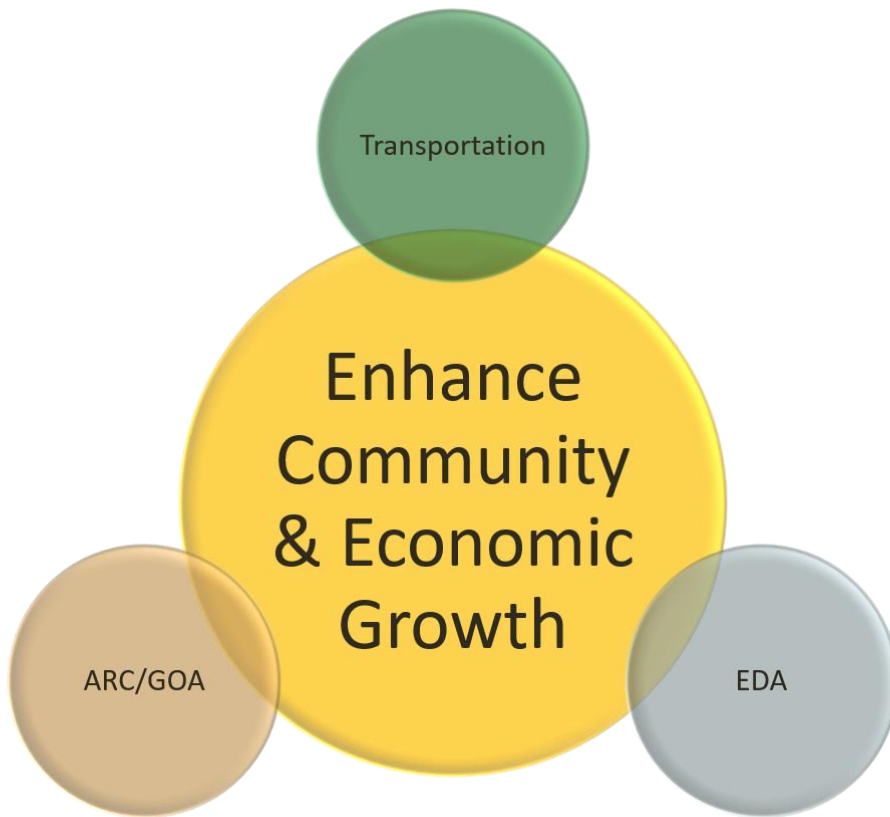


Regional Transportation & Development Plan

Mapping a Route Forward to a Strong & Resilient Region



OMEGA Regional Transportation & Development Plan



Prepared by:



June 2020

TABLE OF CONTENTS

1.0: PLAN PURPOSE AND DEVELOPMENT	1
1.1 INTRODUCTION	2
1.2 PLANNING PROCESS & PUBLIC INVOLVEMENT	5
1.3 REGIONAL GOALS	7
1.4 PLAN OBJECTIVES & TARGETS	10
1.5 PLAN STRATEGIES	12
1.6 PUBLIC SURVEY RESULTS SUMMARY	13
2.0 REGIONAL TRENDS	14
2.1 DEMOGRAPHICS	16
2.2 TRAVEL PATTERNS	34
2.3 LAND USE	41
2.4 ARC COUNTY ECONOMIC STATUS	49
2.5 OPPORTUNITY ZONES	50
2.6 GROWTH & DEVELOPMENT STRATEGIES/PROJECTS - CEDS	52
3.0 OMEGA'S EXISTING TRANSPORTATION NETWORK	61
3.1 ROADWAY NETWORK	62
3.2 TRANSIT NETWORK	87
3.3 ACTIVE TRANSPORTATION NETWORK	91
3.4 AVIATION, RAIL & MARITIME NETWORKS	94
4.0 TRANSPORTATION SYSTEM DEVELOPMENT	102
4.1 DEMOGRAPHICS	102
4.2 ROADWAY NETWORK	104
4.3 BRIDGES	117
4.4 TRANSIT NETWORK	119
4.5 ACTIVE TRANSPORTATION NETWORK	119
4.6 AVIATION, RAIL, & MARITIME NETWORKS	122
4.7 FUTURE REGIONAL DEVELOPMENTS	127
5.0 NEEDS ANALYSIS	130
5.1 PRESERVE REGIONAL ASSETS TO SUPPORT LOCAL ECONOMIES	130
5.2 INCREASE THE SAFETY OF REGIONAL INFRASTRUCTURE	133

5.3 FACILITATE ECONOMIC & COMMUNITY DEVELOPMENT	134
5.4 DEVELOP & MAINTAIN REGIONAL RESILIENCY	139
<u>6.0 RESILIENCY</u>	<u>140</u>
6.1 EXTREME WEATHER EVENTS / CLIMATE CHANGE	140
6.2 MINES	141
6.3 ECONOMIC RESILIENCE	141
<u>7.0 RECOMMENDATIONS & IMPLEMENTATION</u>	<u>144</u>
7.1 REGIONAL POLICY RECOMMENDATIONS	145
7.2 PROJECT RECOMMENDATIONS	148
7.3 PROJECT EVALUATION	154
7.4 FISCAL CONSTRAINT	157

The preparation of this plan has been financed through funding from the Federal Highway Administration, Federal Transit Administration, U.S. Department of Transportation, Economic Development Administration, and the Ohio Department of Transportation. The contents of this plan reflect the views of the authors, who are responsible for the facts and accuracy of the data presented. The contents do not necessarily reflect the official views or policies of either the U.S. Department of Transportation, U.S. Department of Commerce, or the State of Ohio at the time of publication.

1.0: Plan Purpose and Development

The **Regional Transportation & Development Plan** will guide transportation, community, and economic development planning activities for the Ohio Mid-Eastern Governments Association (OMEGA). This plan will provide a comprehensive framework to align the goals and strategies of the entire planning organization to achieve the best results for our members.

This plan is a collaborative effort of all OMEGA staff, in conjunction with the Transportation Advisory and Comprehensive Economic Development Strategy Committees. Public input was used to develop appropriate goals and strategies for the region. Special acknowledgements are given to the North Central Pennsylvania Regional Planning & Development Commission, Buckeye Hills Regional Council, Mid-Ohio Regional Planning Commission, and Ohio Department of Transportation for the technical assistance and guidance provided throughout the planning process.

This plan, once adopted by the OMEGA Executive Board, will supersede the **Regional Transportation Plan** (adopted June 2015), and the **2017 Comprehensive Economic Development Strategy** in fulfillment of the requirements of a long-range transportation plan and a comprehensive economic development strategy as laid out in federal legislation. This plan will be reviewed annually and fully updated every five years, unless otherwise specified in federal or state legislation.

This plan fulfills the requirements of the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) under the Fixing America's Surface Transportation (FAST) Act, signed into law as a reauthorization of surface transportation programs through Fiscal Year 2020. According to requirements of the FAST Act, locally developed coordinated public transit-human services transportation plans must be updated to reflect the changes established by the FAST Act legislation. The FAST Act applies new programs and rules for all Fiscal Year 2016 funds and authorizes federal highway and transit programs for five (5) years.

This plan also fulfills federal requirements (13 C.F.R. § 303.7) governing the development of the CEDS. This document contains sections that include:

- Summary Background
- SWOT Analysis
- Strategic Direction/Action Plan
- Evaluation Framework.

This plan also includes concepts relating to economic resilience, as prescribed by the Economic Development Administration (EDA)¹.

¹ <https://www.eda.gov/ceds/>

1.1 Introduction

The **Regional Transportation & Development Plan**:

- Documents the ongoing transportation planning process carried out by the OMEGA and its partners,
- Documents the ongoing economic and community development planning efforts carried out by OMEGA and its partners, and
- Identifies strategies and projects to maintain and improve communities and regional networks between 2020 and 2045.

Local governments conduct studies on and complete improvements to the transportation system. OMEGA is the principal public agency conducting regional transportation studies for the East Central Ohio region because it serves as the designated Regional Transportation Planning Organization (RTPO) for the Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas counties. Furthermore, OMEGA is the Economic Development District as designated by the Economic Development Administration (EDA) and the Local Development District as designated by the Appalachian Regional Commission (ARC) for the aforementioned counties with the addition of Belmont and Jefferson counties. Transportation planning for Belmont and Jefferson counties is conducted by Belomar Regional Council and Brook-Hancock-Jefferson Metropolitan Planning Commission, respectively.

What is a Regional Transportation Planning Organization (RTPO)?

The Ohio Mid-Eastern Governments Association (OMEGA) is organized as a Council of Governments pursuant to Section 167 of the Ohio Revised Code. OMEGA is a collaborative body of member governments that serves as a facilitator between state and federal government agencies and local entities to provide opportunities in economic and community development through networking, education, planning, research, and allocation of resources. On January 27, 2016, Governor John Kasich, pursuant to United States Code, Title 23, Section 135 (m), officially designated OMEGA as an Ohio Regional Transportation Planning Organization. Our mission is to provide a pathway to enhance community and economic growth in our region.

What is a Local Development District (LDD)?

To ensure that federal funds are used effectively and efficiently, and to strengthen local participation, ARC works with the Appalachian states to support a network of multicounty planning and development organizations, or local development districts (LDDs), throughout the region. The 73 LDDs cover all 420 counties in Appalachia, including the 10 counties in the OMEGA region.

The LDDs' most important role is to identify priority needs of local communities. Based on these needs, the LDDs work with their board members and other local citizens to develop plans for their communities' economic development, to target and meet the most pressing needs, and to build community unity and leadership².

In Ohio, four LDDs work with the Governor's Office of Appalachia and the Office of Community Development to administer state and Appalachian Regional Commission funds. Using a "bottom up" approach, local communities and the LDDs prioritize projects in their regions. The ARC Code, the

² <https://www.arc.gov/about/LocalDevelopmentDistricts.asp>

Commission's and State's plans and strategies, and the LDDs project scoring criteria all include provisions to focus additional support, funding, and resources on counties designated as "distressed" by the Appalachian Regional Commission. The designation recognizes "...counties within Appalachia with persistent, long-term problems that have resulted in extraordinary levels of economic and human distress."³ Ohio's four Local Development Districts are the Ohio Valley Regional Development Commission, Buckeye Hills Regional Council, **OMEGA**, and the Eastgate Regional Council of Governments.

What is an Economic Development District (EDD)?

Economic Development Districts (EDDs) are multi-jurisdictional entities, commonly composed of multiple counties and in certain cases even cross-state borders. They help lead the locally based, regionally driven economic development planning process that leverages the involvement of the public, private and non-profit sectors to establish a strategic blueprint (i.e., an economic development roadmap) for regional collaboration⁴.

What are Regional Transportation Plans?

RTPOs are required to complete a long-range regional transportation plan every five years, with a horizon year 20-25 years into the future. This plan will inform federal and state transportation officials about the needs and priorities for improved highways, transit, rail, aviation, maritime, and active transportation facilities throughout the region. With a five-year update cycle, the long-range plan remains current and reflects changes that occur within intervening years.

RTPOs are also required to maintain a Regional Transportation Improvement Plan (RTIP). This plan complements the long-range plan and is the short-term plan that documents projects that have funding for at least one phase within the upcoming four (4) state fiscal years. The current RTIP can be found on the OMEGA website⁵ at any time.

What is the Comprehensive Economic Development Strategy (CEDS)?

The CEDS is a locally developed, regional planning process undertaken by Economic Development Districts (EDDs) every five years. The plan develops strategies for local leaders to build capacity and guide economic prosperity and resiliency throughout the region. The goals and strategies are developed by a diverse group of public and private economic development professionals, facilitated by a regional planner at the EDD. This planning effort is intended to leverage additional federal, state, local, and private capital to develop a robust economy.

Why merge the Regional Transportation Plan and CEDS?

By merging our long-range Regional Transportation Plan and our Comprehensive Economic Development Strategy (CEDS) into one document, the organization will be able to minimize the amount of duplicative work and reallocate the time and cost savings into projects that directly benefit our members. The merged plans will also formally align all organizational goals and ensure the region is best prepared to move forward, utilizing knowledge and resources from a variety of different programs, professions, and funding sources.

³ https://development.ohio.gov/cs/cs_goa_ldds.htm

⁴ <https://eda.gov/edd/>

⁵ <https://omegadistrict.org/programs/transportation/rtip/>

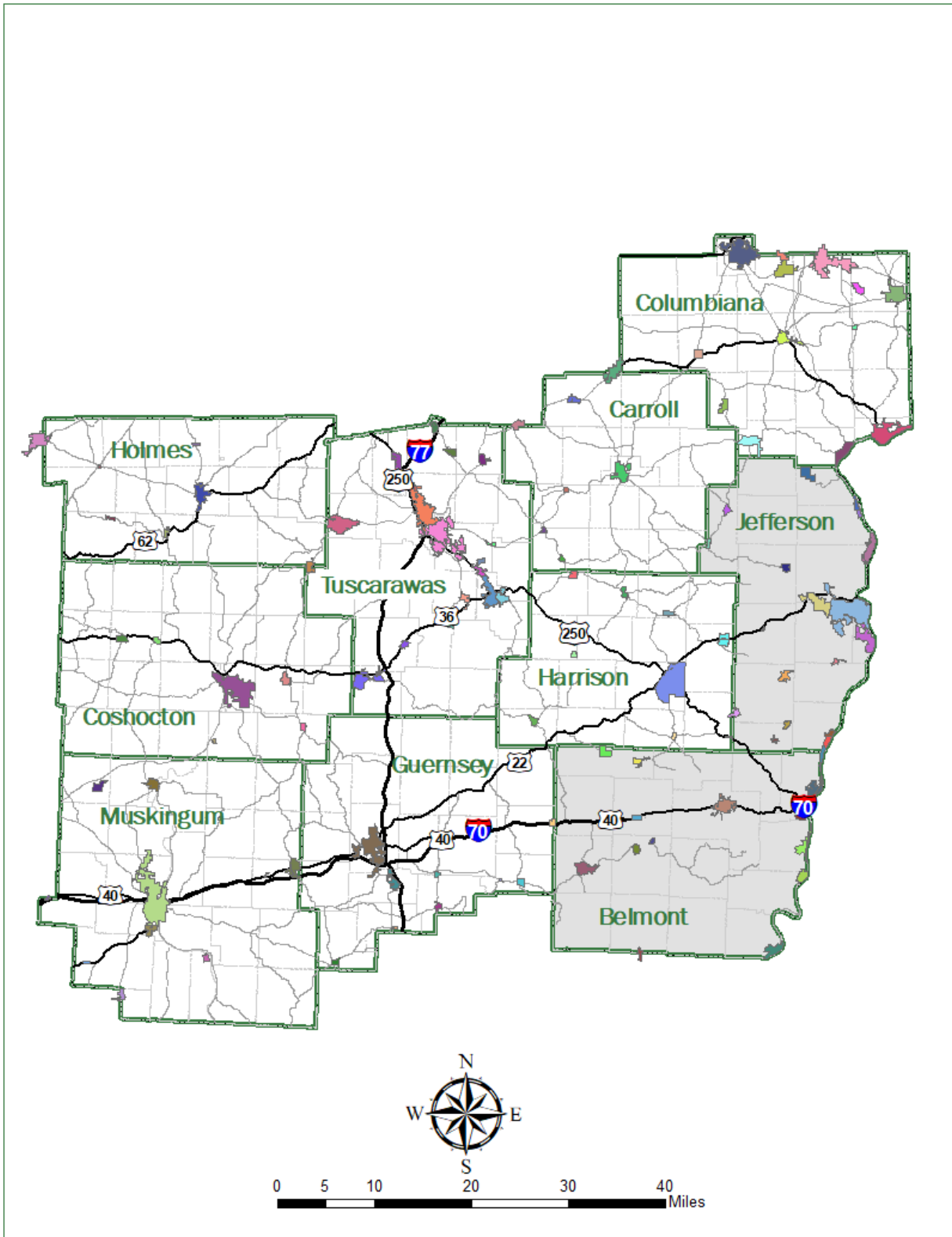


Figure 1-1: OMEGA Transportation Planning Area

What is the OMEGA region?

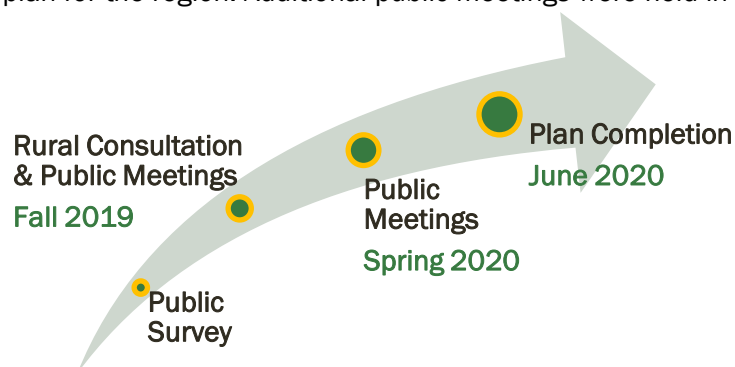
OMEGA is comprised of ten counties in east-central Ohio. All ten counties are designated as Appalachian counties by ARC. Overall, these counties are primarily rural in nature, with extensive acreage covered in forests, cropland, and other non-urbanized uses. The region is bounded on the north by the Akron/Canton and Youngstown metropolitan areas; to the east by the Ohio River, and by the Wheeling and Weirton/Steubenville metropolitan areas; to the south by additional Appalachian counties in the Buckeye Hills Regional Council planning area; and to the west by the Licking County Area Transportation Study (LCATS) and the Central Ohio Rural Planning Organization (CORPO), which is Ohio's newest RTPO. The cities of Columbus and Cleveland in Ohio, and Pittsburgh, Pennsylvania are all approximately 80-100 miles from the center of the OMEGA region.

1.2 Planning Process & Public Involvement

OMEGA adopted a Title VI Plan in December 2019. This plan included an updated Public Participation Plan. The Title VI Plan outlines a framework for all public involvement efforts undertaken by OMEGA staff. The Title VI/Public Participation Plan can be found on the homepage of the OMEGA website⁶.

To initiate the public involvement process, OMEGA staff developed a non-scientific sixteen-question survey to gauge the priorities of the general public. The survey was released online, with printed copies available upon request. Completed printed copies were then entered into online survey platform and saved digitally. OMEGA's Communication Manager distributed the survey link through a press release to media outlets throughout the region, to include radio, print, and television. Social media was also utilized, with stakeholders sharing the survey on their respective platforms. A webpage⁷ for the plan was created and maintained throughout the planning process. This page was updated as information was made available and will host the 2020 plan until it is superseded by the next update in 2025.

Public outreach meetings were scheduled in tandem with the Regional Transportation Improvement Plan (RTIP) Rural Consultation period in September and October 2019. Elected officials and members of the public were invited to provide comments, insight, or other information to guide the development of the plan for the region. Additional public meetings were held in May 2020.



⁶ www.omegadistrict.org

⁷ <https://omegadistrict.org/programs/transportation/plan2020/>

Date	Location	Meeting Type	County/Counties Covered
9/24/2019	Columbiana Co. Port Authority 7860 Lincole Pl. Lisbon, OH	Rural Consultation & Public	Columbiana
9/25/2019	Carroll County District Library 70 Second St. NE Carrollton, OH	Rural Consultation & Public	Carroll
10/01/2019	Dover City Council Chambers 110 E. Third St. Dover, OH	Rural Consultation & Public	Tuscarawas
10/03/2019	Holmes County District Library 3102 Glen Dr. Millersburg, OH	Rural Consultation & Public	Holmes
10/09/2019	Crossroads Library 63500 Byesville Rd. Cambridge, OH	Rural Consultation & Public	Guernsey
10/15/2019	Puskarich Public Library 200 E. Market St. Cadiz, OH	Rural Consultation & Public	Harrison
10/16/2019	Coshocton Public Library 655 Main St. Coshocton, OH	Rural Consultation & Public	Coshocton
10/17/2019	John McIntire Library 220 N. 5 th St. Zanesville, OH	Rural Consultation & Public	Muskingum
5/04/2020	Virtual Meetings via Facebook Live & YouTube	Public	All

1.3 Regional Goals

Based on the existing literature and planning documents, and in conjunction with the Transportation Advisory Committee and the Executive Board, OMEGA has established the following goals and strategies for the **Regional Transportation & Development Plan**. This plan will provide a framework for guiding the long-term planning activities with a horizon year of 2045. This plan will fully integrate the goals and strategies of the Regional Transportation Planning Organization (RTPO), Economic Development District (EDD), and the Local Development District (LDD). The alignment of all program goals enables OMEGA staff to leverage this plan while pursuing funding and implementation of projects throughout the region. Each of the goals outlined will be discussed in greater detail in future sections, as strategies are assigned.

Preserve Regional Assets to Support Local Economies

The preservation of regional assets is vital to the long-term viability of the region. With a resurgent economy in the region, these assets will play an ever-increasingly important role in facilitating the movement of goods, people, services, and resources safely and efficiently.

Increase the Safety of Regional Infrastructure

Safety is an integral part of all networks that serve the OMEGA region. Transportation safety endeavors will be aligned with ODOT's new and existing efforts to make the regional network safer for all users. OMEGA will also work with communities to enhance or replace deficient water and wastewater systems to ensure safe drinking water is provided for all residents and visitors. Further assistance will be given to communities to provide safe public spaces and procure additional resources for public safety departments, such as police and fire.

Facilitate Economic & Community Development

Facilitating economic and community development is the bedrock of OMEGA's existence as an LDD and EDD. With the addition of the RTPO, these efforts will utilize additional tools in creating opportunities for new businesses to move into the region or to allow existing businesses to expand. Historically, the Appalachian region has lagged the rest of the nation in many indicators of economic success. With an assortment of instruments spanning several distinct programs, OMEGA is uniquely positioned to assist communities in broadening and growing their economies for the advancement of the region.

Develop & Maintain Regional Resiliency

Resiliency is fundamental for the continued growth and success of the OMEGA region. OMEGA will work with communities to incorporate resiliency in economic, community, and transportation planning projects. To mitigate adverse impacts, OMEGA will help communities plan for and/or mitigate economic downturns, extreme weather events, and other external factors that may impact the region.

The goals set by OMEGA were compared against relevant federal and state programs to ensure that the regional goals aligned with federal and state goals and priorities. **Figure 1-2** displays the alignment with transportation goals set forth by the U.S. Department of Transportation and ODOT; **Figure 1-3** displays the alignment with community and economic development goals set forth by the Appalachian Regional Commission, Ohio Governor’s Office of Appalachia, and the Economic Development Administration.

National Goals	State Goals	OMEGA Goals			
<i>Transportation</i>		Preservation	Safety	Development	Resiliency
Safety – Reduce transportation-related fatalities and serious injuries across the transportation system	Safety	✓	✓	✓	
Infrastructure – Invest in infrastructure to ensure mobility and accessibility and to stimulate economic growth, productivity, and competitiveness for American workers and businesses	Preservation	✓			
	Economic Development			✓	
	Accessibility & Connectivity	✓	✓	✓	✓
Innovation – Lead in the development and deployment of innovative practices and technologies to improve the safety and performance of the Nation’s transportation system	Mobility & Efficiency		✓	✓	✓
Accountability – Serve the Nation with reduced regulatory burden and greater efficiency, effectiveness, and accountability	Stewardship	✓			✓

Figure 1-2: Transportation Planning Goal Alignment

National & State Goals <i>Economic/Community Development</i>	OMEGA Goals			
	Preservation	Safety	Development	Resiliency
ARC – Invest in critical infrastructure (especially broadband); transportation; and water/wastewater systems	✓	✓	✓	✓
ARC - Invest in entrepreneurial and business development strategies that strengthen Appalachia’s economy			✓	✓
ARC - Strengthen Appalachia’s community and economic development potential by leveraging the Region’s natural and cultural heritage assets			✓	✓
ARC - Increase the education, knowledge, skills, and health of residents to work and succeed in Appalachia			✓	✓
ARC - Build the capacity and skills of current and next-generation leaders and organization to innovate, collaborate, and advance community and economic development			✓	✓
EDA - Reduce Regional Unemployment			✓	✓
EDA - Increase Regional Income			✓	✓
EDA - Reduce Regional Poverty			✓	✓
EDA - Improve Regional Standard of Living			✓	✓

Figure 1-3: Economic & Community Development Goal Alignment

1.4 Plan Objectives & Targets

Goals	Objectives	Target	Benchmark	Progress*
Preservation	Reduce the # of bridges on the local system with a General Appraisal Rating of 4 or less	5 bridge replacements funded per year on local system	265 (2018)	
	Increase the # of miles in "Acceptable" pavement conditions on Federal Aid system	90% of all Federal Aid route pavements in Acceptable condition	84.89% (2019)	
Safety	Reduce the # and rate of fatal and serious injury crashes	1% reduction annually or support current statewide goal	5-year rolling average	
	Reduce the # of fatal and serious injury non-motorized crashes (includes bicycle, pedestrian, buggy)	1% reduction annually or support current statewide goal	5-year rolling average	
	Reduce at-grade railroad crossing crashes (motorized, pedestrian, etc.)	Zero at-grade incidents	5-year rolling average	
Economic & Community Development	Increase the # of commuters walking, biking, or riding transit	5% share of commuters using transit or as pedestrians/bicyclists	3.89% (2018)	
	Increase the average # of jobs accessible within 30 minutes by driving	75% of all commuters within 30 mins	67.8% of commuters within 30 mins (2018)	
	Increase the # of miles of trails or designated bike facilities	Assist 1 community per year to plan/implement/fund designated bike facilities	712 miles (2020)	
	# of households improved – Access to Safe Drinking Water	--	--	
	# of households improved – Access to Public Wastewater System	--	--	
	Track the MHI for the region vs. statewide	Increase MHI relative to state level	89.8% (2017)	
	Track the poverty level for the region vs. statewide	Reduce poverty level relative to state level	11.3% vs OH 10.8% (2017)	

Goals	Objectives	Target	Benchmark	Progress*
Economic & Community Development	Track the education attainment level for region vs. statewide	Increase educational attainment level relative to state level	2017 ACS Data	
	Increase the # of census tracts served by broadband (25:3 or as defined by FCC)	100% broadband coverage by 2045	2017 Connect Ohio Statistics	
	Track the transfer payments for the region vs. statewide	Reduce the total amount of transfer payments per county	\$5,855,647,000 (2018)	
	Track the # of manufacturing employees	Maintain/increase the total # of manufacturing employees	5-year rolling average	
	# of businesses improved - Infrastructure	--	--	
	# of businesses improved - Financed	1 business financed annually	6 financed (2015-2019)	
	# of students/workers improved - Workforce	--	--	
	Transit – Reduce Denials*	--	--	
	Transit – Reduce Cancellations/No Shows*	--	--	
	Transit – Increase Ridership*	--	--	
	Transit – Track Call Volume*	--	--	
Resiliency	Consider Complete Streets Implementation	50% of all regional jurisdictions with policy/plan by 2045	1 municipality (2018)	
	Decrease the # locations of major roadways at risk of flooding/slipping	1 improvement programmed per RTIP cycle	68 major roads (2019)	
	Increase business diversification	Increase percentage of underrepresented industry sectors	5-year rolling average	

*No data currently available to set benchmarks. New benchmarks will be established in CY 2020 and tracked in CY 2021 and beyond.

