Conformity Interagency Consultation

Good Afternoon,

The attached document, Eastgate Conformity Summary is being submitted for interagency consultation, resulting from the recent USEPA 8-hour ozone court case. The document addresses the conformity criteria, conformity processes schedules, and required Eastgate Metropolitan Transportation Plan and FY 2018 – FY 2021 TIP conformity SIP budget tests and analyses. As for review comments and/or approval.(***** FIGURES 5,6,& 7**)

Thank You,
Ken Sympson
Director of Transportation

FIGURE 5

MODEL SUMMARY						
TYPE	YEAR	VMT/VEH	HC	NOX	SO2	PM2.5
LINK (on-model)	2002	12,918,106	1.907	8.159	0.000	0.000
LINK (off-model)	2002	3,775,797	0.527	2.284	0.000	0.000
VEH (on-model)	2002	596,872	7.490	5.144	0.000	0.000
VEH (off-model)	2002	82,656	1.037	0.712	0.000	0.000
INTRA	2002	71,1130	0.016	0.055	0.000	0.000
TOTAL		16,765,033	10.978	16.355	0.000	0.000
LINK (on-model)	2020	12,809,172	1.840	6.355	0.000	0.000
LINK (off-model)	2020	3,808,137	0.516	1.782	0.000	0.000
VEH (on-model)	2020	605,498	6.328	2.602	0.000	0.000
VEH (off-model)	2020	83,849	0.876	0.360	0.000	0.000
INTRA	2020	73,842	0.016	0.042	0.000	0.000
TOTAL		16,911,151	9.577	11.134	0.000	0.000
LINK (on-model)	2030	12,613,502	0.923	2.5155	0.000	0.000
LINK (off-model)	2030	3,982,251	0.274	0.735	0.000	0.000
VEH (on-model)	2030	591,926	3.623	1.191	0.000	0.000
VEH (off-model)	2030	81,971	0.502	0.165	0.000	0.000
INTRA	2030	72,507	0.008	0.016	0.000	0.000
TOTAL		16,668,260	5.330	4.621	0.000	0.000
LINK (on-model)	2040	12,881,121	0.660	1.513	0.000	0.000
LINK (off-model)	2040	4,178,741	0.203	0.451	0.000	0.000
VEH (on-model)	2040	585,807	2.352	0.564	0.000	0.000
VEH (off-model)	2040	81,123	0.326	0.078	0.000	0.000
INTRA	2040	71,221	0.006	0.008	0.000	0.000
TOTAL		17,131,083	3.547	2.615	0.000	0.000

FIGURE 6

MODEL SUMMARY: VMT			
YEAR	COUNTY	VMT	%
2002	MAH	7,153,655	55.38%
2002	TRU	5,764,451	44.62%
2020	MAH	7,113,772	55.54%
2020	TRU	5,695,400	44.46%
2030	MAH	7,013,144	55.60%
2030	TRU	5,600,358	44.40%
2040	MAH	7,145,811	55.48%

FIGURE 7

MODEL SUMMARY: VOC & NOX			
YEAR	COUNTY	VOC (TONS/ DAY)	NOX (TONS/ DAY)
2020	MAH	4.537	4.970
2020	TRU	3.632	3.979
2020	COL	1.393	2.143
	TOTAL	9.561	11.092
2030	MAH	2.528	2.060
2030	TRU	2.018	1.645
2030	COL	0.776	0.900
	TOTAL	5.322	4.606
2040	MAH	1.671	1.152
2040	TRU	1.341	0.925
2040	COL	0.529	0.529
	TOTAL	3.541	2.606

Note: Columbiana totals include off-model portions of Mahoning and Trumbull Counties

APPENDIX E: GPB RESOLUTION

GPB RESOLUTION #013-2018

RESOLUTION
APPROVING THE 2040 METROPOLITAN TRANSPORTATION PLAN UPDATE OF THE EASTGATE REGIONAL COUNCIL OF GOVERNMENTS

WHEREAS, the Eastgate Regional Council of Governments (Eastgate) is the designated Metropolitan Planning Organization (MPO) for the Transportation Management Area (TMA) consisting of Mahoning and Trumbull Counties; and