1.5 Plan Strategies

Stakeholders outlined strategies that may be undertaken at a regional or local level to achieve the regional goals, as stated above. OMEGA will assist communities in the refinement and implementation of these strategies, as needed.

Goal 1: Preservation of Regional Assets

- Facilitate communication between funding/regulatory agencies and political subdivisions
- Develop a prioritized list of infrastructure improvements based on current conditions/use
- Advocate for the ability for local communities to enact Road Use Maintenance Agreements (RUMAs) for additional industrial uses
- Increase flexibility to implement weight restrictions on local roads
- Provide current infrastructure condition data to locals via interactive web maps or ad hoc data requests
- Support Transportation Performance Management Statewide Target for Pavement
- Support Transportation Performance Management Statewide Target for Bridge Condition

Goal 2: Increase Safety of Regional Infrastructure

- Encourage communities to plan for safe use by all users of the transportation network, to include motorists, pedestrians, bicyclists, transit riders, and Amish buggies
- Plan for wider travel lanes to accommodate slow-moving vehicles are frequent (e.g. Amish buggies, bicyclists, agricultural equipment)
- Support the development of interconnected active transportation networks
- Develop a regional list of dangerous intersections and road segments, updated annually
- Work with communities to develop access management plans for new and existing corridors
- Support Transportation Performance Management Statewide Target for Safety

Goal 3: Facilitate Economic & Community Development

- Research and disseminate funding opportunities for communities; assist in applying for and administering funds, if requested
- Advocate for the expansion and improvement of rural broadband access, safe drinking water, and wastewater systems
- Advocate for the development of the regionally significant corridors (US 30 & Columbus-to-Pittsburgh Corridor)
- Support community efforts to revitalize, rehabilitate, or develop economic/recreational spaces
- Lead or assist in regional corridor planning
- Develop short-term plans for communities to implement new programs (e.g. Safe Routes to School, Park Improvement Plans, etc.)
- Support workforce development programs
- Support Transportation Performance Management Statewide Target for Travel Time Reliability
- Support Transportation Performance Management Statewide Target for Truck Travel Time Reliability

Goal 4: Develop & Maintain Regional Resiliency

- Incorporate green infrastructure into the planning phases of projects to reduce environmental impacts from development (e.g. bioswales for improved drainage, permeable pavements in parking areas, etc.)
- Assist local governments in the development of access plans during extreme weather events, in coordination with local EMA directors
- Support area or site development efforts to diversify regional economies
- Facilitate educational opportunities for communities to learn/implement new strategies to make their local area resilient economically and physically
- Identify high-risk areas for extreme weather impacts
- Encourage enforcement of existing regulations to mitigate development in high-risk areas

***Note:** Due to the lack of large urbanized areas, the Transportation Performance Management Statewide Targets for Urbanized Area Peak Hour Excessive Delay and non-Single Occupancy Vehicle Travel do not apply to the OMEGA RTPO.

1.6 Public Survey Results Summary

In July 2019, OMEGA staff released a non-scientific public survey to gain additional insight into the priorities and transportation needs of the region. From July through November, 257 responses were gathered. These responses represented all ten OMEGA counties, and some of the neighboring counties in Ohio and Pennsylvania as well. A full list of questions and their answers is provided in **Appendix A**.

The respondents ranged in age from the 15 to 24-year-old cohort to those 65+ years of age, with a majority being 45 years old or older. Due to the primarily rural nature of the region, a high percentage (76.7%) of the population drives alone to reach their primary destination (work, school, medical, etc.). Public transportation use was reported by 12.8% of the population, though there may be a reporting bias, as this survey was also distributed by a county transit agency to gather data for their locally developed coordinated plan update.

Slightly over half of respondents (54.5%) reported a commute time of 0-20 minutes, which is consistent with the travel time estimates provided by the US Census. Many trips (64.2%) also reported a total commute length of 0-20 miles.

The top five transportation priorities for survey respondents were, in order:

1. Maintain Roads/Bridges
2. Improve Roadway Safety
3. Relieve Traffic Congestion
4. Improve Public Transportation
5. Improve Bicycle/Pedestrian Facilities

Other priorities were identified, but their ranking was significantly lower than the top five. When restricted to picking their highest priority only, Maintain Roads/Bridges was the highest ranked, followed by Improve Roadway Safety. These results influenced the development of the goals outlined above.

2.0 Regional Trends

The OMEGA region has experienced limited population growth over the preceding three decades, averaging approximately one-third of the state's growth rate. This growth is not regionwide, as four counties lost population, while six gained during this time. There are signs that this population stagnation may be ending, owing mainly to the expanding energy extraction/petrochemical industries, and their supporting firms. The influence of the fast-growing Columbus metropolitan region is also being felt in Muskingum County, as people seek cheaper places to live and commute. Cities such as East Liverpool in Columbiana County recorded increases in projected population for the first time in decades.

Area	1990	2000	2010	2018 Est.	Δ 1990-2018
Belmont*	70,856	70,226	70,400	67,505	-0.64%
Carroll	26,554	28,751	28,836	27,081	8.59%
Columbiana	108,482	112,040	107,841	102,665	-0.59%
Coshocton	35,437	36,655	36,901	36,629	4.13%
Guernsey	38,987	40,792	40,087	39,022	2.82%
Harrison	16,042	15,856	15,864	15,174	-1.11%
Holmes	32,924	38,943	42,366	43,892	28.68%
Jefferson*	80,087	73,894	69,709	56,767	-12.96%
Muskingum	82,148	84,585	86,074	86,183	4.78%
Tuscarawas	84,132	90,914	92,582	92,176	10.04%
OMEGA	575,649	592,656	590,660	576,094	2.61%
Ohio	10,847,115	11,353,140	11,536,504	11,689,442	6.36%

Table 2-1: Population in OMEGA Region (source: US Census Bureau)

*Counties not in RTPO

One notable exception to this regional trend is Holmes County, which hosts the highest manufacturing rate of the ten county OMEGA region, as well as a robust tourism industry centered on the high concentration of Amish farms and businesses in the area. Holmes County has experienced significant growth over the previous thirty years, far outpacing both the state and the region.

On the other end of the spectrum, a significant population loss has occurred in Jefferson County on the eastern border of the region. This region has historically been associated with steel manufacturing, shipments of coal, and other related industries. Steel manufacturing returned in June 2018, with the opening of the JSW Steel facility in Mingo Junction. Logistics are also an important part of Jefferson County's economy, as Walmart operates a distribution hub in Wintersville that supplies stores throughout the region and into West Virginia and Pennsylvania.

Over the previous decade, more systemic population loss has occurred, with counties in the western half of the region losing a smaller portion of their population, and counties in the eastern half losing significant percentages of their population. The exception, again, is Holmes County, which is joined by Muskingum County as the only two counties to log population growth between the 2010 Census and the 2018 Census estimates (see *Figure 2-1*).

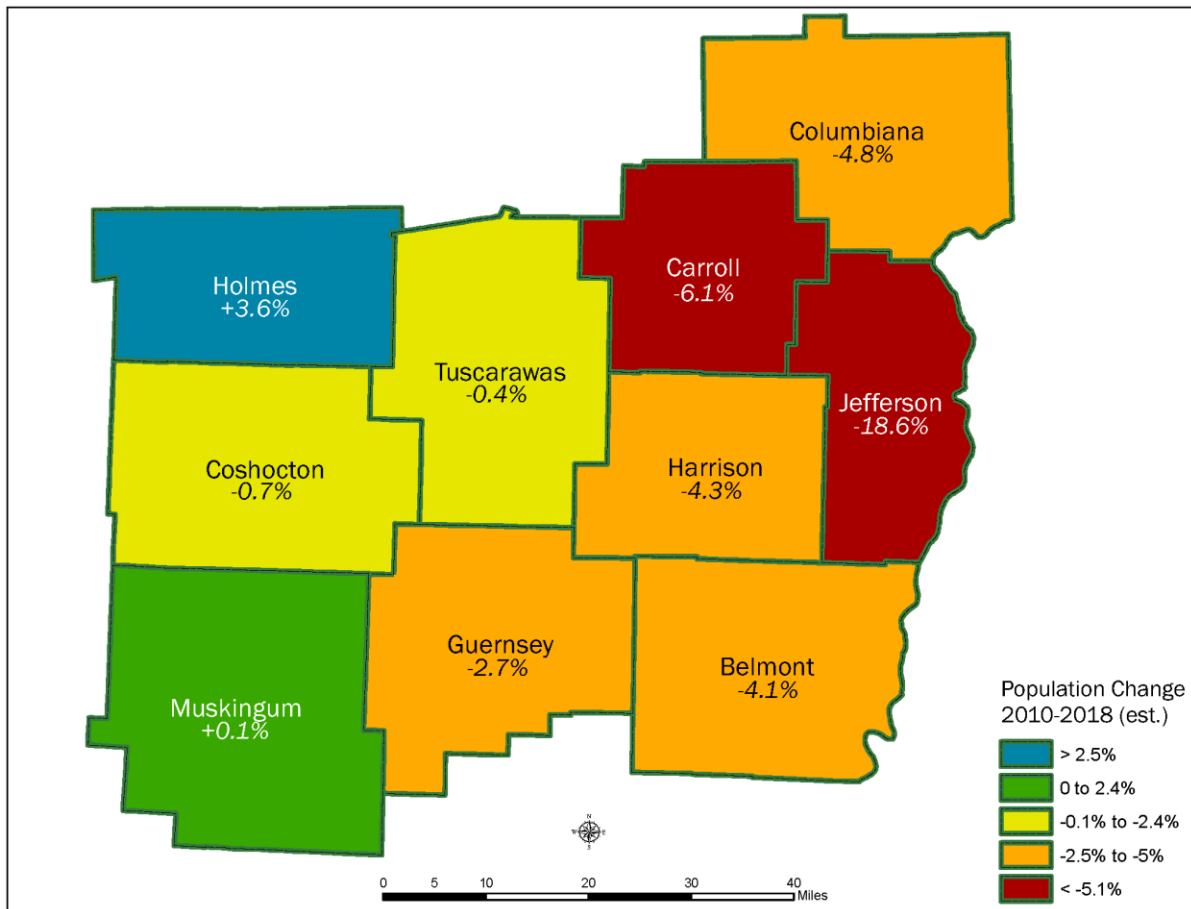


Figure 2-1: Population Change in OMEGA Region (source: US Census Bureau)

While population growth has been tepid, the Annual Average Daily Traffic (AADT) has increased on many of the major routes with the region. Most notably, truck traffic in the eastern portion of the OMEGA region skyrocketed in the past decade, a result of the oil and gas extraction and pipeline construction. A portion of this increase might also be explained with the location of large distribution centers within the region and the continued growth of online shopping/direct-to-consumer shipping.

The OMEGA region alone continues to provide over 93% of all oil production in Ohio, and almost 75% of the state's natural gas production. From 2018 to 2019, both the oil and natural gas production in the OMEGA region increased by 31% and 13%, respectively. Belmont County led the state in natural gas extraction, producing 932,941,891 MCF (thousand cubic feet) or 36.23% of the total natural gas extraction in Ohio. Similarly, Guernsey County led the production of oil in Ohio, producing 13,556,178 barrels or 54.44% of the total. The top three oil-producing counties, and two of the top three natural gas-producing counties, are in the OMEGA region. This development within the preceding decade has put enormous strain on the existing infrastructure, including transportation and municipal services.

2.1 Demographics

The demographic makeup of the region is important to assist in the determination of appropriate strategies to move the region forward. Demographics are used in a variety of ways in the region. Funding sources often utilize demographic data to calibrate the level of “need” that a community has. Other programs may be targeted to certain populations, income levels, or population densities. This section will outline the different demographics that are most used by OMEGA in the development of plans, funding applications, and other analysis.

Median Household Income

According to 2013-2017 ACS 5-year estimates, the Median Household Income (MHI) for the region is \$45,761, which is 86% of the statewide average. MHI is an important barometer of the overall financial health of an area. As shown in **Figure 2-2**, the MHI varies throughout the region, with higher values being found in Holmes County, central Tuscarawas County, and in northern Belmont County. Low MHI values are generally centered in more urbanized areas, such as New Philadelphia, Cambridge, East Liverpool and Coshocton.

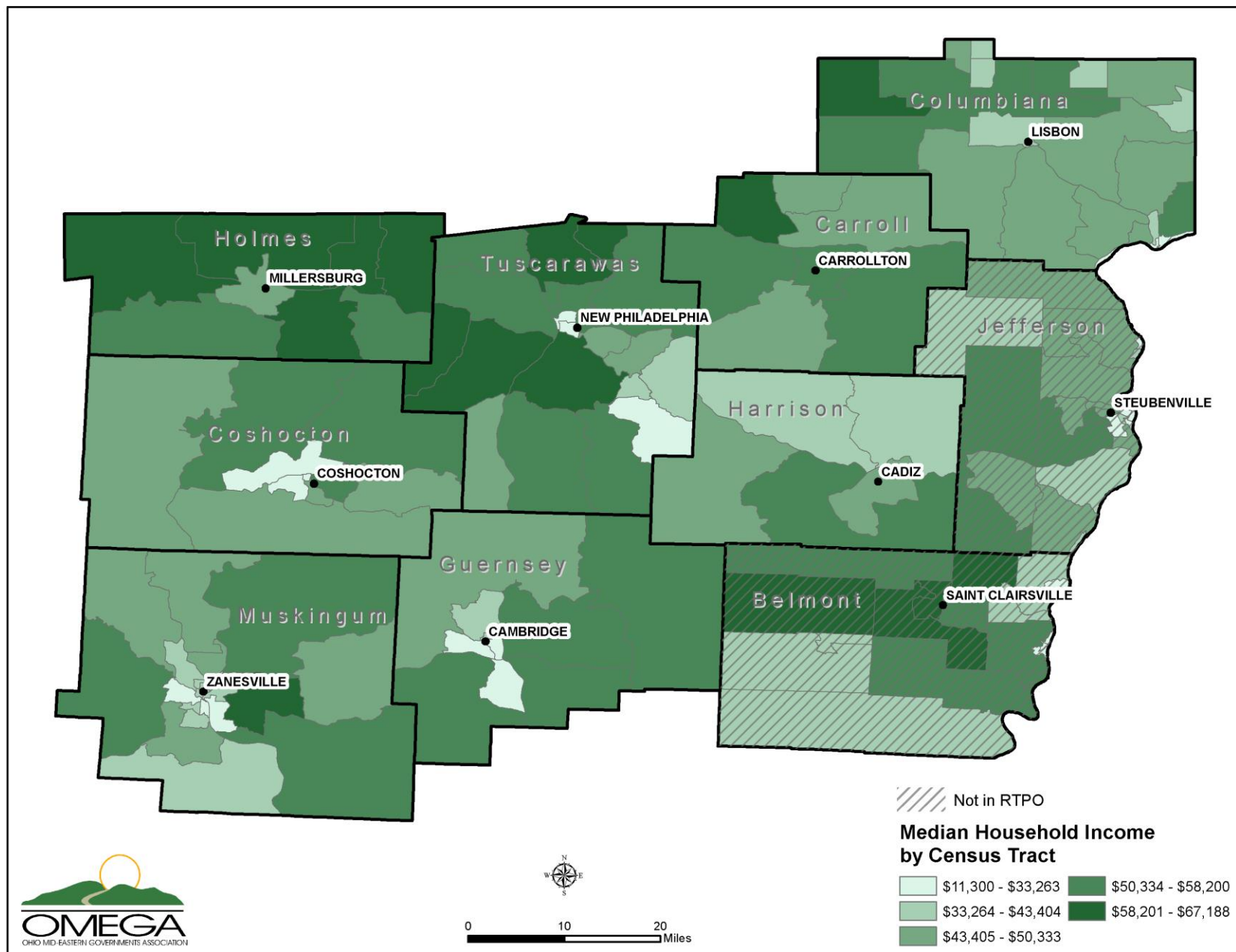


Figure 2-2: Median Household Income in OMEGA Region (source: US Census Bureau)

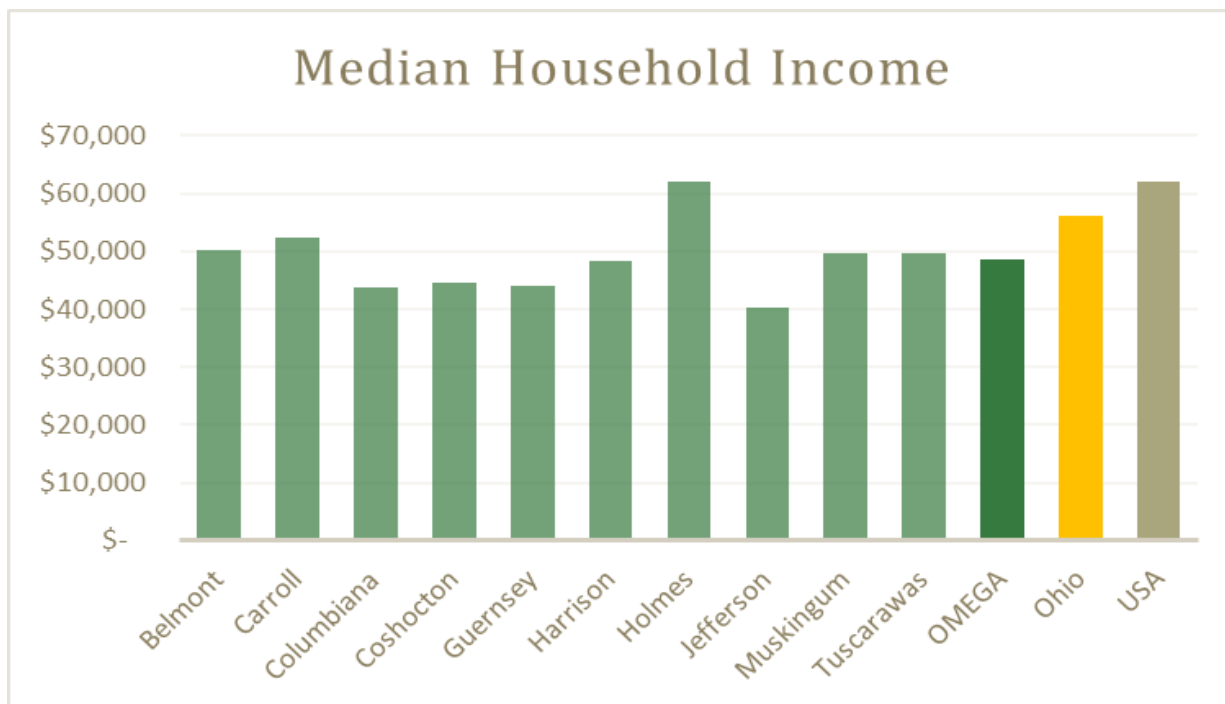


Figure 2-3: Median Household Income, 2018 Estimates (source: US Census Bureau)

Figure 2-3 shows the breakdown of MHI values by county using 2018 estimates from the US Census Bureau. These totals are higher than the five-year rolling average, but show that the region is moving higher, in lockstep with the state and nation. For example, Holmes County, with an estimated MHI of \$62,111 exceeds both the state and national averages of \$56,111 and \$61,973, respectively. Other counties in the region are generally within 80-90% of the state average and 70-80% of the national average. Jefferson County has the lowest MHI, \$40,308, which is only 72% of the state average and 65% of the national average.

Poverty Levels

Closely related to the Median Household Income are populations living below the federal poverty level. For 2018, the federal poverty level was defined as a four-member household with a combined income below \$25,100 for the year, or \$2,092 for the month. In **Figure 2-4**, Census Tracts with populations below the poverty level are mapped. Concentrations of individuals living below poverty are generally centered around larger population centers such as Carrollton, Cambridge, and Zanesville.

In the OMEGA region, there are two counties with poverty levels lower than the national average of 13.1%. These are Belmont (10.9%) and Holmes (11.1%). Belmont County has been the epicenter of the hydraulic fracturing “fracking” methods used to extract oil and natural gas from the Utica and Marcellus shale formations in Eastern Ohio. Holmes County is at the heart of Amish Country and boasts many small manufacturing firms that have kept unemployment levels low and wages higher than the regional average. The rest of OMEGA’s counties are above the national average, due primarily to the loss of manufacturing jobs and other higher wage employment sectors. Guernsey County has the highest poverty level with 20.2%, followed closely by Jefferson with 20.0%. See **Figure 2-5**.

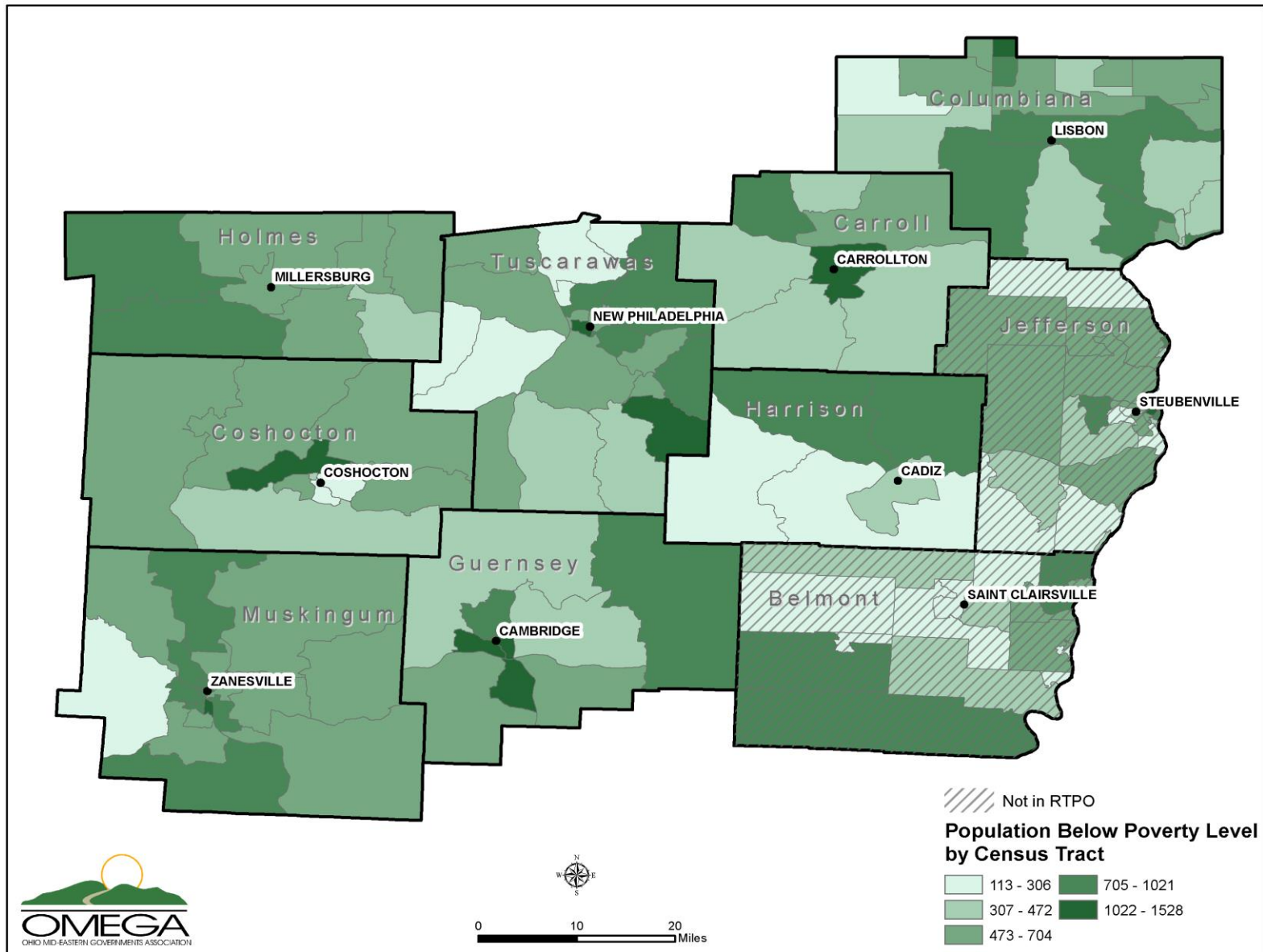


Figure 2-4: Population Below Poverty (source: US Census Bureau)

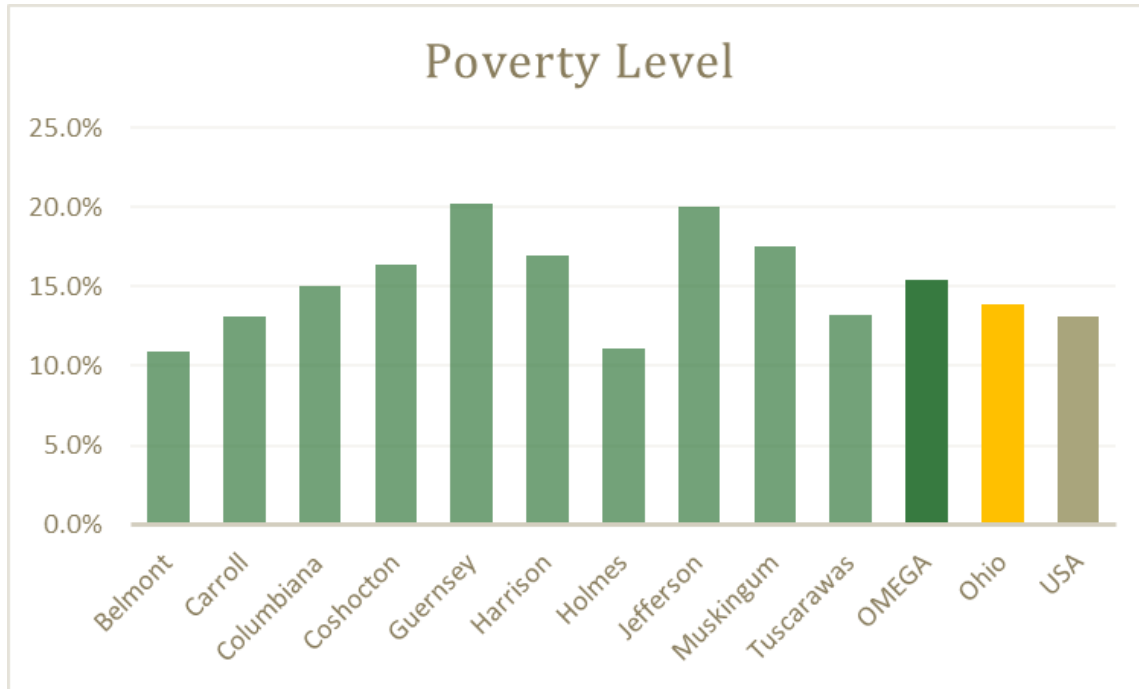


Figure 2-5: Poverty Level, 2018 Estimates (source: US Census Bureau)

Race/Ethnicity

Defined as any race other than White, minority populations in the OMEGA region are low. Throughout the region, minority populations are often concentrated near large population centers or county seats. **Figure 2-6** displays the Census Tracts with the highest numbers of minority residents, based on 2017 American Community Survey estimates.

Figure 2-7 shows the OMEGA population broken down by race. Over 94% of all OMEGA region residents are White. The next largest groups are Black/African American with 2.29% and Hispanic with 1.47%. All counties within the region have a population that is greater than 91% White. Overall, the OMEGA region is far less diverse than both the State of Ohio (81% White) or the United States (72% White). This data was based on 2018 American Community Survey estimates from the US Census Bureau.

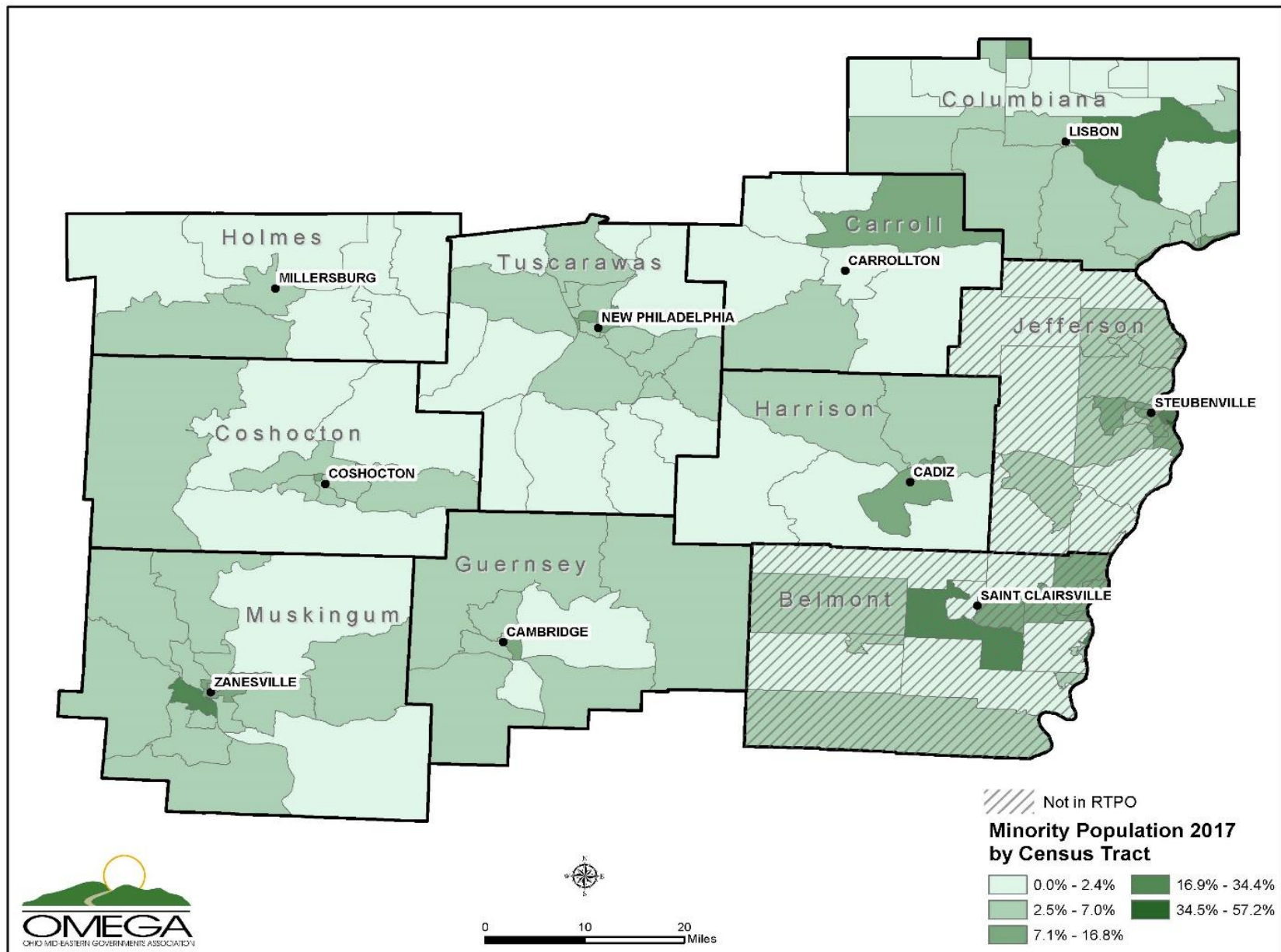


Figure 2-6: Minority Population by Census Tract (source: US Census Bureau)

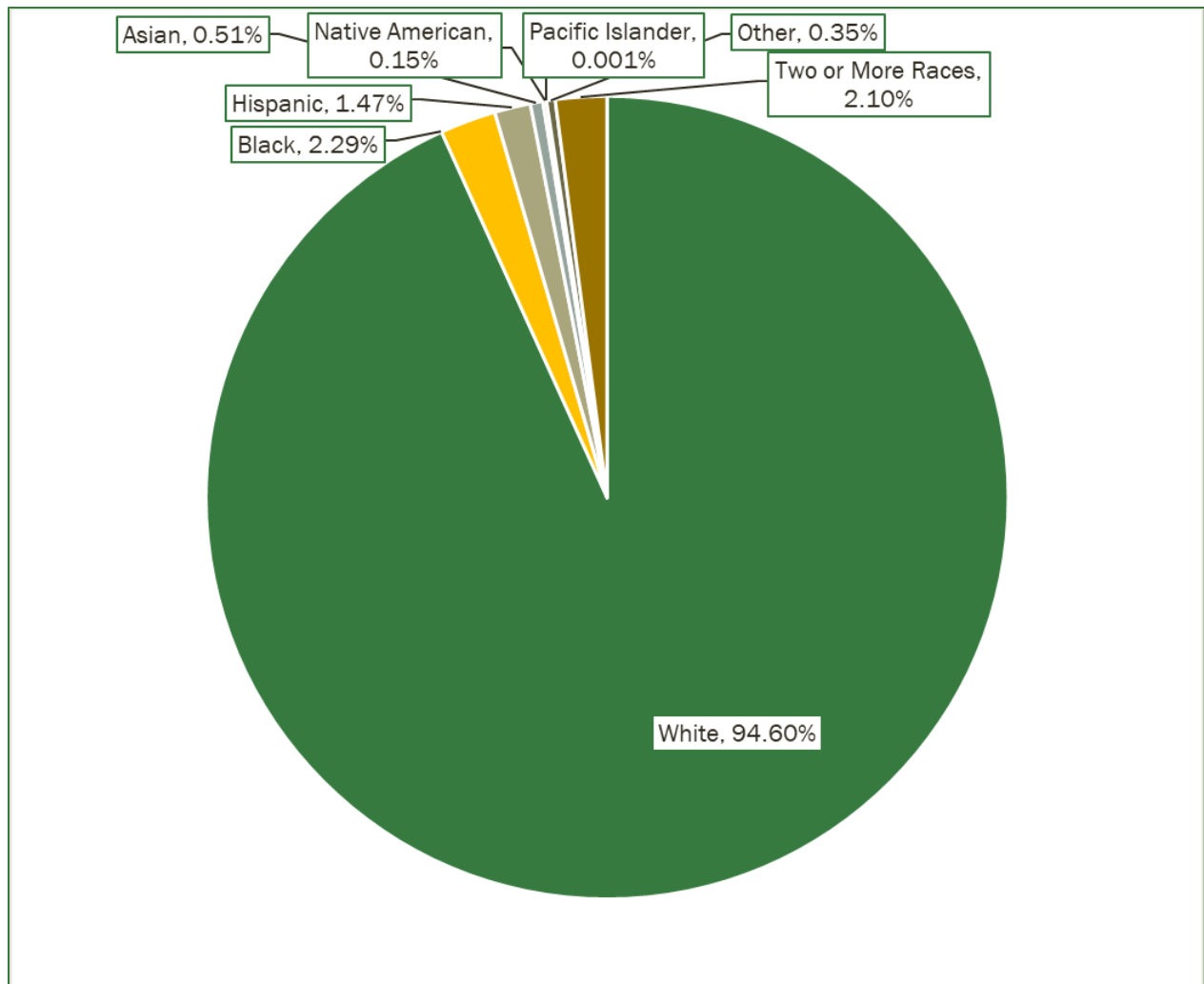


Figure 2-7: Minority Population, 2018 Estimates (source: US Census Bureau)

Age Composition

In addition to having a low minority population, the OMEGA region is also facing an aging population. **Figure 2-8** shows the current population pyramid according to 2018 estimates. There are a sizable number of people at retirement age and a large cohort of people (206,144) between 25-54, which will be either be retired or nearing retirement by 2045. The population is currently concentrated with high numbers of youth and elderly citizens, but fewer working-age adults, as they may have left the region to pursue employment opportunities elsewhere. The “Brain Drain” has become common in rural areas as young adults leave for educational opportunities and are unable to find adequate employment within the former community. This may potentially impact communities within the coming years due to the projected loss of income, sales, and property tax revenues, based on the dwindling population.

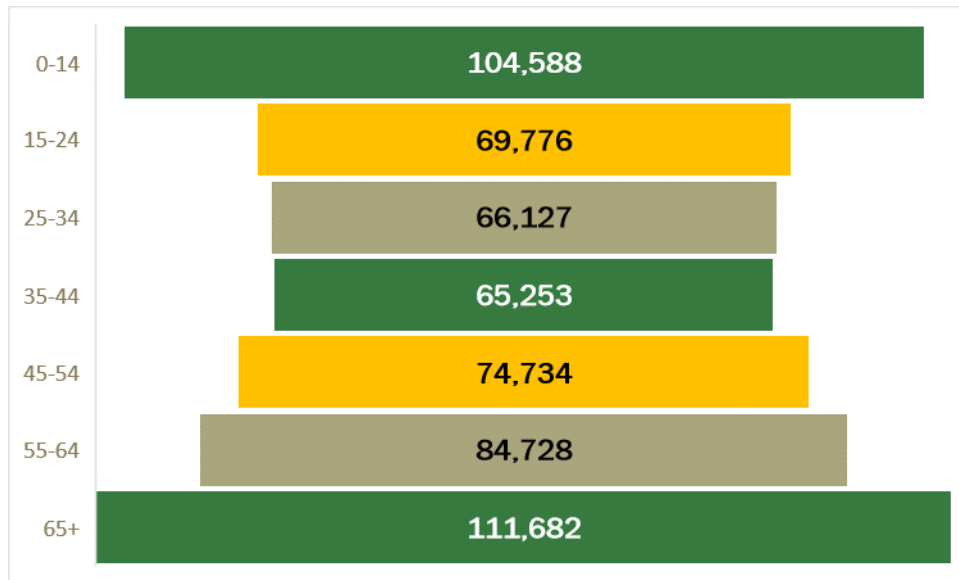


Figure 2-8: OMEGA Population Pyramid, 2018 Estimates (source: US Census Bureau)

Figure 2-9 shows the current Block groups with populations aged 65 and older. Distribution is generally uniform throughout the region, though Block Groups near urbanized areas have higher overall numbers. The 65+ age groups may require additional services as they age, putting additional strain on the local transit and human service transportation providers.

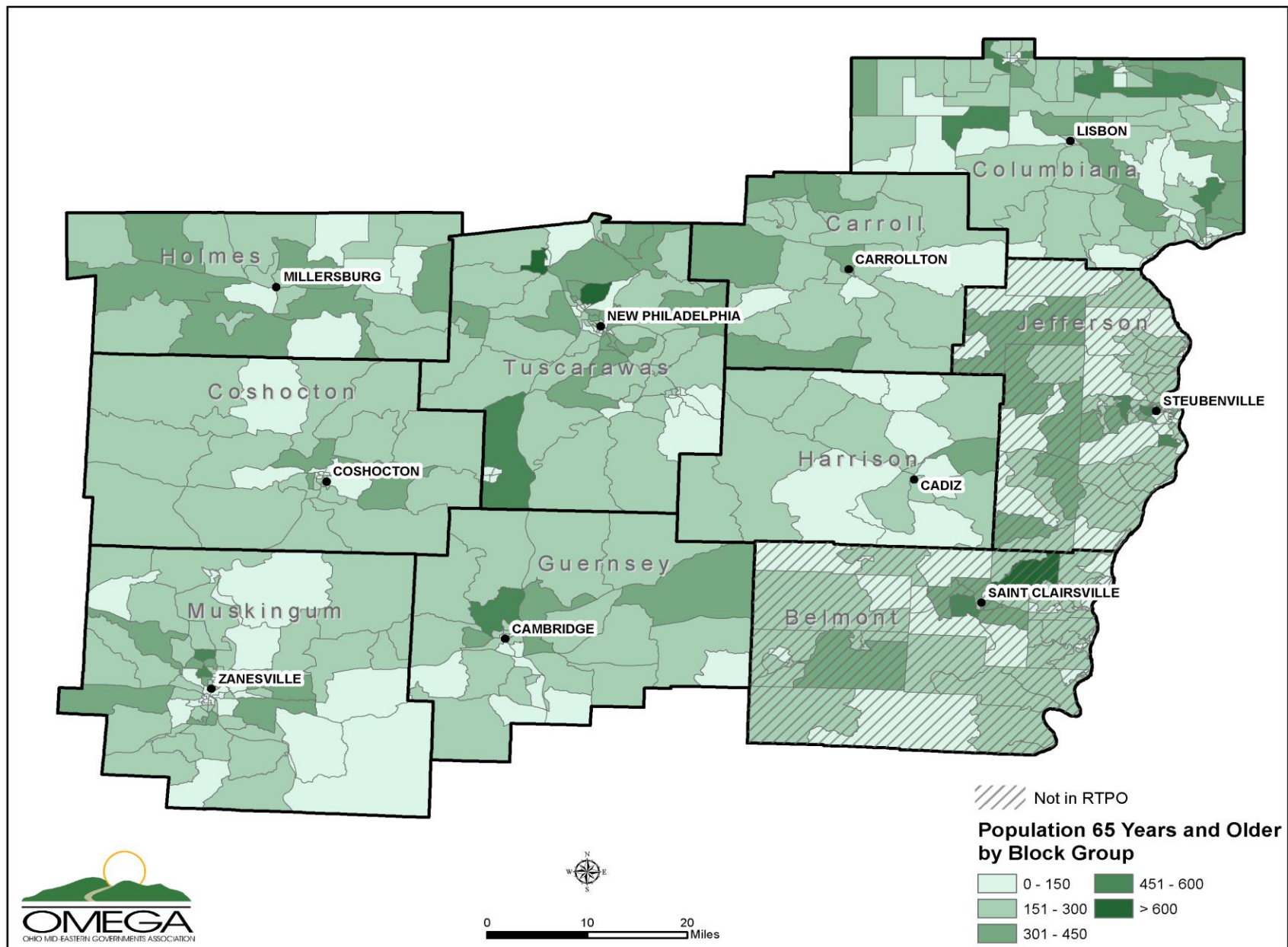


Figure 2-9: OMEGA Population Over 65 (source: US Census Bureau)

Disability Rate

The OMEGA region has a disability rate of 15.5% as of 2018, based on estimates from the US Census Bureau that are shown in **Figure 2-10**. This is moderately higher than the State of Ohio (14.1%) and significantly higher than the national average of 12.6%. Holmes County had the lowest rate of 8.1% and Harrison County had the highest with 18.7%. Apart from Holmes County, all other OMEGA counties had a rate higher than the state average, which highlights the challenges facing the regional transportation system.

Accessible transportation networks are critical to the success of all individuals, especially those with a disability. Mobility for disabled persons, especially in the rural areas, may be challenging. According to **Figure 2-11**, northern and eastern Guernsey County, southeastern Columbiana County, and central Tuscarawas County all have higher rates of people with disabilities in rural areas.

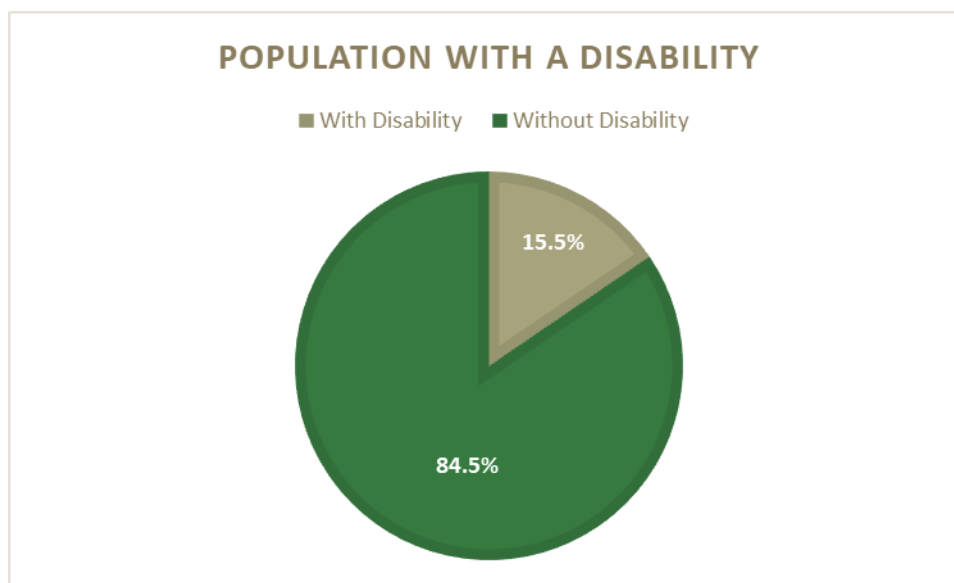


Figure 2-10: OMEGA Population with a Disability (source: US Census Bureau)

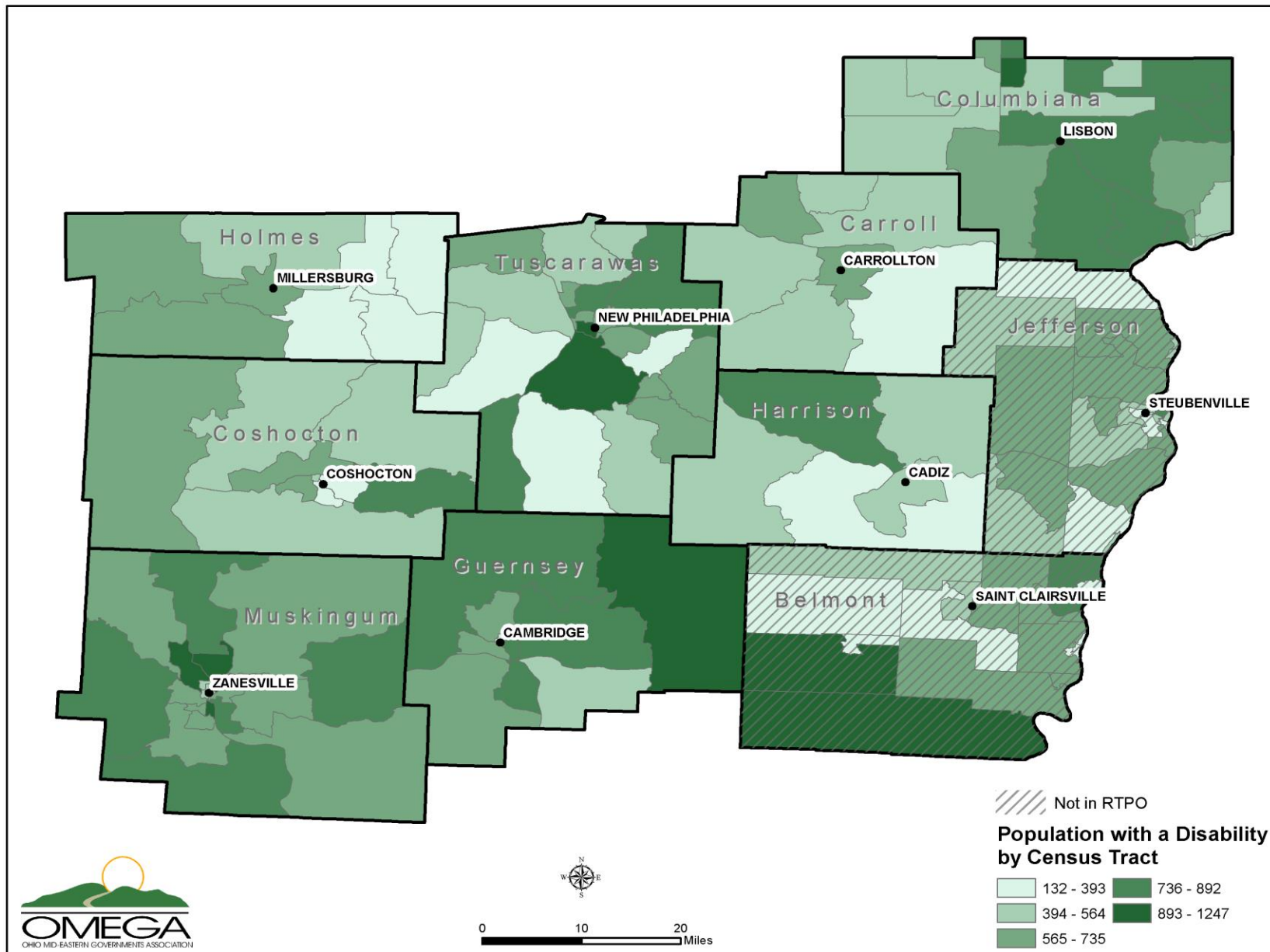


Figure 2-11: OMEGA Population with a Disability (source: US Census Bureau)

Language Proficiency

The age for determining English language proficiency is five years old. In the OMEGA region, the total population that is aged five years or older is 543,310. Of this population, 14,370 spoke English “Less Than Very Well” in 2017, or approximately 2.6% of the total population. Language barriers may pose an additional challenge for people using the regional transportation system. **Figure 2-12** displays the population that describes themselves speaking English “Less Than Very Well”. Eastern Holmes County, northeastern Coshocton County, and northwestern Tuscarawas County are home to a large Amish population. Outreach to this community is often more challenging and requires established relationships with local officials and regional planning officials to be effective. Other areas near larger population centers may reflect more concentrated groups of immigrants or migrant workers.