WHEREAS, the Moving Ahead for Progress in the 21st Century Act (MAP-21) Transportation Bill was signed into law on July 6, 2012 and went into effect on October 1, 2012; and

WHEREAS, the Fixing American's Surface Transportation Act (FAST Act) was signed into law on December 4, 2015, and became effective on October 1, 2015; and

WHEREAS, Eastgate as the MPO, is required to prepare and/or update the MTP in accordance with the requirements of both MAP-21 and the FAST Act based on the U.S. Department of Transportation (FHWA/FTA) and the U.S. Environmental Protection Agency's (U.S. EPA) Air Quality Conformity requirements, the MTP must maintain a twenty-year planning horizon and/or updated every five years; and

WHEREAS, in 2013 the General Policy Board of the Eastgate Regional Council of Governments, State of Ohio, previously approved the final FHWA, FTA, and U.S. EPA comments regarding the 2040 Metropolitan Transportation Plan through General Policy Board Resolution #017-2013 supporting the plan; and

WHEREAS, that previous planning process for the 2040 MTP was reviewed by the FHWA and FTA, and approved for air quality conformity by U.S. EPA on May 14, 2013 and designated as a maintenance area for 1997 eight-hour ozone NAAQS in 2013; and

WHEREAS, in 2018 Eastgate recently completed the process of developing the 2040 MTP Update; and

WHEREAS, all information on the development processes for the 2040 MTP Update were presented and reviewed by Eastgate's Technical Advisory Committee (TAC) and Citizen Advisory Board (CAB), at various TAC and CAB meetings from April 2017 through July 2018; and

WHEREAS, the 2040 MTP Update was locally developed to meet the requirements of MAP-21 and the FAST Act legislation and was recommended to the General Policy Board for approval by Eastgate's Technical Advisory Committee and Citizen Advisory Board at their July, 2018 meetings; and

GPB RESOLUTION #013-2018-continued

NOW, THEREFORE, BE IT RESOLVED that the General Policy Board of the Eastgate Regional Council of Governments, State of Ohio, hereby supports this resolution of the Eastgate Regional Council of Governments by approving the 2040 MTP Update, as presented

Passed this 30th day of July, 2018.

ATTEST:

James G. Kinnick, P.E., Executive Director

Patrick T. Ginnetti, P.E., P.S., Chairman

APPENDIX F: FHWA LETTER

U.S. Department
of Transportation

Federal Transit Administration
Region V
200 West Adams St., Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

Federal Highway Administration
OH Division
200 North High St., Room 328
Columbus, OH 43215

August 2, 2018

Jerry Wray
Director
Ohio Department of Transportation
1980 West Broad Street
Columbus, OH 43223

Dear Director Wray:

This is in response to your communication dated July 11, 2018 regarding the requests for USDOT conformity determinations for the Youngstown-Warren-Sharon, OH-PA (Eastgate) air quality area. We have completed our review of the conformity documentation to support adoption of the Youngstown-Warren-Sharon, OH-PA (Eastgate) 2040 MTP update, the 2018-2021 TIP and for the new FY 2020-2023 TIP, which was will be approved on July 1, 2019, and was approved by resolution on July 30, 2018 by the Eastgate General Policy Board. The conformity documentation includes analyses to demonstrate conformity for the 1997 8-Hour Ozone for the Youngstown-Warren-Sharon, OH-PA area.

Based on our review, in consultation with the United States Environmental Protection Agency (EPA), we find that the Eastgate 2018-2021 TIP and 2040 Metropolitan Transportation Plan update conform to the applicable state implementation plan in accordance with the provisions of the EPA's Transportation Conformity Rule (40 CFR Parts 51 and 93).

The effective date of this determination is the last signature date below.

If you have any questions, please contact Ms. Carmen Stemen, Planning Specialist, at carmen.stemen@dot.gov or 614-680-6848.

Sincerely,

Kelley Brookins
Regional Administrator (Acting)
Federal Transit Administration
Date:

Laura S. Leffler
Division Administrator
Federal Highway Administration
Date:

EASTGATE

Regional Council of Governments