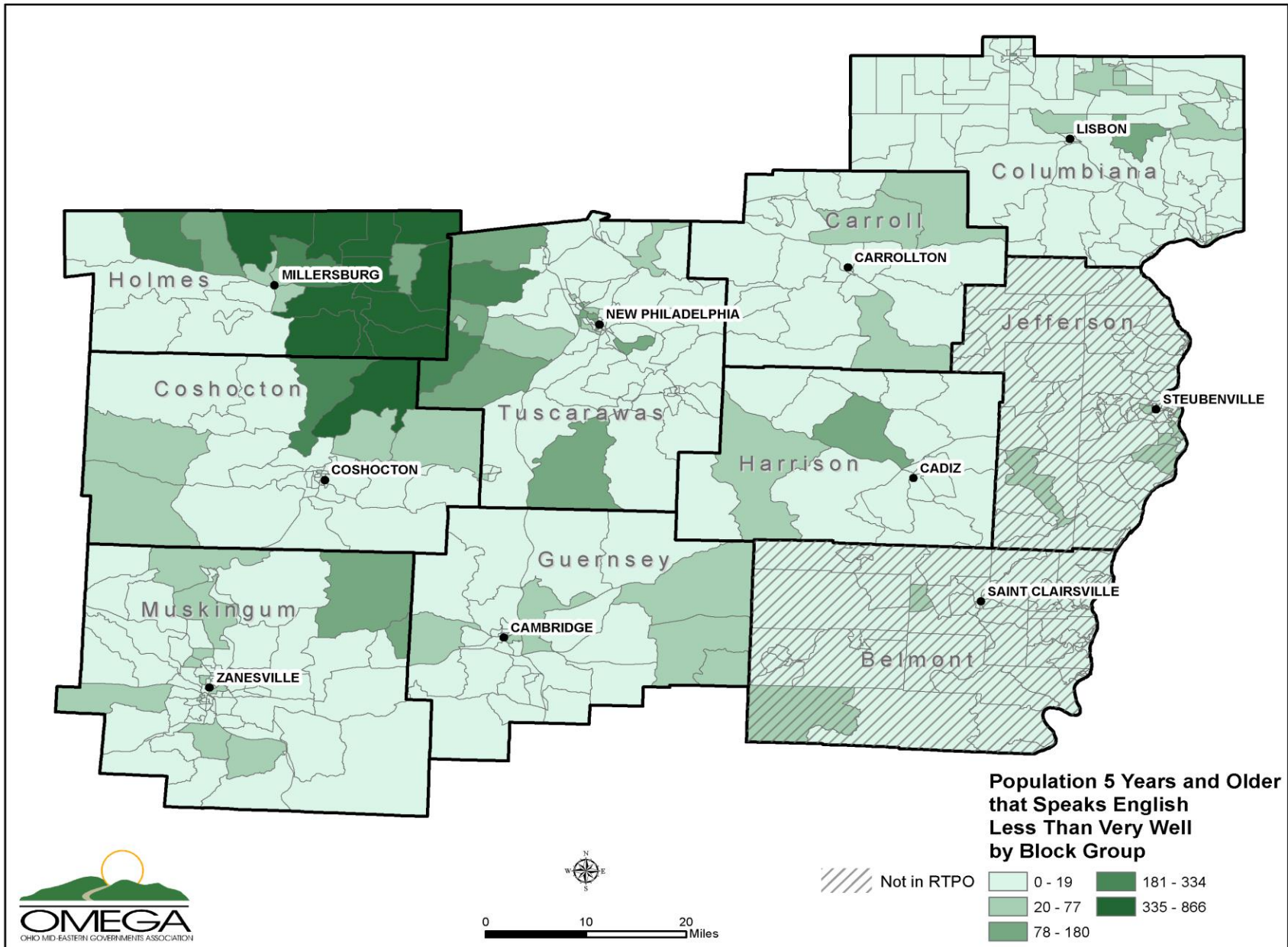


Figure 2-12: OMEGA Population Speaking English “Less Than Very Well” (source: US Census Bureau)

Zero-Vehicle Households

There are approximately 229,747 occupied households in the OMEGA region, based on Census data. According to 2018 estimates, 18,642 households reported either not owning a vehicle or not having access to a vehicle for their personal use. This represents approximately 9% of all households. Households without vehicles may rely on public or privately funded transportation options. Areas with high numbers of zero vehicle households are located within areas of high Amish population (Holmes, Coshocton, and Tuscarawas counties) and near larger urbanized areas such as Zanesville. and **Figure 2-13** shows the breakdown of vehicular ownership throughout the OMEGA region and **Figure 2-14** displays where zero vehicle households are concentrated.

OMEGA Region Zero-Vehicle Households

Total Occupied Housing Units: 229,247

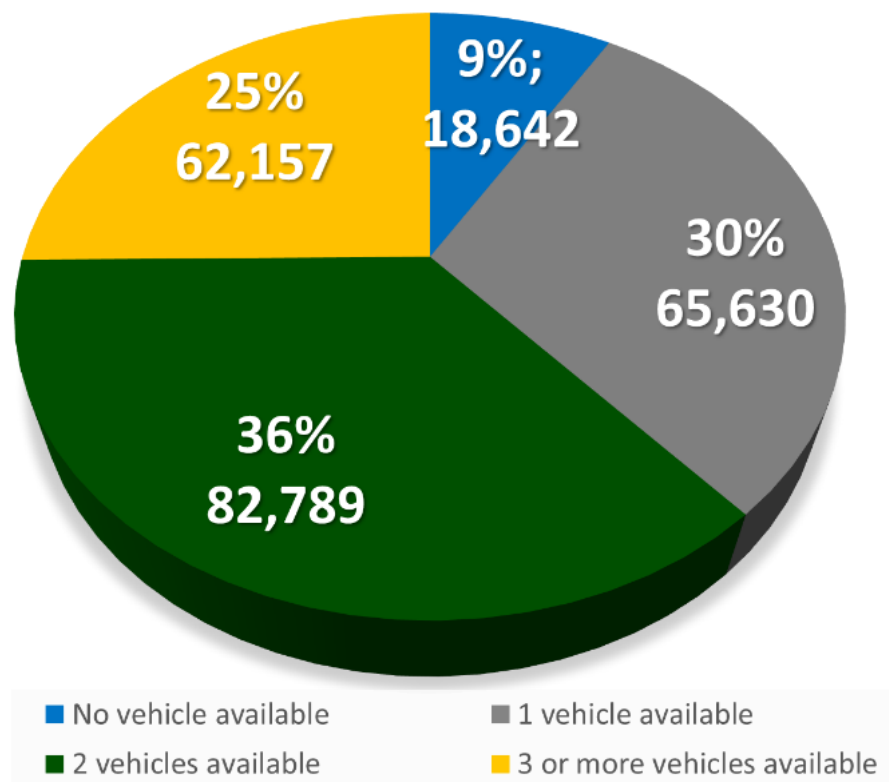


Figure 2-13: OMEGA Population - Zero Vehicle Households (source: US Census Bureau)

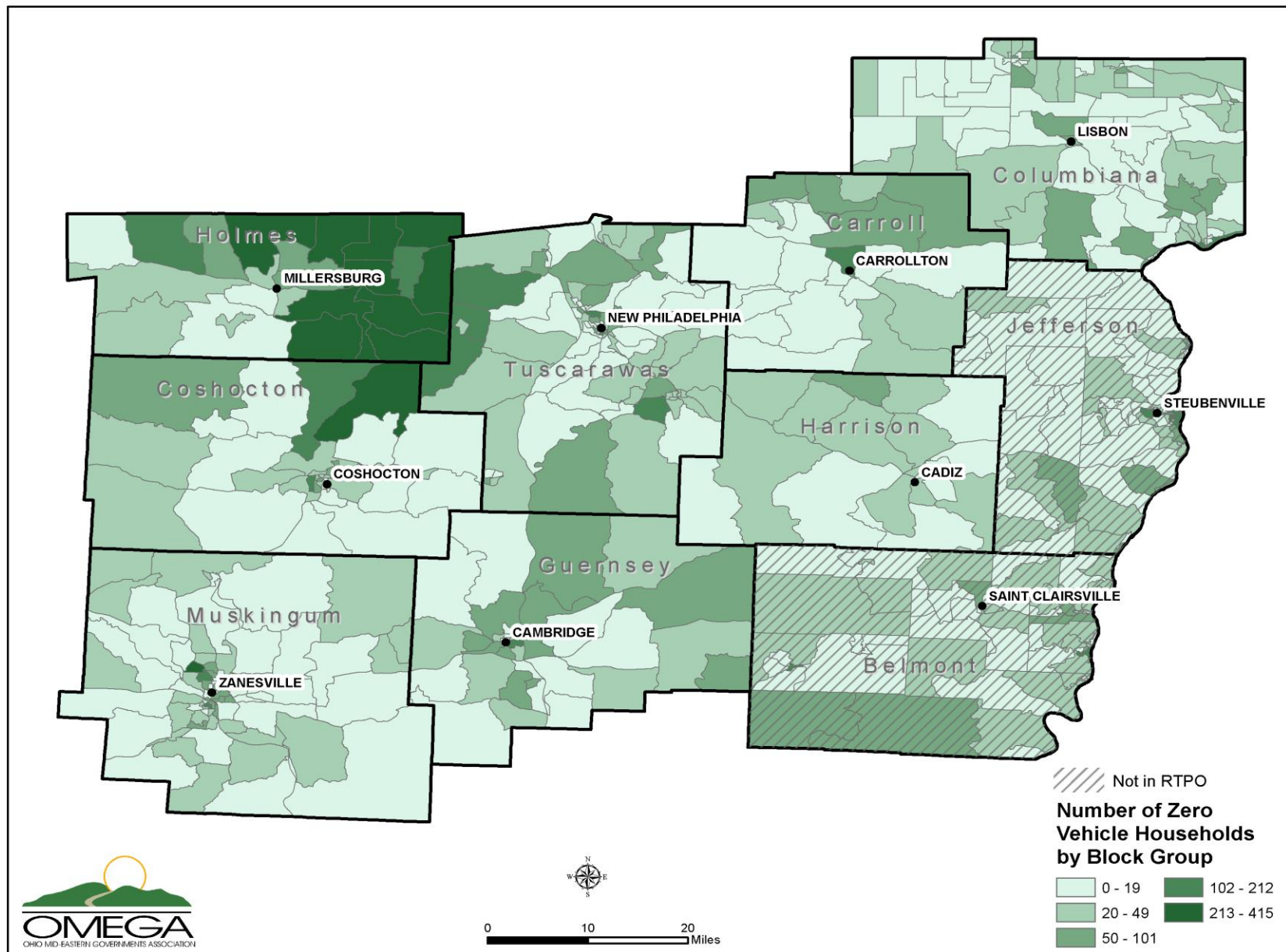


Figure 2-14: OMEGA Population - Zero Vehicle Households (source: US Census Bureau)

Environmental Justice

The following information represents the results of the OMEGA Environmental Justice analysis. The concept of Environmental Justice is derived from Title VI of the Civil Rights Act of 1964 and other civil rights statutes. Environmental Justice began in 1994 as a national policy directive, driven by Presidential Executive Order 12898, and directs "each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." In response, the Federal Highway Administration [FHWA] and the Ohio Department of Transportation [ODOT] continue their commitments to assure that Environmental Justice is carried out in the programs and strategies they fund, including the activities of RTPOs.

Like other regional and metropolitan planning agencies, OMEGA utilized a four-step process for the analysis in our Transportation Improvement Program. This process is applied to all transportation related project in OMEGA's RTIP and transportation plans, including those on roads, bridges, pedestrian and bicycle infrastructure, and public transit.

Step 1 - Public Outreach

The objective of OMEGA's public outreach is to make every attempt to involve all stakeholders regardless of their demographic composition; in particular, those that may be directly impacted as a result of a transportation improvement. OMEGA approaches communities to inform stakeholders who traditionally tend not to become involved through the regular informational meetings within our public involvement process. OMEGA accomplishes this through three sets of public involvement: a series of county-specific public involvement meetings, OMEGA's Citizens Advisory Board (CAB), and OMEGA's Transportation Advisory Committee (TAC).

Step 2 -Demographic Profile

Based on data from the American Community Survey 5-Year Estimates 2013 - 2017 (ACS), OMEGA focused on two population groups: minority and low-income residents to complete the Environmental Justice assessment. 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 within a county. There are 104 census tracts in the OMEGA eight-county area.

Although minority and persons in poverty live throughout the OMEGA region, many are concentrated in specific locations and neighborhoods in or near municipal areas. A person is counted as a member of a minority group if he or she claimed any of the following: Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, or Hispanic. Based on data from the 2013 - 2017 ACS, minorities comprise 5.18% of the average population within OMEGA region census tracts. Therefore, any census tract with a percentage above 5.18% was considered to have a regionally significant concentration of minority populations.

A similar approach was taken to establish regionally significant concentrations of populations with low income. Based on data used in the 2013 - 2017 ACS the average MHI within OMEGA region census tracts was \$45,761. Therefore, any census tract with a median household income below \$45,761 was considered to have a regionally significant concentration of low-income residents.

Finally, GIS techniques were used to determine which census tracts had either higher-than-average minority or higher-than-average low-income populations. These tracts were then identified as Environmental Justice populations within the OMEGA region. Eighty-one census tracts in the OMEGA region were considered to have either higher-than-average minority or higher-than-average low-income populations. This represents 55.1% of the 147 census tracts within the OMEGA region. See **Figure 2-15**.

Step 3: Environmental Effects

To comply with Executive Order 12898, a list of project control variables was established to qualitatively evaluate the environmental effects of projects that are in minority or low-income areas. The variables considered were:

- Safety
- Congestion
- Aesthetics
- Natural Environment
- Local Economy
- Residents
- Accessibility

Step 4: Analysis of Environmental Effects on OMEGA Projects

During the project review process, a project's location was mapped to identify if the project would affect an Environmental Justice population. Projects not located within an Environmental Justice population were exempt from further analysis and marked as "N/A." Projects that were located within an Environmental Justice population area were then subject to further review by the control variables listed in Step 3.

Environmental Justice Focus Areas

Environmental Justice Focus Areas defined as Census Tracts with
Income Level < \$45,761 or Minority Population > 5.18%
(Regional Averages)
Source: U.S. Census 2013 to 2017 ACS Estimates

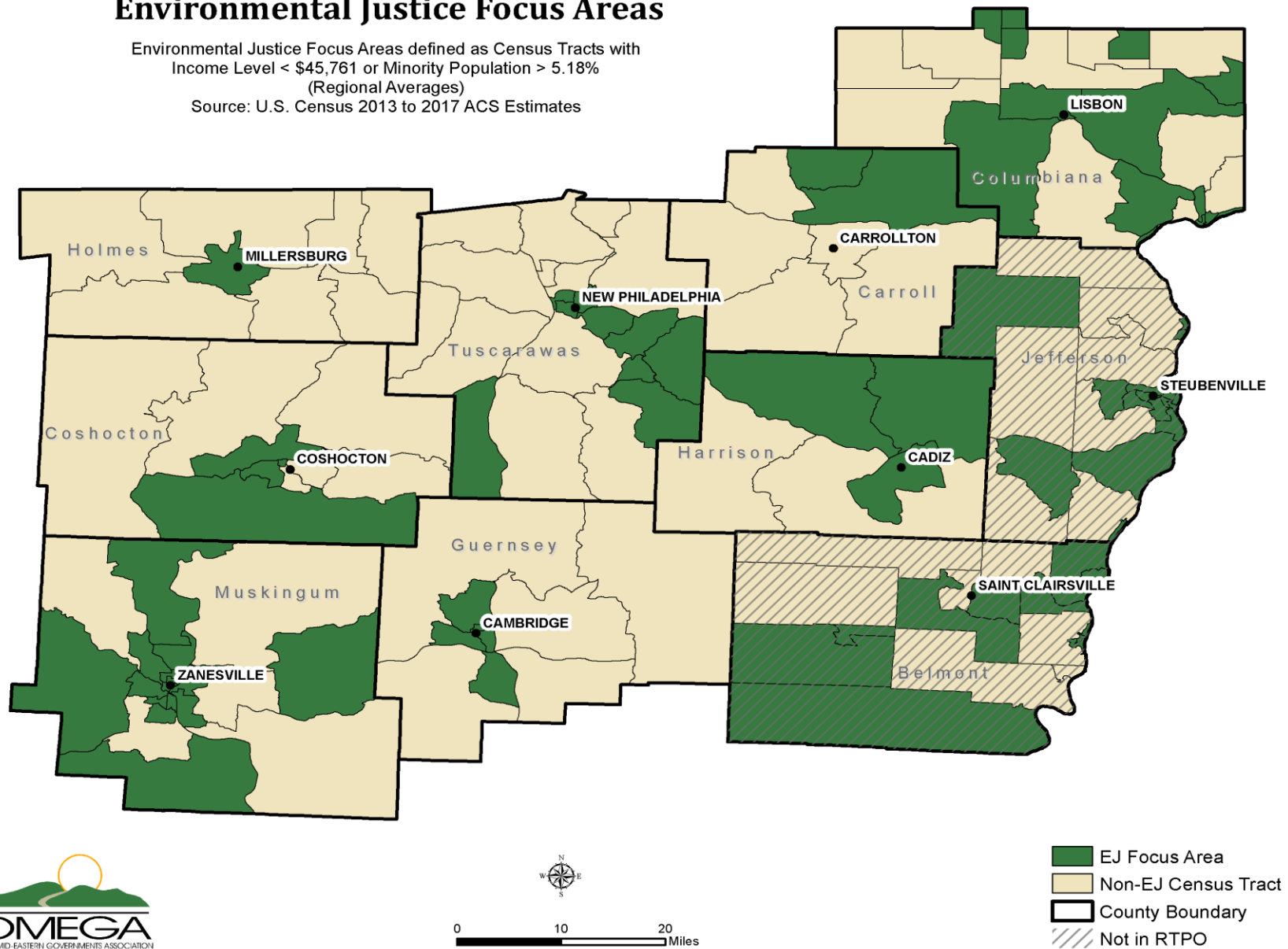


Figure 2-15: OMEGA Environmental Justice Focus Areas
Regional Transportation & Development Plan

2.2 Travel Patterns

Travel patterns are a representative guide to observe how the population moves throughout the region as well as outside the region. A very important indicator, and the basis of travel in the region, is how people commute regularly to their place of work. According to **Figure 2-16**, most of the working population in the region drive themselves to work. The next largest group of commuters to work are those who carpooled at 9.05%. The third largest group are those who worked at home at 3.37% and following them are those who walked to work at 2.70%. The smallest group of commuters to work are those who used a taxicab, motorcycle, or other means at 1.09%, those who used a bicycle at 0.84%, and those who use public transportation at 0.35%. The average commute time to work in the region is 24.6 minutes, which is slightly longer than the state average of 23.4 minutes.

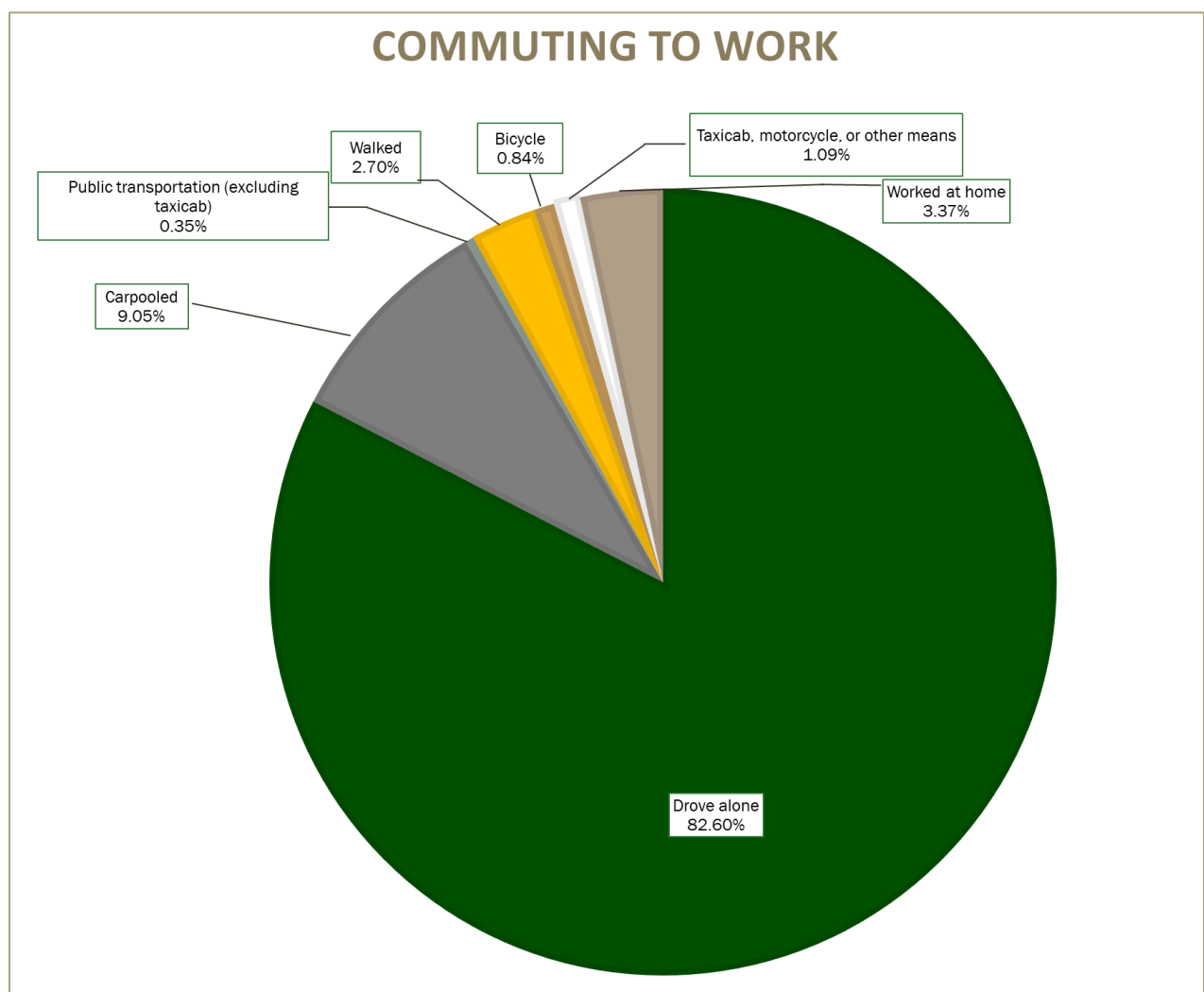


Figure 2-16: OMEGA Population Commuting to Work (source: US Census Bureau)

Based on **Figure 2-17**, most of the out-of-state commuters in the region are in the eastern portion of the region, as most of the counties are close to or border the states of West Virginia and Pennsylvania. Between 6-15% commute out-of-state from northeast Carroll County. From eastern Harrison County, there are a few commuters that travel out-of-state for work, between 6-15% from the census tracts in the east and 16-25% from the south and southeast. A notable area that has out-of-state commuters for work is from the center of Guernsey County at 6-15%. This is unlike many other areas in the region that are generally situated closer to the state border.

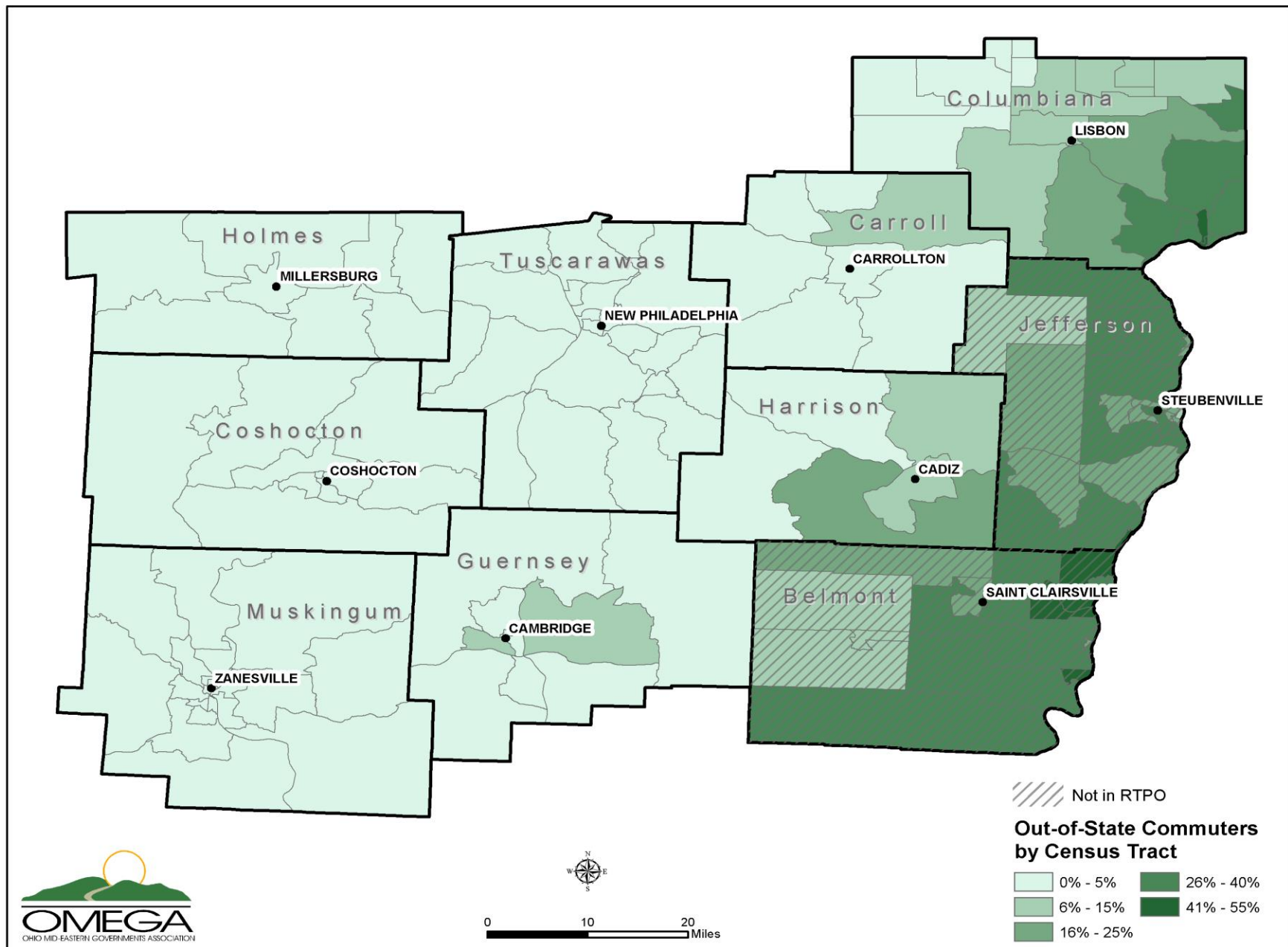


Figure 2-17: Regional Out-of-State Commuters (source: US Census Bureau)
Regional Transportation & Development Plan

Many residents from the aforementioned counties travel out-of-state on a daily basis for employment opportunities. According to **Figure 2-18**, approximately 10.3% of the employees from the entire region leave the state of Ohio for employment in neighboring states.

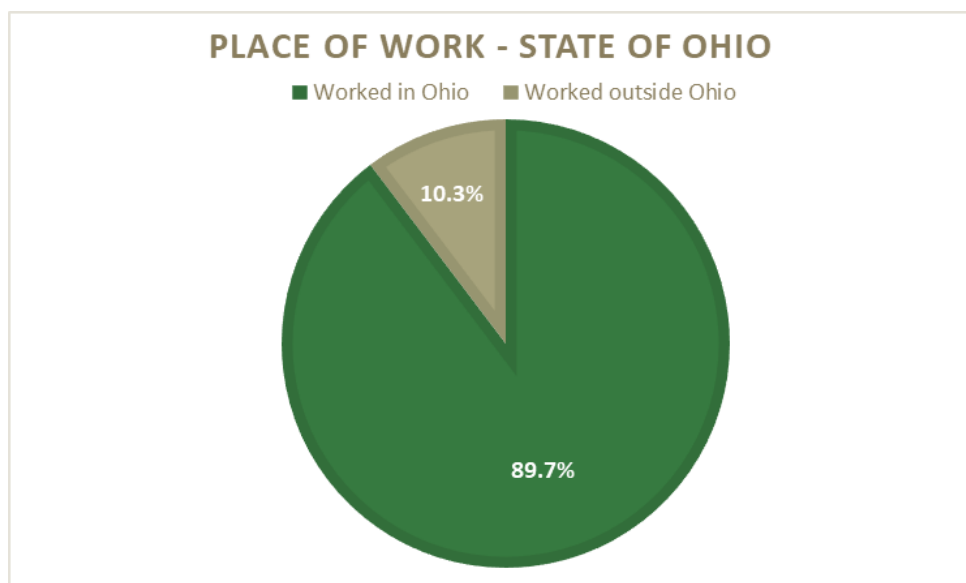


Figure 2-18: Commuters' Place of Work – State (source: US Census Bureau)

Figure 2-19 represents the working population that leave their home county for employment. It is not too surprising to find that most of the out-of-county commuters in their census tracts live near their county lines. This is understandable since their closest employment opportunity may be in the next county over or even further. Every county has a different ratio with their commuters. The census tracts that have more than 50% out-of-county commuters are, by county:

- **Belmont County***: all less than or equal to 50%;
- **Carroll County**: northwest, west, and southwest of Carrollton;
- **Columbiana County**: western Columbiana County, west of Lisbon;
- **Coshocton County**: western Coshocton County;
- **Guernsey County**: all less than or equal to 50%;
- **Harrison County**: northwest of Cadiz;
- **Holmes County**: all less than or equal to 50%;
- **Jefferson County***: all less than or equal to 50%;
- **Muskingum County**: all less than or equal to 50%;
- **Tuscarawas County**: northern Tuscarawas County.

On average, the areas in the region that have the lowest out-of-county commuters appear to be located near or around the county seat as they may have more job availability owing to the higher population density.

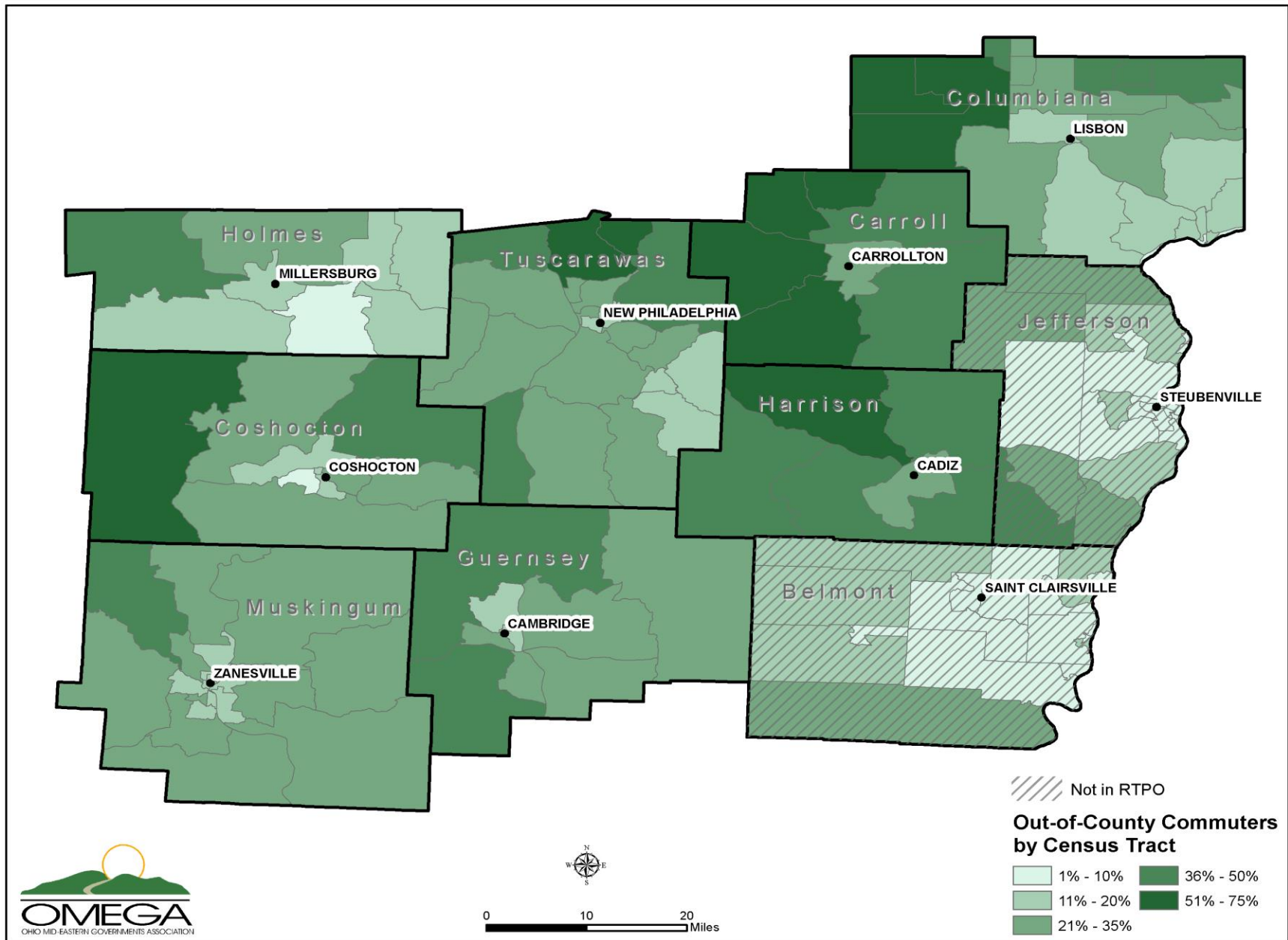


Figure 2-19: Regional Out-of-County Commuters (source: US Census Bureau)
Regional Transportation & Development Plan

According to **Figure 2-20**, approximately 28.5% of the working population in the region that work in the Ohio work in a different county than which they live. For these commuters, there may be job opportunities for people that live near their county borders in another county, and it is easier and closer for them to travel to the next county than to find work in their home county. The remaining working population, 71.5% (~ 160,000 employees) work within their county of residence.

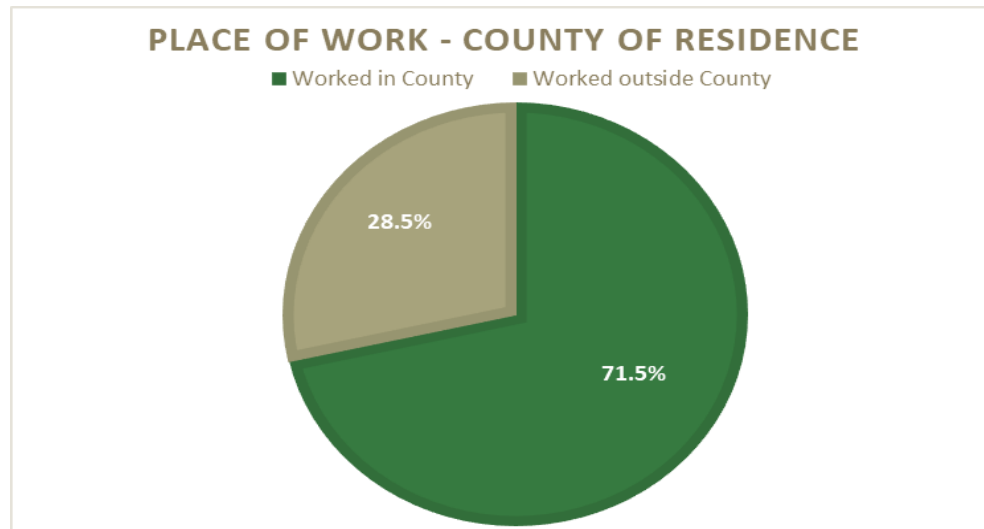


Figure 2-20: Commuters' Place of Work – County (source: US Census Bureau)

Commuters that work within their county of residence are represented in **Figure 2-21**. As stated before, the majority of the region's commuters work in their county of residence, yet each county has different ratios for various reasons. The census tracts that have more than two-thirds, or 66%, of within-county commuters are, by county:

- **Belmont County*:** south and to the west of St. Clairsville;
- **Carroll County:** in the middle surrounding Carrollton;
- **Columbiana County:** around Lisbon to the north and west and east of SR 9 northeast of Salem;
- **Coshocton County:** around Coshocton and to the east, south of US 36, and to the north between SR 60 and SR 643;
- **Guernsey County:** around Cambridge to the north and to the west and south of Byesville to the east within SR 265 and SR 761;
- **Harrison County:** all less than 66%;
- **Holmes County:** all of Holmes County except the northwest corner around Nashville;
- **Jefferson County*:** along the Ohio River in Steubenville and west towards Wintersville. Areas near East Springfield, Richmond down south to Smithfield;
- **Muskingum County:** all of Muskingum County except the northwest corner around Fazeysburg;
- **Tuscarawas County:** near New Philadelphia and in the southeast around Uhrichsville.

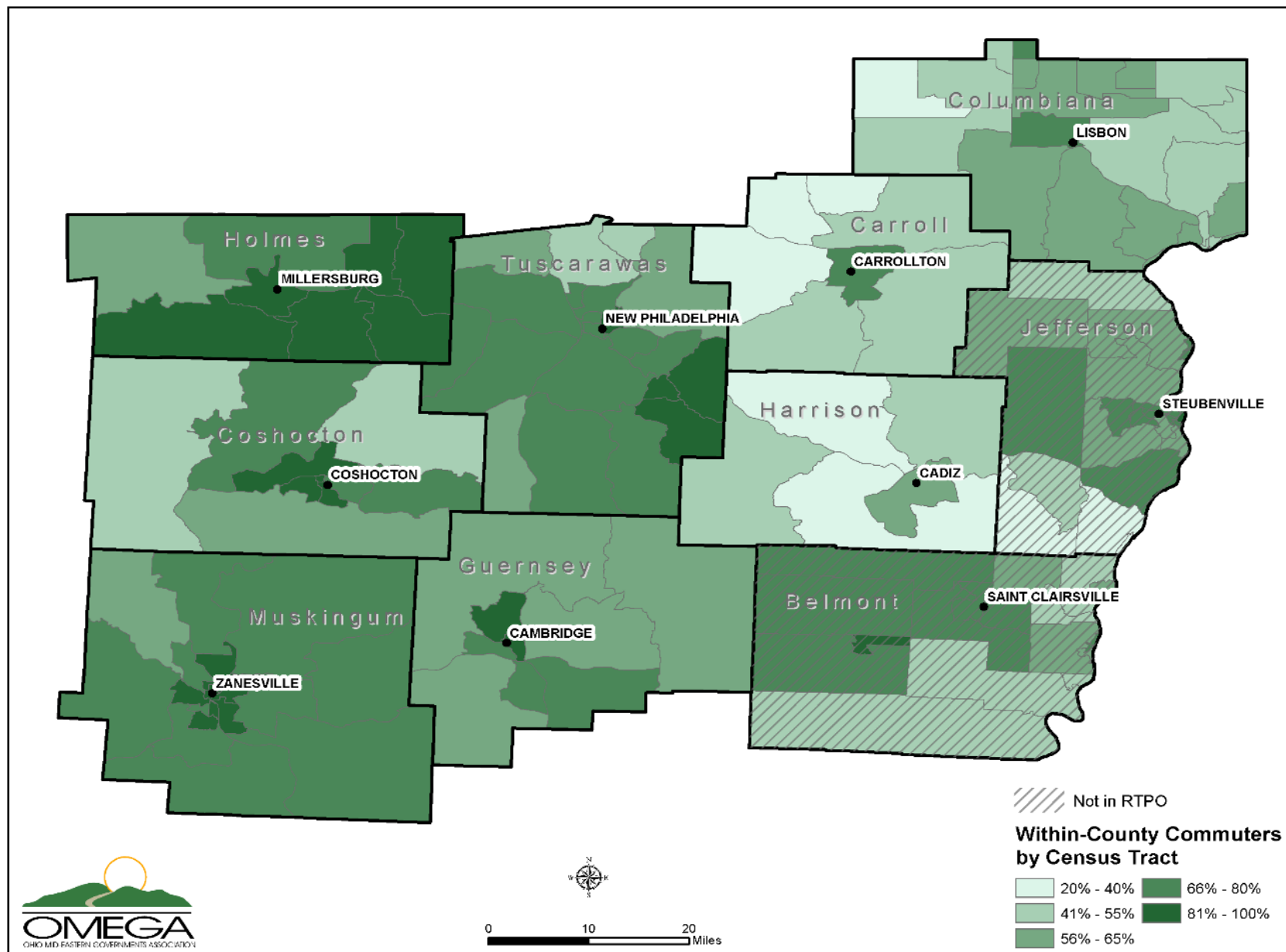


Figure 2-21: Regional Within-County Commuters (source: US Census Bureau)
Regional Transportation & Development Plan

All the commuter movement in the region offers an opportunity for the possibility to be served by public transit and human service transportation coordinated within the region. If many commuters who drove alone to work were aware of services available to them based on affordability, proximity, or eligibility, then they may be more interested in using these alternatives. This may be worth exploring since the average daily commute in the region of 24.6 minutes is slightly longer than the state average. Offering and increasing awareness of more alternatives to daily commuters in the region may influence growth in the other modes such as carpooling, biking, walking, and public transit.

The travel patterns for commuters may also be based on proximity to job opportunities. For instance, the counties that border the neighboring states represent the majority of the 10.3% of out-of-state commuters, including some from Carroll, Guernsey, and Harrison Counties. Also, more than a quarter of the commuters in their region leave their county of residence for work because they may have job opportunities closer to them in another county if they live closer to their county line than to their county seat, in general. However, most of the region's commuters, 71.5%, work within their county of residence.

2.3 Land Use

Over one-half (56.02%) of the OMEGA region is forest. Two significant land uses are pastured land and cultivated crops at 25.19% and 6.24%: respectively. In contrast, just under 8% of the total region is developed. The predominantly rural nature of the OMEGA region continues to present infrastructure related challenges when considering new and/or improved utilities because of the vast open areas between serviced entities. See **Figures 2-22 and 2-23**.

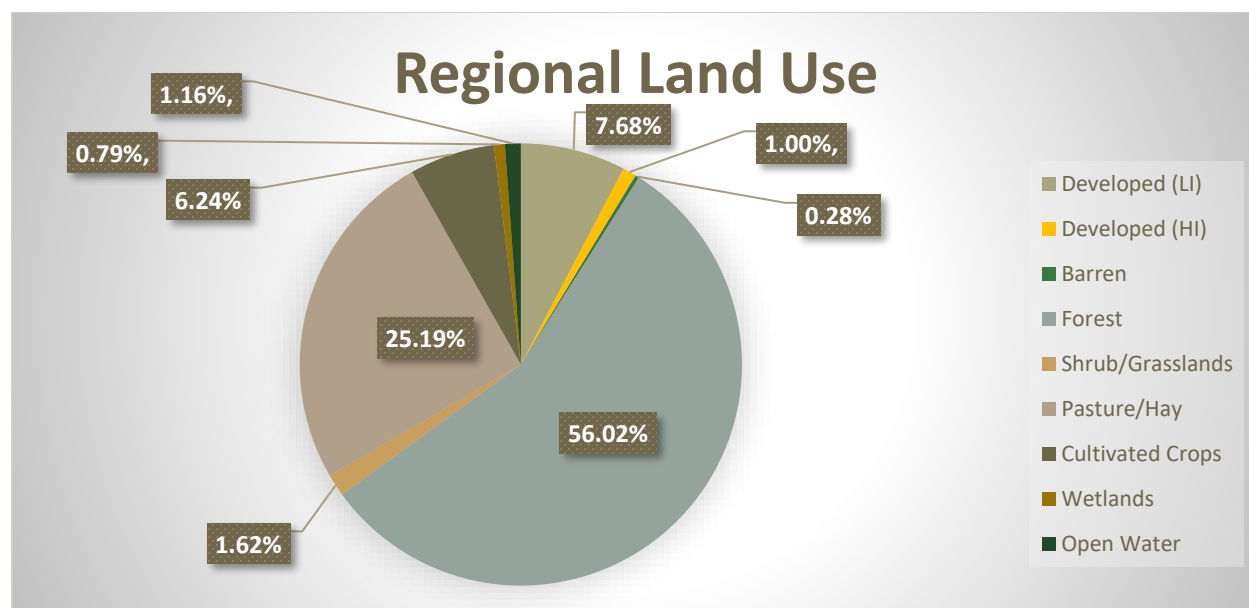


Figure 2-22: Regional Land Use (Source: Ohio Development Services Agency)

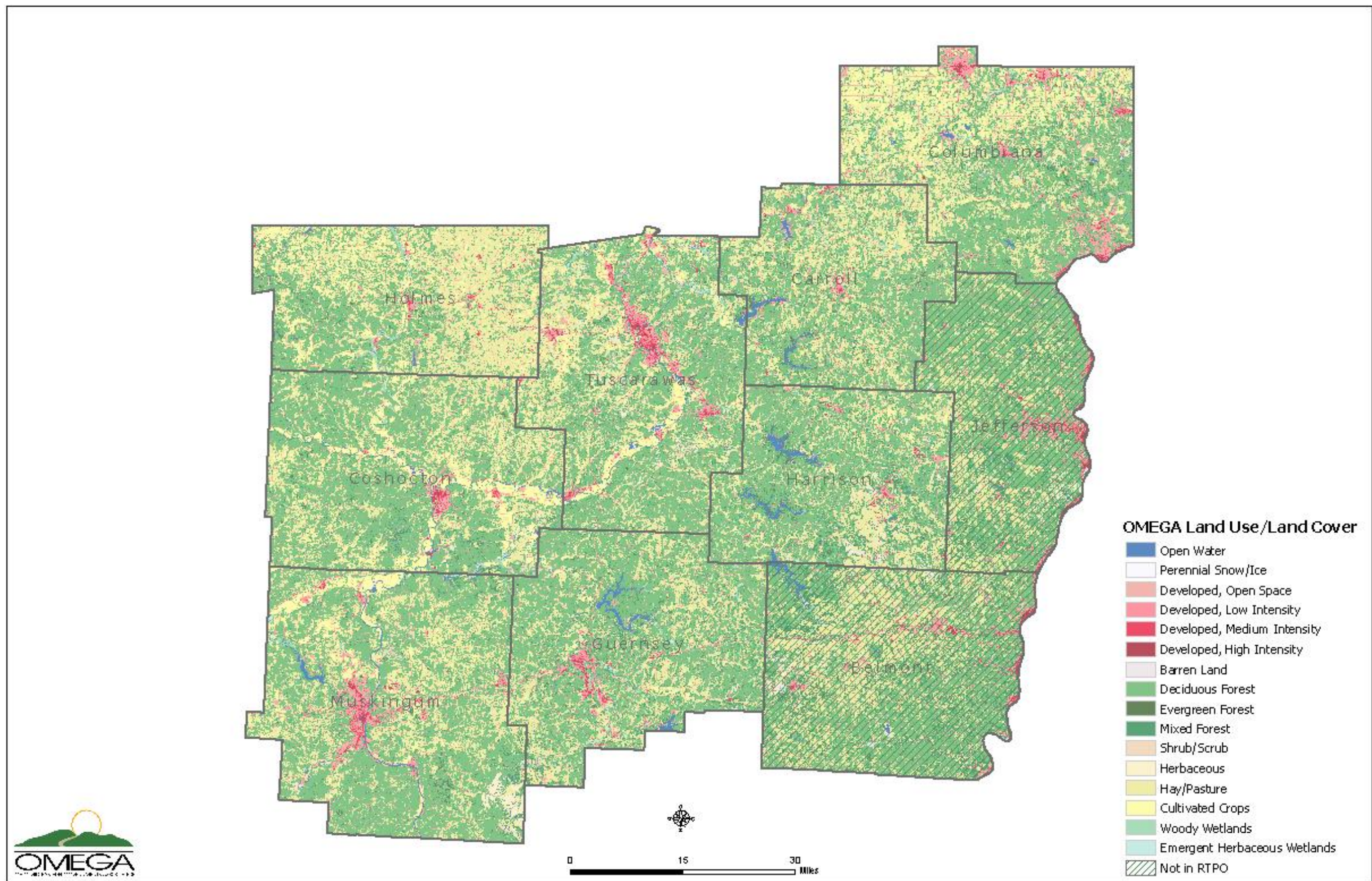


Figure 2-23: Land Use/Land Cover

Floodplains & At-Risk Roadways

Using GIS, OMEGA overlaid existing floodplains onto roadways to determine the level of risk of flooding for major roadways in the RTP0. This analysis was limited to the state-maintained system. When the level of the roadway was within the same contour line as a floodplain, the road was deemed at risk. The contours used were twenty-foot contours. While this does not indicate that the roadway regularly floods, it does focus attention to areas likely to flood in extreme rain events. Throughout the region, each county has an average of 11.5 major roads with areas within a flood hazard zone. At-risk routes include one Interstate, six US, and 61 state routes. See **Table 2-2** and **Figure 2-24**.

At Risk Route	Carroll County	Columbiana County	Coshocton County	Guernsey County	Harrison County	Holmes County	Muskingum County	Tuscarawas County
I-70				X				
US 22				X	X		X	
US 30		X						
US 36			X					
US 40				X			X	
US 62		X				X		
US 250					X			X
SR 3						X		
SR 7		X						
SR 9	X	X			X			
SR 11		X						
SR 14		X						
SR 16			X				X	
SR 39	X	X				X		X
SR 43	X							
SR 45		X						
SR 46		X						
SR 60			X			X	X	
SR 79			X					
SR 83			X	X		X	X	
SR 93			X				X	X
SR 146				X			X	
SR 151					X			
SR 154		X						
SR 183	X							
SR 164	X	X						
SR 165		X						
SR 170		X						
SR 172		X						
SR 173		X						
SR 206			X					
SR 208							X	

At Risk Route	Carroll County	Columbiana County	Coshocton County	Guernsey County	Harrison County	Holmes County	Muskingum County	Tuscarawas County
SR 209				X				
SR 212	X							X
SR 258								X
SR 259								X
SR 265				X				
SR 267		X						
SR 285				X				
SR 313				X				
SR 331					X			
SR 340				X				
SR 342					X			
SR 344		X						
SR 345							X	
SR 416								X
SR 513				X				
SR 515						X		
SR 518		X						
SR 520						X		
SR 524	X							
SR 541			X	X				
SR 542	X							
SR 555							X	
SR 558		X						
SR 644		X						
SR 646					X			
SR 658				X				
SR 660				X				
SR 662				X				
SR 666							X	
SR 715			X					
SR 723				X				
SR 751			X					
SR 754						X		
SR 799					X			
SR 800					X			X
SR 821				X				

Table 2-2 – At-Risk Roadways (Flooding)

Floodplains also pose a challenge to economic development. With challenging topography, the amount of developable land is significantly diminished. Most developed land is located near these floodplains.

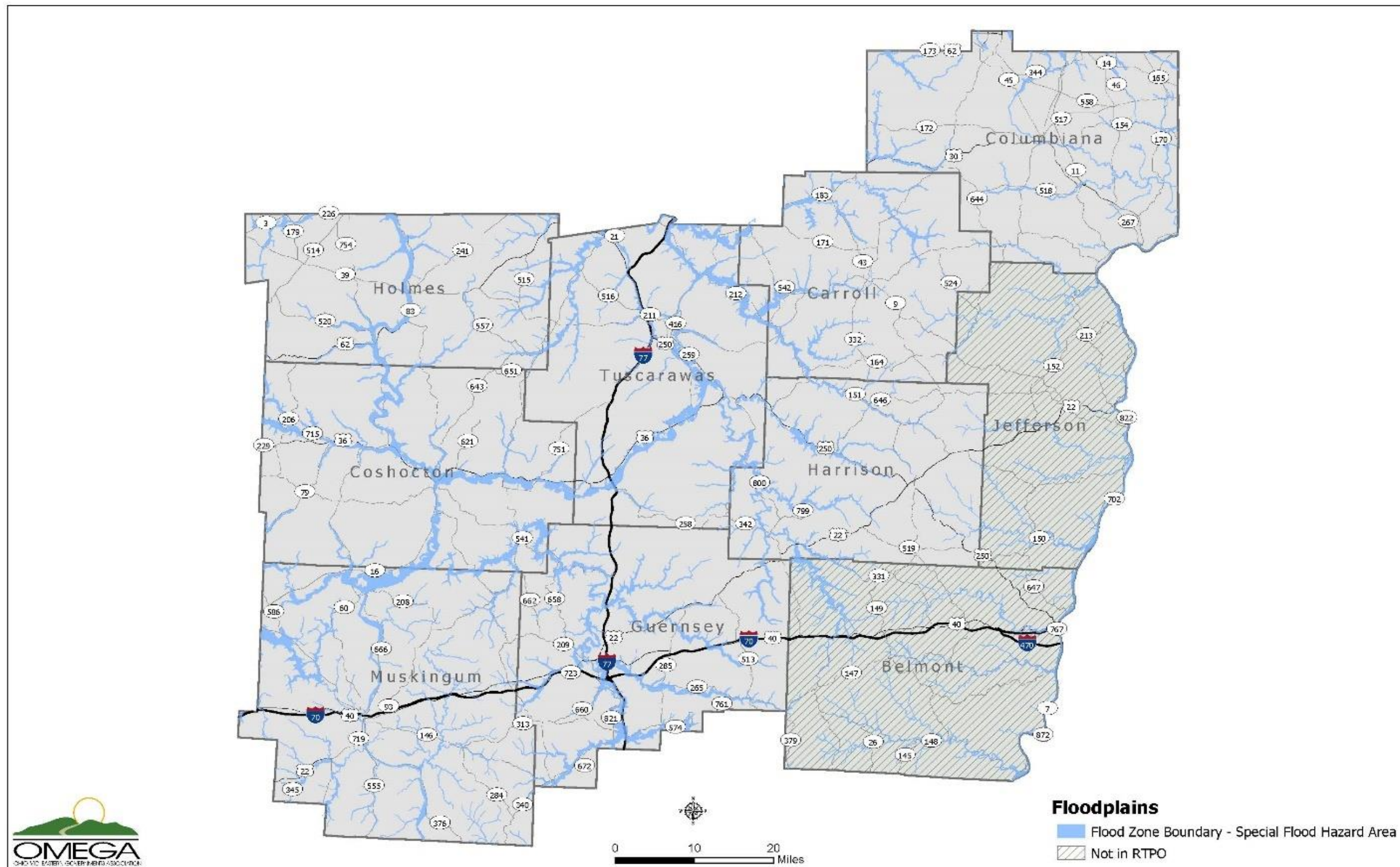


Figure 2-24: Floodplains

Abandoned mine land also proves to be a significant challenge when developing land. Because of this, OMEGA partnered with the Ohio Department of Natural Resources Division of Mineral Resource Management to identify sites mined prior to 1977 where reclamation is likely to improve the land for economic or community development reuse under the Abandoned Mine Land (AML) Pilot Program. A nine-acre site in the D.O. Hall Business Park in Guernsey County is completed and a second, adjacent site is under consideration to support a potential business expansion under this program. A site in Columbiana County has been approved for project funding as well. The AML Pilot Program runs through mid-2020. AML locations are shown in **Figure 2-25**.

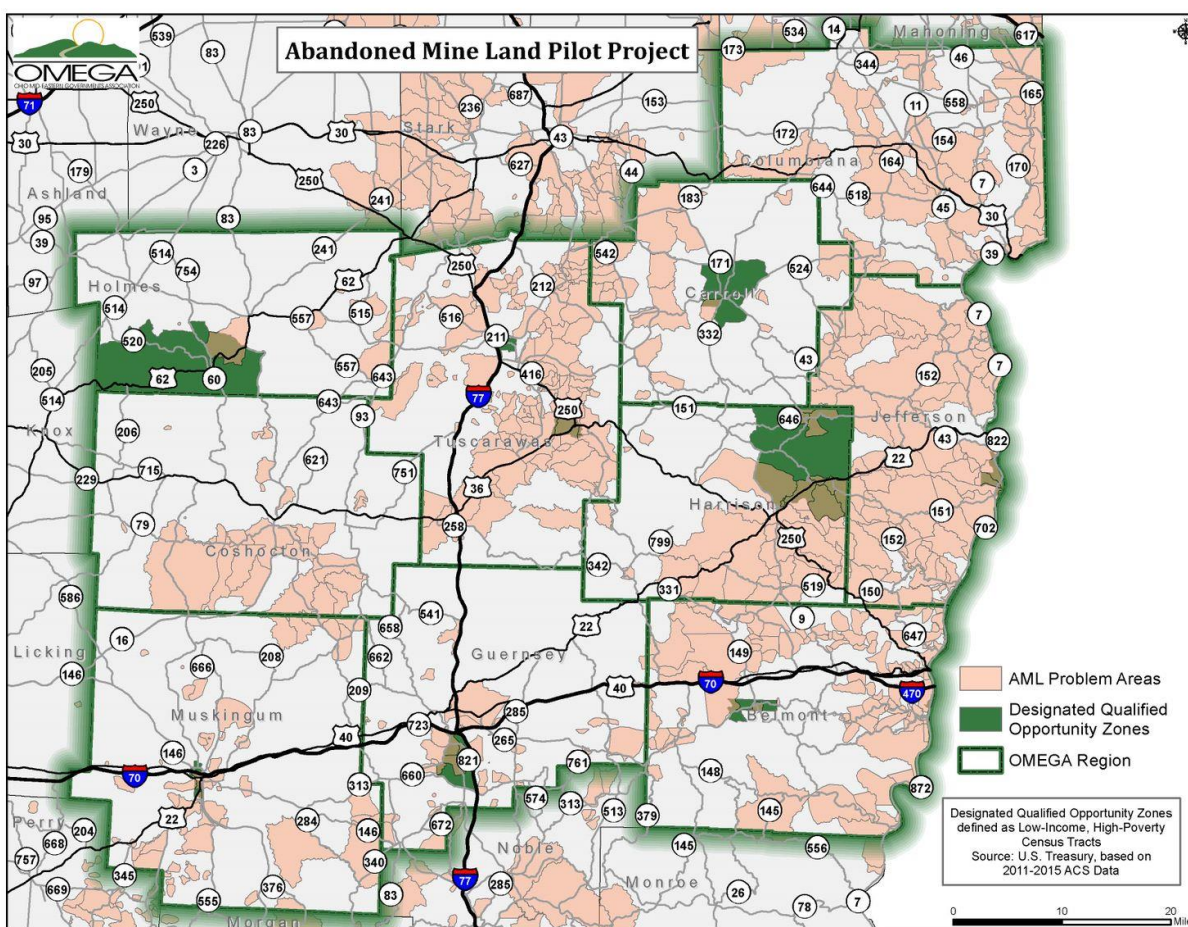


Figure 2-25 – Abandoned Mine Lands with Opportunity Zones

Wetlands are also present throughout the region. **Figure 2-26** displays the general location and type of wetlands present in the region. Wetland delineations may be necessary for project development, this map is for general reference use only. Land use is restricted depending on the type of wetland that is present or adjacent to a property. These restrictions further hamper local efforts to develop new land to attract new businesses or allow businesses to expand.

The OMEGA region hosts several historically significant places. Ohio was settled east to west, and it follows that some of the oldest settlements in the state are located throughout the region. The historical places are a boon to tourists and can potentially spur new development by utilizing historical tax credits and other incentives to repurpose existing structures. **Figure 2-27** shows the location of these structures and sites.

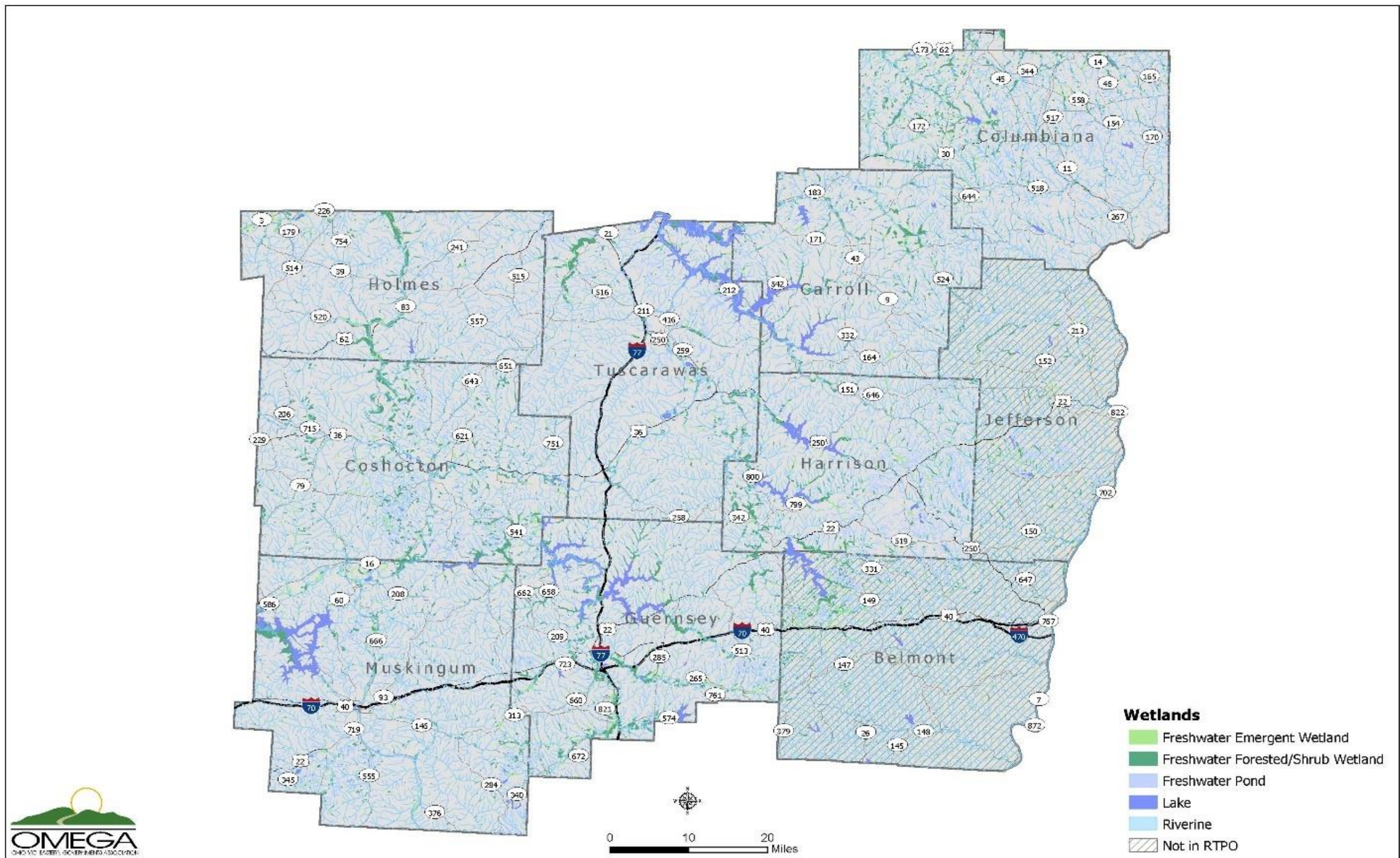


Figure 2-26: Wetlands

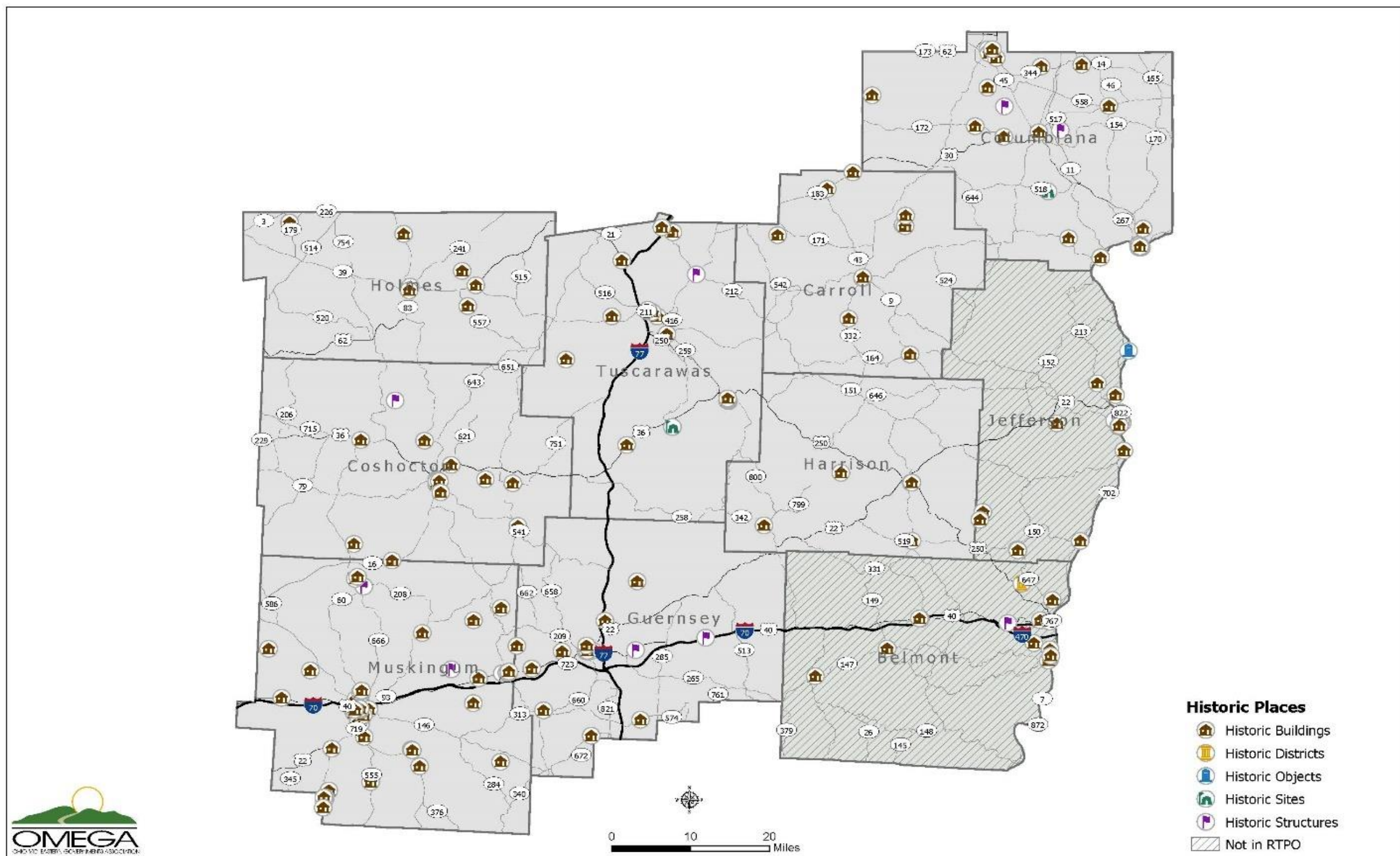


Figure 2-27: Historic Places

2.4 ARC County Economic Status

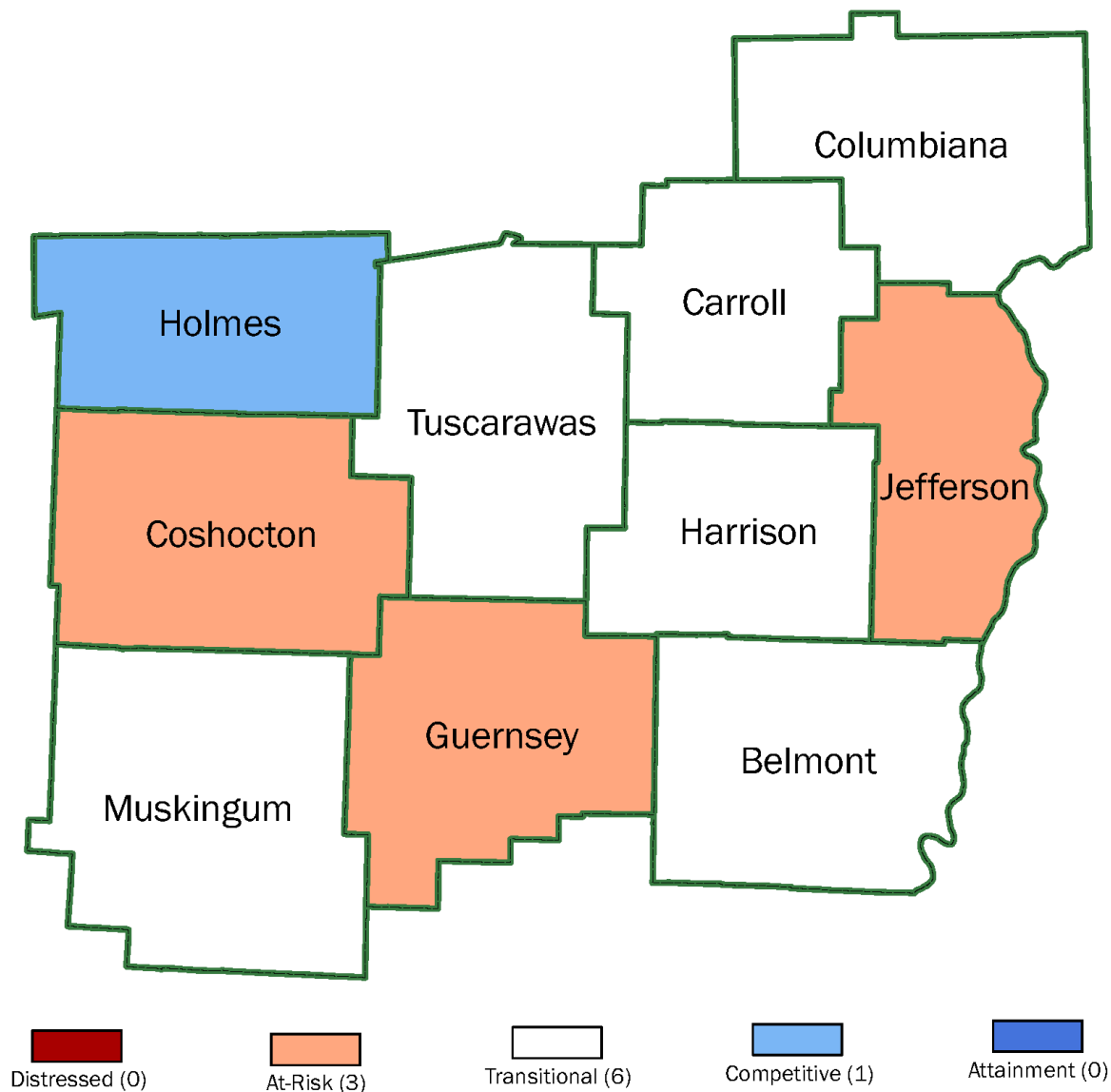


Figure 2-28: ARC County Economic Levels FY 2020

The Appalachian Regional Commission (ARC) uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties. The system involves the creation of a national index of county economic status through a comparison of each county's averages for three economic indicators—three-year average unemployment rate, per capita market income, and poverty rate—with national averages. The resulting values are summed and averaged to create a composite index value for each county. Each county in the nation is then ranked, based on its composite index value, with higher values indicating higher levels of distress. **Figure 2-28** shows the ARC County Economic Levels for fiscal year 2020.

ARC County Economic Levels

Each Appalachian county is classified into one of five economic status designations, based on its position in the national ranking.

Distressed

Distressed counties are the most economically depressed counties. They rank in the worst 10 percent of the nation's counties.

At-Risk

At-Risk counties are those at risk of becoming economically distressed. They rank between the worst 10 percent and 25 percent of the nation's counties.

Transitional

Transitional counties are those transitioning between strong and weak economies. They make up the largest economic status designation. Transitional counties rank between the worst 25 percent and the best 25 percent of the nation's counties.

Competitive

Competitive counties are those that are able to compete in the national economy but are not in the highest 10 percent of the nation's counties. Counties ranking between the best 10 percent and 25 percent of the nation's counties are classified competitive.

Attainment

Attainment counties are the economically strongest counties. Counties ranking in the best 10 percent of the nation's counties are classified attainment.

Source: Appalachian Regional Commission

2.5 Opportunity Zones

Qualified Opportunity Zones were created by the 2017 Tax Cuts and Jobs Act. These zones are designed to spur economic development and job creation in distressed communities throughout the country and U.S. possessions by providing tax benefits to investors who invest eligible capital into these communities. Taxpayers may defer tax on eligible capital gains by making an appropriate investment in a Qualified Opportunity Fund and meeting other requirements.

An Opportunity Zone is an economically distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment. Localities qualify Opportunity Zones if they have been nominated for that designation by the state and that nomination has been certified by the Secretary of the U.S. Treasury via their delegation of authority to the Internal Revenue Service⁸.

Opportunity Appalachia is a catalyst program funded by the ARC to bring Opportunity Zone investment to Central Appalachia. It is designed to support projects and businesses in underserved communities and attract Opportunity Zone financing that would otherwise be challenged to raise this capital. The Opportunity Zone located in Holmes County is not eligible for the Opportunity Appalachia program due to their “competitive” ARC county classification⁹.

⁸ <https://www.irs.gov/newsroom/opportunity-zones-frequently-asked-questions>

⁹ <https://appalachiancommunitycapitalcdfi.org/oa-program/>

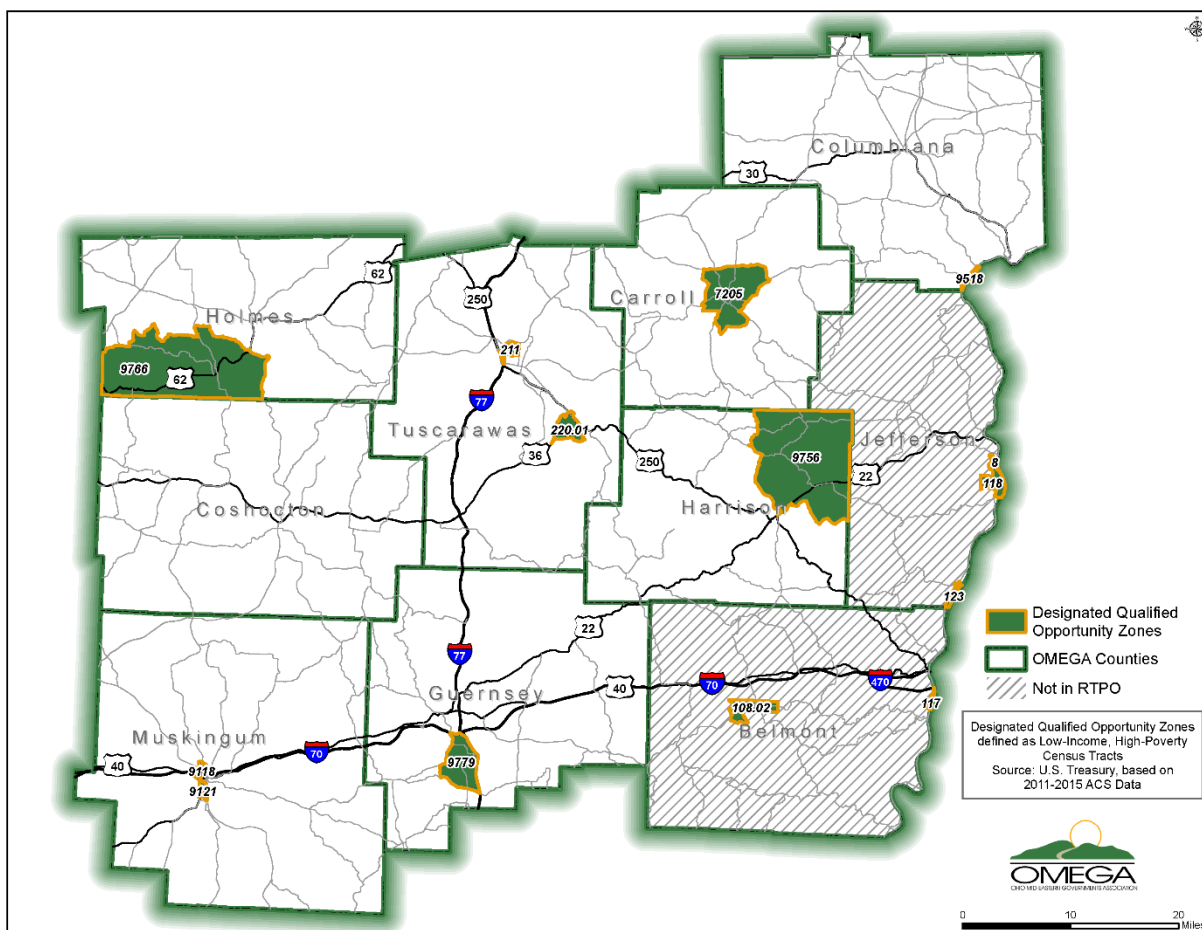


Figure 2-29: Qualified Opportunity Zones

Figure 2-29 shows the location of all Opportunity Zones in the OMEGA region. Table 2-3 lists each Opportunity Zone in more detail.

County	Census Tract #	Nearby City/Village
Belmont	108.02	Bethesda/Belmont
	117	Bellaire
Carroll	7205	Carrollton
Columbiana	9518	Wellsville
Guernsey	9779	Byesville
Harrison	9756	Hopedale/Jewett
Holmes	9766	Glenmont/Killbuck
Jefferson	8	Steubenville
	118	Mingo Junction
	123	Tiltonsville/Yorkville
Muskingum	9118	Zanesville
	9121	South Zanesville
Tuscarawas	211	Dover
	220.01	Uhrichsville

Table 2-3: Qualified Opportunity Zones by County

2.6 Growth & Development Strategies/Projects - CEDS

Workforce

From 2017 to 2019, regional unemployment rates ranged between 0.7% to 0.9% above the state average each year. In 2019, Holmes County recorded the lowest average unemployment rate in the region at 2.9%, while Jefferson and Coshocton Counties had the highest rates at 5.8% and 5.6%; respectively.

Civilian Labor Force	2017	2018	2019
Employed	250,200	249,700	250,200
Unemployed	15,500	13,600	12,800
Total Labor Force	265,600	263,300	263,200
OMEGA Unemployment Rate	5.84%	5.17%	4.86%
Ohio Unemployment Rate	4.97%	4.48%	4.12%

Source: OhioLMI.com - Ohio Labor Market Information

Table 2-4: Regional Civilian Labor Force

Over the last 10 years, county labor force figures have trended downward; however, in most cases the decline has slowed over the most recent 5-year period. Possible contributing factors to the 10-year rate of change are the 2008-2011 recession and decline in the coal industry in the region. The slowing decline is most likely related to increasing oil and gas industry exploration and extraction activities in the region, as well as the overall economic recovery taking place in the United States following the recession of 2008-2011. The positive 5 and 10-year labor force trends in Holmes County are most likely due to the population growth of the predominately Amish population of the county and the diverse economic base.

The opioid crisis has had an undeniable impact on the labor force of many states, Ohio included. Between 1999 and 2015, the volume of prescription opioids per capita in Ohio increased 395% (about 11% annually). This rise in opioid use was associated with a 2% decline in Ohio's labor force participation rate of prime-age workers, reducing annual real gross domestic product (GDP) growth by 0.8%. (American Action Forum, 2018)

In 2018 and 2019, the state Governor's Office of Appalachia provided funding to the four Local Development Districts in Ohio for the Regional Job Training Program. In 2018, OMEGA solicited proposals from colleges, school districts, career centers and economic development agencies and recommended five projects totaling \$1,035,000 in grant funds. Partners in the first year included Kent State Tuscarawas, Belmont College, the Sustainable Opportunity Development Center (SODC) in Salem, Zane State College, and Central Ohio Technical College. Total outcomes projected by the partners included 1,121 workers/trainees improved and 431 students improved.

In the second year of the program, OMEGA recommended \$1,035,000 in funding for six projects, including additional grants for Kent State Tuscarawas and Belmont College for training for advanced manufacturing and the shale industry. OMEGA expanded the scope of the program to include Career Pathways projects for high school students at the Ohio Valley and Muskingum Valley Educational Service Centers. Other partners include Mid-East Career and Technical Center for CDL training, and the Columbiana County Port Authority to work with Compco Quaker in Salem to train incumbent and

new workers. Projected outcomes for the second year include 680 workers/trainees improved and 1,455 students improved.

Employment

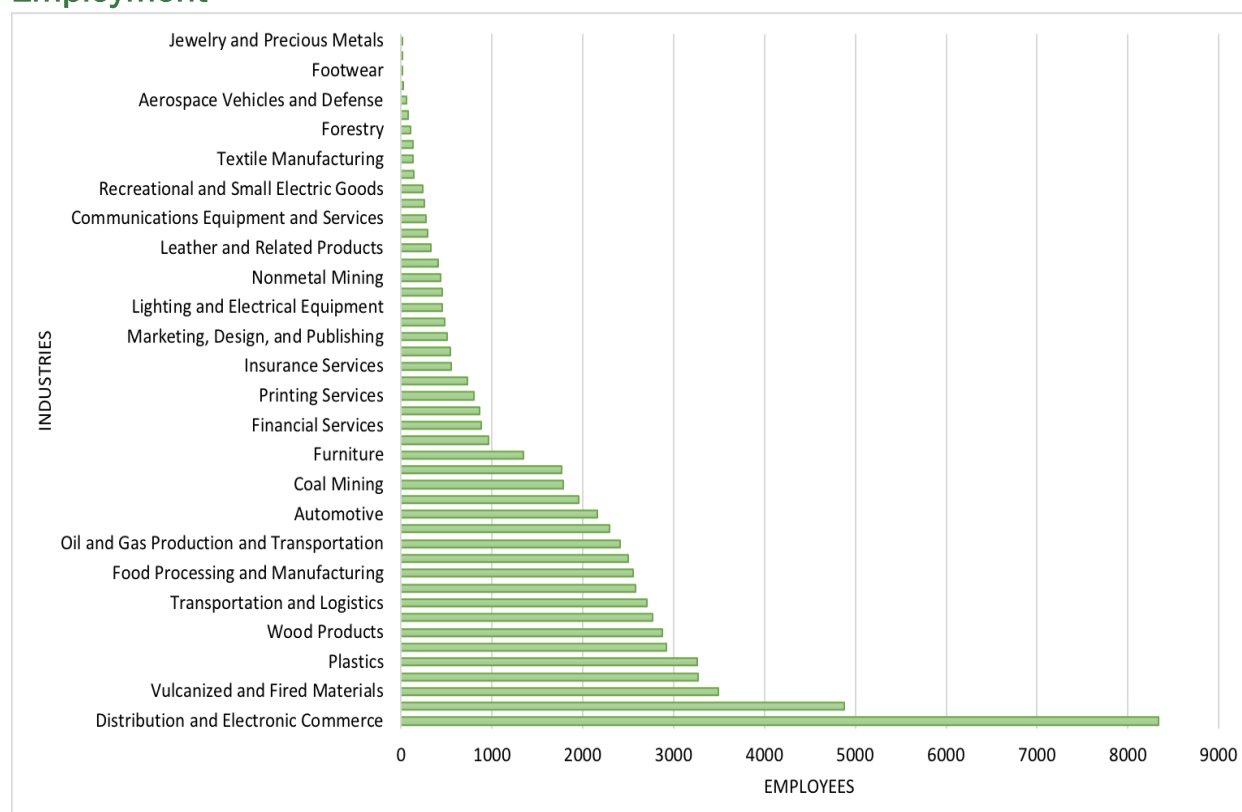


Figure 2-30: Industry Clusters

(Source: https://www.clustermapping.us/region/custom/omega_by_omega/cluster-portfolio (2016 data))

The OMEGA region has a strong manufacturing workforce, ranging from metals to food for various industries across the county. Seeing that 'Distribution and Electronic Commerce' is the leading industry cluster in the region, shows how heavily the region's economy relies on the trade of these manufactured materials.

Recreation

The OMEGA region resides in mid-eastern Ohio, in the rolling hills leading to the Appalachian Mountains. Home to nine state parks and with many lakes, woods, and one old-growth forest, the OMEGA region has a plethora of outdoor recreation opportunities. The region is a fisherman's oasis, with several places to canoe, kayak, and fish off the shore. Two designated water trails, the Muskingum River and the Mohican River, make river access available. Hunters and trappers also can find a bounty of public land to roam in the region. The Great Guernsey Trail also provides cyclists, runners, and walkers with 14 miles of paved path with natural beauty all around.

'Local hospitality establishments' is the 2nd largest local industry cluster for the OMEGA region according to the U.S. Cluster Mapping by the EDA. The Jesse Owens State Park and Wildlife Area as well as Salt Fork State Park and other parks and lakes in the region all attract hundreds of thousands of visitors every year. This not only brings people to and around the region for recreation,

these visitors eat and stay in the region as well. 'Hospitality and tourism' is the 10th largest traded industry cluster in the OMEGA region, proving the importance of the maintenance of the natural landscape to the vitality of the region's economy.

Tourism Economics by the Oxford Economics Company conducted a study on the impact of the tourism industry in the Appalachian region of Ohio. The findings of tourism's impact on the economy of the OMEGA region conclude:

- \$1.7165 billion in tourism-related sales
- 18,211 employed by the tourism industry
- \$385.7 million in wages for tourism industry employees
- \$209.8 million in tax revenue

With such a magnificent natural environment, it is no surprise that the beauty of the OMEGA region draws so many tourists and has such a large impact on the region's economy. The Tourism study demonstrates the impact that even undeveloped land can have when the region is fortunate to be in such a naturally beautiful setting.

Education

Much like the state of Ohio, the OMEGA region is home to a plethora of educational resources, including all or part of 57 school districts and nine colleges.

Location	High School Diploma	Associate's Degree	Bachelor's Degree or Higher
Belmont	89.9	10.7	16.4
Carroll	87	7.5	11.4
Columbiana	87.7	9.3	14
Coshocton	85.8	7.9	12.1
Guernsey	84.5	9	13.7
Harrison	85.8	9.7	9.6
Holmes	58.5	4.4	7.7
Jefferson	89.9	11.9	15.5
Muskingum	86.5	9.3	15.1
Tuscarawas	85.9	7.1	15
OMEGA Region	84.2	8.7	13.1
Appalachian Ohio	86.7	8.6	17.1
State of Ohio	89.5	8.4	26.7
Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates			

Table 2-5: Educational Attainment

Holmes County's lower educational attainment rate is likely attributable to the high number of Amish and Mennonite residents, many of whom do not advance past the eighth grade in school. The population of Holmes County is estimated to be 50% Amish. In order to ensure that Ohio has a competitive workforce, the Ohio Department of Higher Education set a goal to have 65% of Ohioans ages 25-64 attain a degree, certificate, or post-secondary credential of value in the workplace by 2025.

Infrastructure

Outdated, insufficient, and/or total lack of infrastructure has consistently been the largest challenge facing economic development in the OMEGA region. OMEGA works with multiple federal and state agencies focusing on the region's infrastructure needs and many grant and loan programs are often leveraged to allow large infrastructure projects to proceed. With the rolling hills and abundance of isolated, rural households, providing the entire region with affordable and quality internet access is not a simple task.

OMEGA is extremely supportive of the expansion of broadband services in the region as high-speed connectivity is a significant element in site selection. OMEGA has adopted a broadband policy to demonstrate commitment to infrastructure expansion in support of economic and community development, education, and quality of life in the region.

The goals include:

- Improve the accuracy and veracity of broadband mapping by drilling down to the actual service locations.
- Advance the region's economic development through Internet-enabled education, healthcare, transportation, and workforce development.
- Leave no one behind by extending broadband to all households and businesses, delivering robust communication services.
- Use fiber to connect local government facilities in Appalachia in order to increase efficiency of management and delivery of municipal services.

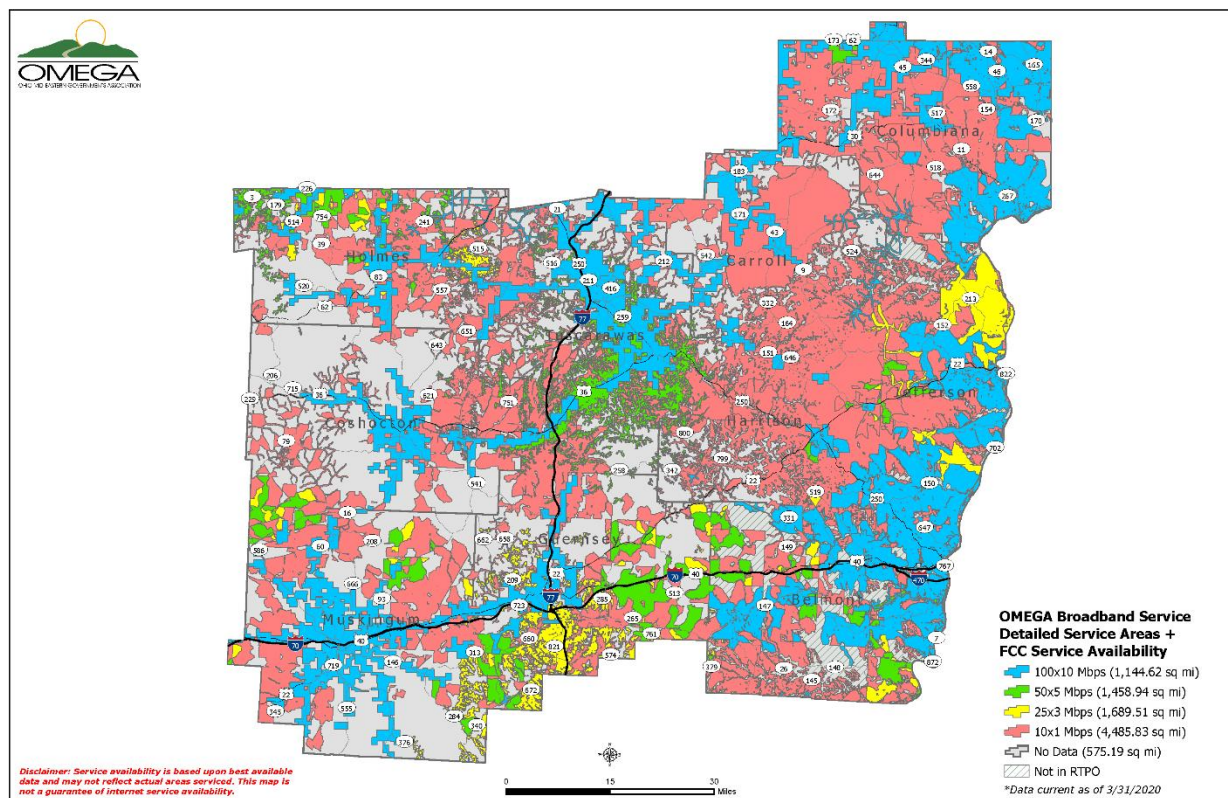


Figure 2-31: Broadband Service Coverage

Figure 2-31 shows the overall broadband coverage for the region, according to Connected Nation data for Detailed Service Areas and FCC Service Availability current as of March 31, 2020. Additional maps broken out by each of the four speeds and symbolized with Detailed Service Areas separate from FCC Service Availability are provided in **Appendix B**. For the general representative nature of these maps, it should be noted that all square mileage calculated is approximate.

Connected Nation's mapping program derives this broadband data through a combination of direct communication with service providers, FCC Form 477 broadband coverage and subscription data, verified public feedback, and independent research by Connected Nation Ohio. Connected Nation first attempts to request granular broadband coverage data directly from service providers. If the provider is unable or unwilling to provide granular service coverage data for the development of a detailed service area, then the FCC Form 477 data is used. The FCC Form 477 is much broader; providers are only required to submit service coverage data at the census block level. In other words, if one person in a census block has broadband coverage, the provider may report the entire census block as having coverage. This may be problematic in rural areas where census blocks can be very large.

When combining Connected Nation's Detailed Service Area data and FCC Service Availability data for the OMEGA region, approximately **88.63%** of the region's land area is estimated as having broadband coverage of at least 10 Mbps (Megabits per second) download and 1 Mbps upload. However, despite the maps illustrating granular data as well as FCC Form 477 data, many communities throughout the OMEGA region are reporting that this is woefully inaccurate.

It is an important goal of OMEGA to continue working to expand reliable, high-speed broadband access throughout the region, despite the discrepancies in service coverage data.

Housing

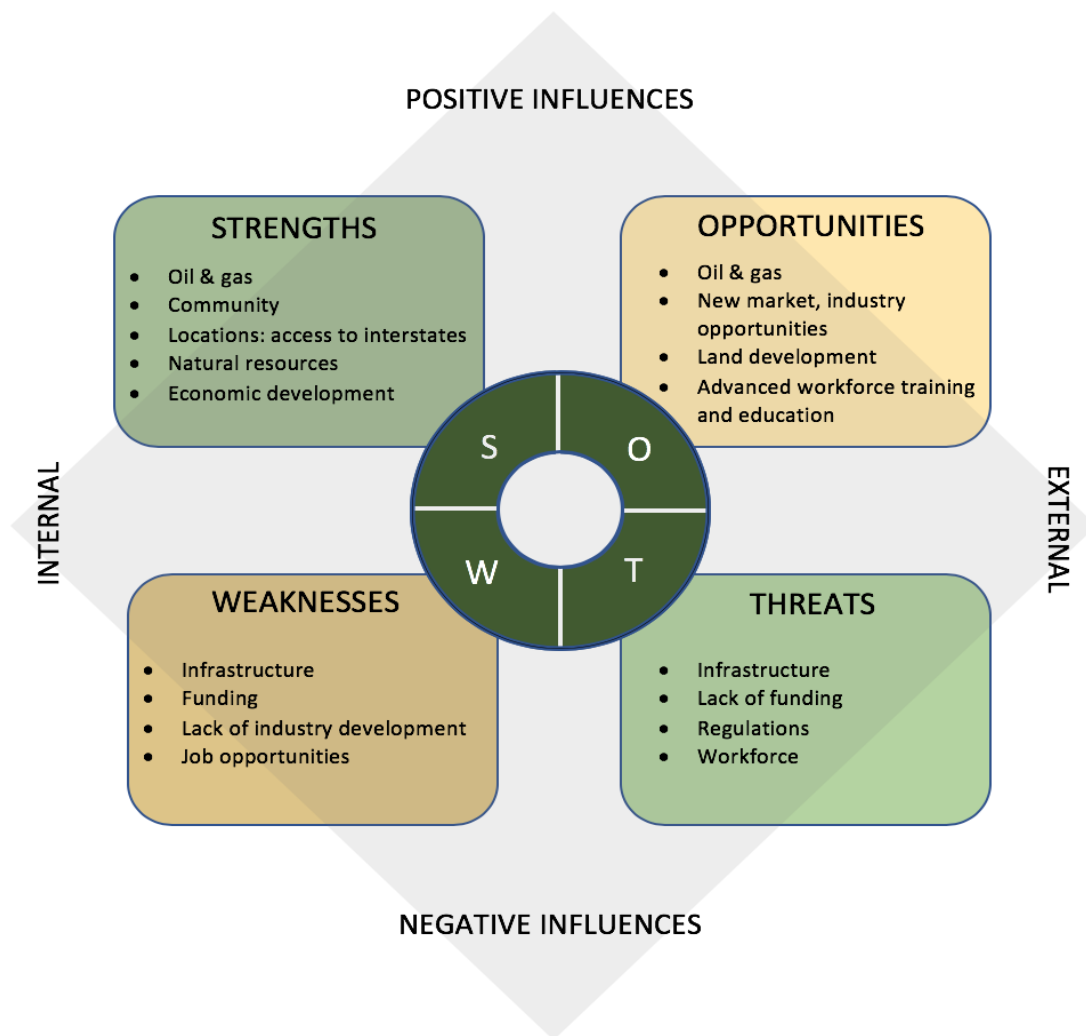
Housing in the OMEGA region continues to be a concern as midstream and downstream oil and gas industry activities bring many new residents, both temporary and permanent, to the region. Speculation continues regarding the potential ethane cracker plant in Belmont County and housing for an estimated 6,000 construction workers over the three-to-four-year construction period. This concern was anticipated because of the impact demonstrated by the construction of a similar ethane cracker plant in Potter Township, Pennsylvania, about 75 miles north of the proposed Belmont County site. Historically, such activities have led to housing hardships for existing low-and-moderate-income residents as they are often forced from existing housing by tenants able to pay a higher rate to occupy the housing units. Several communities are accessing funding to demolish dilapidated structures through land banks, though at this time, few structures have been replaced on the empty lots.

Location	Units	Occupied	Owner Occupied	Renter Occupied	Vacant
Belmont	32,287	26,910	20,414	6,496	5,377
Carroll	13,619	10,917	8,739	2,178	2,702
Columbiana	46,824	41,582	30,446	11,136	5,242
Coshocton	16,450	14,367	10,812	3,555	2,083
Guernsey	19,284	16,065	11,505	4,560	3,219
Harrison	8,110	6,192	4,897	1,295	1,918
Holmes	13,639	12,520	9,605	2,915	1,119
Jefferson	32,601	27,571	19,037	8,534	5,030
Muskingum	37,947	34,348	23,107	11,241	3,599
Tuscarawas	40,180	36,548	25,837	10,711	3,632
Region	260,941	227,020	164,399	62,621	33,921
<i>Source: U.S. Census Bureau - impacted by seasonal and recreational use</i>					

Table 2-6: Regional Housing Information (2018)

SWOT Analysis

In 2017, OMEGA partnered with Kent State University at Tuscarawas to develop and conduct an online SWOT (Strengths, Weaknesses, Opportunities, and Threats) survey of OMEGA CEDS Committee members, employees, executive board, members, and representative of affiliated organizations. The following chart is from 2017, and the subsequent section is an updated and extended version for 2020.



Strengths/Opportunities

The OMEGA region is home to many assets. High quality recreational activities, a multitude of educational resources, mineral wealth, the small-town atmosphere, and access to transportation make the OMEGA region a great place to live, work, and own a business.

Recreational Opportunities

With nine state parks and forests, there is an abundance of outdoor activities and events to attract tourists and keep locals enjoying the region. The scenic natural setting of the OMEGA region is both a strength that needs protected and an opportunity for growth.

Educational Resources

With nine colleges and ten vocational schools in the region, you never have to travel too far to access a higher education or training for a trade. The current relationships between many employers and educational facilities facilitate valuable real-life training situations and opportunities upon completion.

Mineral Wealth

The OMEGA region is home to part of both the Utica Shale and the Point Pleasant formation, making the region rich with oil and natural gas. The development of wells and continued drilling in the region's reservoirs has provided jobs and wealth to many landowners with mineral rights. Since 2014, OMEGA's oil and natural gas production has increased by almost 175% and 450% in 2019, respectively, with Carroll, Guernsey, Harrison, Jefferson, and Belmont counties leading in the development.

Small Town Atmosphere

Local restaurants and diners, enthusiasm for youth sports, quaint and historic downtowns, and easily accessible outdoor recreation keeps the small-town American dream alive in the OMEGA region.

Access to Transportation

The proximity to the I70-I77 interchange is an incredible perk to businesses in the OMEGA region. With I70 spanning from the East coast all the way Utah, this highway provides a direct passageway through the Mid-West. I77 runs from Cleveland to South Carolina, making it a prime route up or down the eastern United States.

Threats/Weaknesses

While the OMEGA region has many perks, there are also weaknesses that threaten the rate and sustainability of development.

Aging Population

With an aging population comes more roles for the younger generations to fill. This can be seen as an opportunity for young people looking for employment as they can train in still relevant trades that are not as popular in younger generations. However, an aging population also comes with an increased need for healthcare and transit services.

Lack of Economic Diversity

When one industry is hit, the whole region tends to suffer the consequences. While our mineral wealth is currently a strength and provides opportunities for growth, these are finite resources with limits to sustainable growth. Currently 'Energy' stands as the third largest industry employer in our region and many people are employed are within industry clusters that support the Energy industry ('Advanced Materials', 'Mining', and 'Fabricated and Primary Metal Product Manufacturing').

The loss of mining and mine supply chain jobs and replacing them with lower paying retail and non-profit healthcare jobs has reduced wages and benefits of many workers in OMEGA region and has likely contributed to the population decline in recent years.

Terrorism

With the mineral wealth of our region also comes the threat of terrorism. While pipelines provide jobs and resources to the region, the hazard posed just by the nature of the commodity makes them vulnerable to terrorism. Damage to the pipeline infrastructure and the inevitable subsequent leach of hazardous materials into the surrounding earth poses a major threat to humans, the environment, and the economy.

Funding

Funding continues to be an area of difficulty when it comes to economic and infrastructure development in the region. Typically, OMEGA receives ARC/GOA pre-applications requesting funds at a rate of 3:1. In a 2017 survey, one-fifth of respondents listed lack of funding as a threat in our region. Applying for funding for sites without an end-user is difficult to leverage, but it is also a challenge to attract end-users without dig-ready sites.

Lack of Infrastructure

The lack of infrastructure, namely Broadband, in the OMEGA region slows and sometimes completely inhibits many types of development: economic, educational, and personal. During the COVID-19 pandemic in early 2020, all schools moved online, leaving those without quality internet access in the dust.

Businesses are reluctant to establish roots as well when the cost of Broadband access in addition to water, sewer, and electric poses to be too much of an upfront cost to locate in the region. Federal, state, and local budget restraints make it difficult to provide funding to expand infrastructure, thus setting the region back by not having many dig-ready sites available.

Limited Preparation for External Economic Shock

The COVID-19 pandemic in 2020 proved that our economy and small businesses were not prepared for such an event. It only took a couple of weeks before factories began rolling lay-offs and small businesses closed indefinitely; unable to make payroll, rent, and other bills, and unwilling to acquire more debt through disaster loan programs.

3.0 OMEGA's Existing Transportation Network

The OMEGA region has experienced an economic resurgence since 2015. Though a few companies left the region, several new companies have moved into the region, current businesses have expanded, and certain areas of the region experienced net population growth for the first time in decades. This new growth has highlighted the need for a safe and robust transportation network that is vital for the continued economic growth of the region and well-being of residents.

The overarching goal of OMEGA is to ensure that the infrastructure throughout the region is maintained or improved to be in state of good repair. OMEGA will work with the Ohio Department of Transportation (and its federal partners), county engineers, township trustees, municipal officials, and other stakeholders to ensure that existing infrastructure is preserved, and targeted areas are expanded or modified to accommodate future challenges.

An inventory of existing transportation facilities is a key element in developing a Regional Transportation System. This section will identify the multiple modal networks that crisscross the OMEGA RTPPO. This section will also outline the current conditions of the regional transportation system and highlight potential areas of concern.

The core of the OMEGA transportation network is centered on Interstate 70 running east-west in the southern part of the region, and Interstate 77 running north-south through the middle. Other major routes carry commuters, freight, tourists, and more throughout the region. OMEGA is also served by several regional or shortline railroads and one Class 1 (Norfolk Southern). CSX Corporation is also a Class 1 railroad and owns rail lines in the OMEGA RTPPO, however these lines are operated by other railroads through leasing agreements. Though none of the region's airports host commercial air service, the region is within an hour's drive of three larger airports: Pittsburgh International, John Glenn International (Columbus), and Canton/Akron Regional. Finally, the region utilizes the Ohio River as a prime maritime corridor. There are sixteen private ports, and one public intermodal port in Columbiana County.

3.1 Roadway Network

Roads

The largest infrastructure network in the OMEGA region is roadways. Within the OMEGA RTPO, there are 10,520 center line miles, and 71% of these roads are under local jurisdiction (county, township, and municipal). The National Functional Classification (NFC) System is used to determine the level of importance placed on each road within a planning area. The three levels of classification are:

1. Arterial highways
2. Collector streets
3. Local roads

These classifications represent a balance between mobility and access. Arterial highways have the highest degree of mobility and a low degree of access, whereas local roads are the inverse. Collectors represent a moderated balance between mobility and access. Factors involved with functional classification include efficiency of travel, access points or control, speed limit, route spacing, usage (average daily traffic or vehicle miles traveled), number of lanes, and regional/statewide significance.

Functional classification is important for program and project prioritization, asset management, safety programs, highway and bridge design, traffic control, access management, and maintenance. The current functional classifications are:

01. Interstate
02. Freeway and Expressway
03. Other Principal Arterial
04. Minor Arterial
05. Major Collector
06. Minor Collector
07. Local

01 - Interstate. Two major Interstate highways intersect in the region, with I-77 running north-south through Tuscarawas and Guernsey Counties, and I-70 running east-west through Muskingum and Guernsey Counties. The interchange of these two Interstates is located to the southeast of downtown Cambridge in Guernsey County. The total mileage of the Interstate system is 114.25 miles.

02 – Freeway and Expressway. Additionally, other routes are designated as freeways/expressways and are limited access. These include SR 16 in northwestern Muskingum County to SR 60; US 250 between I-77 and US 36 in Uhrichsville; and SR 11 from East Liverpool to the Columbiana County border with Mahoning County. The total mileage of the freeway/expressway system is 51.1 miles.

03 – Other Principal Arterial. Other primary arterial routes in the region include US 36 in Muskingum/Coshocton/Tuscarawas Counties; US 22 from Cambridge to the Harrison/Jefferson County line; US 250 from Uhrichsville to Cadiz and from I-77 to the Tuscarawas/Stark County line; and SR 39 from Dover to the Holmes/Ashland County line in Loudonville.

As shown in **Figures 3-1** and **3-2**, roads are classified in the seven categories.

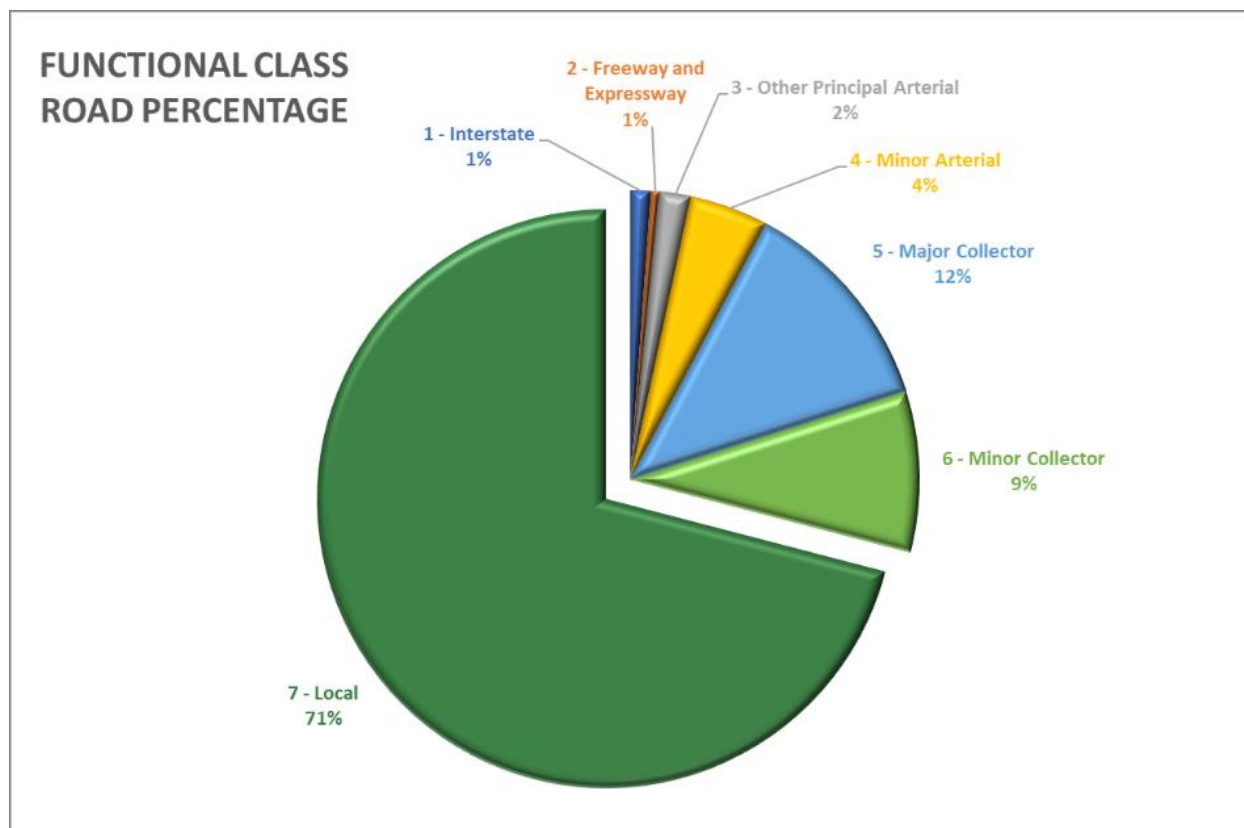


Figure 3-1: Road Percentages by Functional Class

Over 70% of all OMEGA roadways are classified as local roads. These roads are primarily maintained by municipalities, counties, and townships. Some of these roads are on the Federal Aid system, though most of the lane miles are not. Holmes and Carroll Counties are the only two counties within the OMEGA RTPo that do not have any roads with a higher classification than 04 – Minor Arterial. Coincidentally, these counties are also the only counties within the RTPo that are not served by any four-lane roadways.



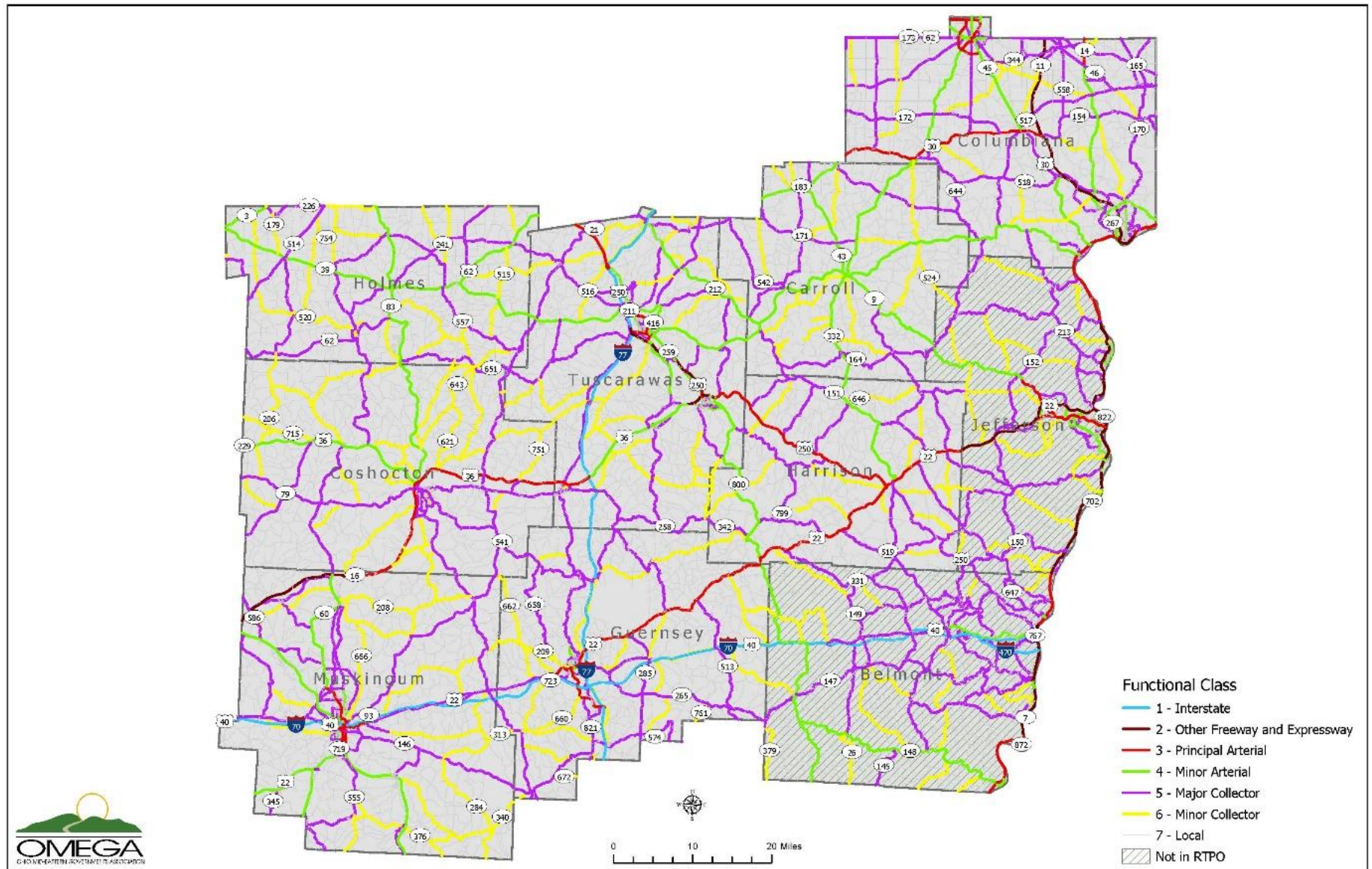


Figure 3-2: Roadway Functional Classification
 Regional Transportation & Development Plan

Level of Service (LOS) is a qualitative measure of the operation of traffic flow. Speed, travel time, freedom to maneuver, traffic interruptions, drive inconvenience, safety, and delay are all factors considered in the LOS. The LOS is based upon different measures of effectiveness for different transportation systems.

As defined in the Highway Capacity Manual, there are six levels of service from A as being the best to F as being the worst. These levels are defined as:

- **Level A** Free flow, with low volumes and high speeds. Traffic flows at or above the posted speed limit and motorists have complete mobility between lanes. Motorists have a high level of physical and psychological comfort and incidents or point breakdowns are easily absorbed. Level of Service A typically occurs late at night in urban areas and frequently in rural areas.
- **Level B** Reasonable free or stable flow, speeds beginning to be restricted by traffic conditions. Maneuverability within the traffic stream is slightly restricted. Motorists still have a high level of physical and psychological comfort.
- **Level C** In stable flow zone, but most drivers are restricted in freedom to select own speed. Ability to maneuver through lanes is noticeably restricted and lane changes require more driver awareness. Most drivers are comfortable, roads remain safely below but efficiently close to capacity, and posted speed is maintained. Minor incidents still have no effect, but localized service will have noticeable effects and traffic delays will form behind the incident.
- **Level D** Approaching unstable flow; drivers have little freedom to maneuver. Lower speeds and increased traffic volume. Minor incidents will create delays.
- **Level E** Unstable flow; operating at capacity. Flow becomes irregular and speed varies, rarely reach the posted limit. Any disruption to traffic flow will create a shock wave affecting upstream traffic. Driver's level of comfort is poor.
- **Level F** Forced or breakdown flow. Frequent slowing required. Demand exceeds capacity and the road is in a constant traffic jam.

In rural areas, interstates, other freeways and expressways, and arterials are generally designed for a LOS of B (or C in hilly terrain). Collectors are normally designed for a Level of Service C (or D in hilly terrain). In urban and urbanized areas, the design LOS for these functional classifications is normally C, regardless of terrain. Local roads in both rural and urban areas are normally designed for a LOS D.

As shown in **Figure 3-3**, the Level of Service for the major routes within the RTPO is C or higher.

The following routes within the RTPO have a **LOS of D**:

- **Carroll County** SR 183/SR43 from the Stark County Line to Malvern
SR 183 in Minerva
SR 43 in northeast Carrollton
- **Columbiana County** SR 170 between St. Clair Township and Middleton Township
SR 14 east of Salem (Washingtonville)
SR 14 north of Columbiana and SR 7 east of Columbiana
US 62/SR 173 west of Salem
- **Coshocton County** SR 16 from the Muskingum County Line to City of Coshocton
- **Guernsey County** I-70 between MM 172 and I-77
US 40 east of Cambridge to SR 265
- **Holmes County** SR 39 between Sugarcreek and Berlin
US 62 between Berlin and Millersburg
SR 83 north and south of Millersburg
- **Muskingum County** I-70 from Zanesville east to the Perry Township Line
SR 16 from SR 60 to Coshocton County Line
SR 60 at Philo/Duncan Falls
SR 60 at Richvale Rd.
Sections of SR 146 in Falls Township
SR 93 south of the intersection with US 22
- **Tuscarawas County** SR 39 between Dover and Sugarcreek
US 250 north of Strasburg
US 250 from Dennison to Harrison County Line
SR 259 in New Philadelphia (KSU-Tusc)
I-77 between Exit 81 and 87

The following routes within the RTPO have a **LOS of E**:

- **Columbiana County** US 62/SR 173 east of Alliance
- **Guernsey County** SR 209 at I-70 interchange
- **Muskingum County** SR 60 north of SR 555
- **Tuscarawas County** US 250 south of intersection with SR 21

The following route within the RTPO has a **LOS of F**:

- **Guernsey County** SR 209 north and south of I-70 interchange

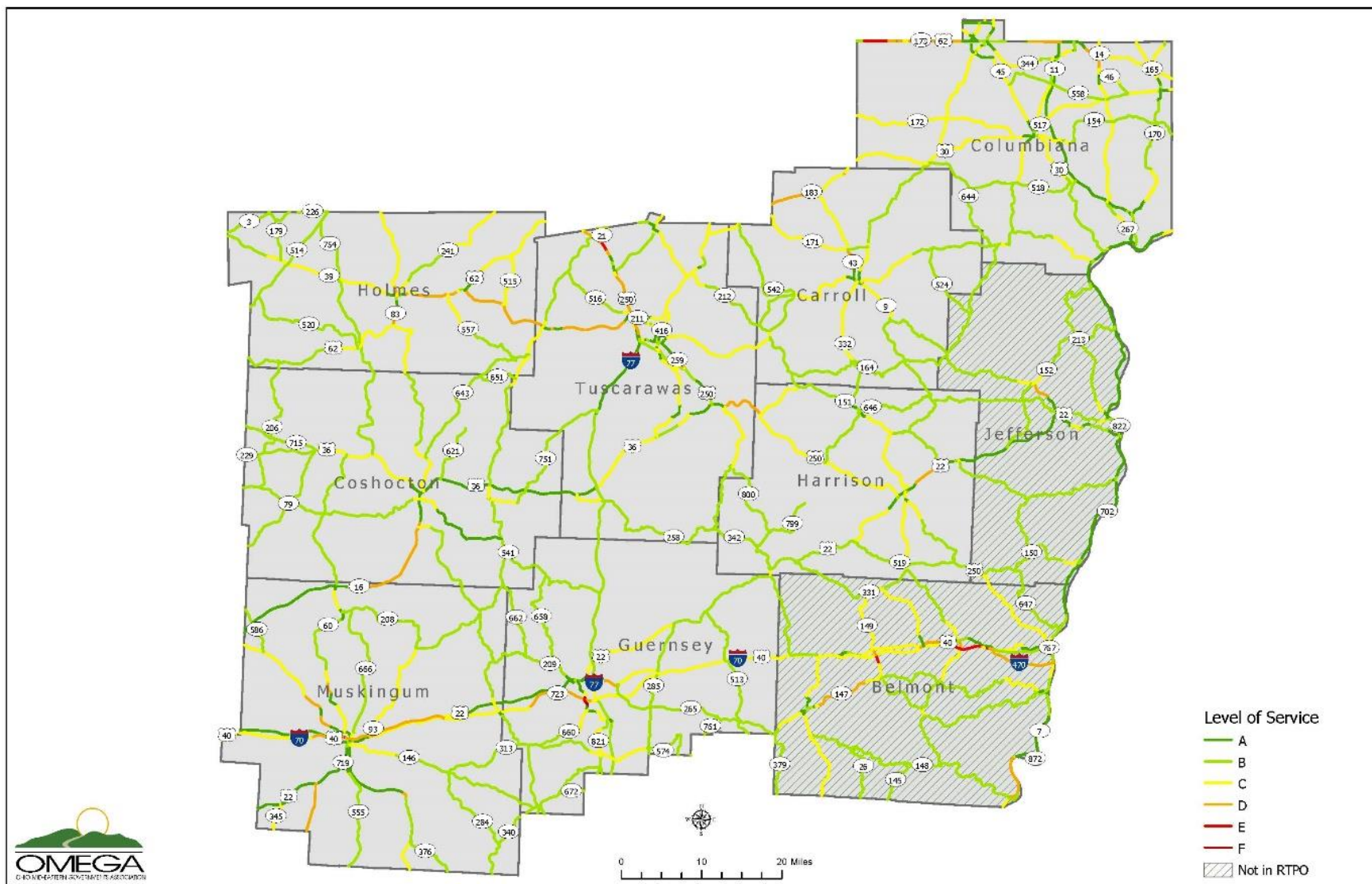


Figure 3-3: Roadway Level of Service

Unsurprisingly, the highest traffic volumes are found along the Interstate highways, primarily Interstate 70. Interstate 70 crosses the US, starting in Utah in the west and terminating in Maryland (outside Baltimore) in the east. In the OMEGA region, this route is used heavily by trucks and through passenger traffic, as well as commercial bus lines. The highest Annual Average Daily Traffic (AADT) in the region is found outside Zanesville along I-70 with 48,272 vehicles, approximately one-third of that volume being classified as trucks. As shown in **Figure 3-4**, no segment of the highway system appears in the deep red color (50,001-100,000 vehicles). Only one segment in Belmont County appears to cross this threshold, owing to two Interstates diverging to bypass Wheeling, West Virginia. This area is within Belomar Regional Council's transportation planning area.

Interstate 77 originates in Cleveland and terminates outside Columbia, South Carolina, passing through Charlotte, North Carolina. In the OMEGA region, this route is traveled by through freight, local hauler, and passenger vehicles. Commercial bus lines also use segments of this route to connect to other networks. The AADT on I-77 near Dover is 42,376, which is the highest volume along this route in the OMEGA region.

Off the Interstate system, other highways carry high volumes of traffic into and out of the region. Major US routes include US 22, US 30, US 36, US 40, and US 250. Major state routes include SR 9, SR 16, SR 39, SR 60, and SR 83. These routes connect cities and villages to the core network and function as efficient commuter and freight corridors.

Truck volumes have increased in many areas of the OMEGA RTPPO over the past decade, with the eastern portion of the region seeing especially significant growth due to the development of the Marcellus and Utica Shale formations for oil and natural gas extraction. Just-in-time logistics and the escalation of online retail has also contributed to the increased number of trucks on the roadways within the OMEGA region.

Figure 3-5 shows the percentage of truck traffic along routes where it is measured. Areas highlighted by red have truck traffic volumes greater than 30%. On average, every third vehicle on these routes is classified as a truck by the Federal Highway Administration's guidelines. This is expected along Interstate 70 (through freight), but it is newer to areas such as Harrison County (US 22, US 250, SR 9) which saw this growth due mainly to the oil and gas extraction within the region. Other areas with higher truck volumes (and their potential explanation) include:

- Holmes County (small manufacturers and retail locations)
- Guernsey County (oil/gas, logistics, Interstate 70/77 interchange)
- Muskingum County (logistics & warehousing)

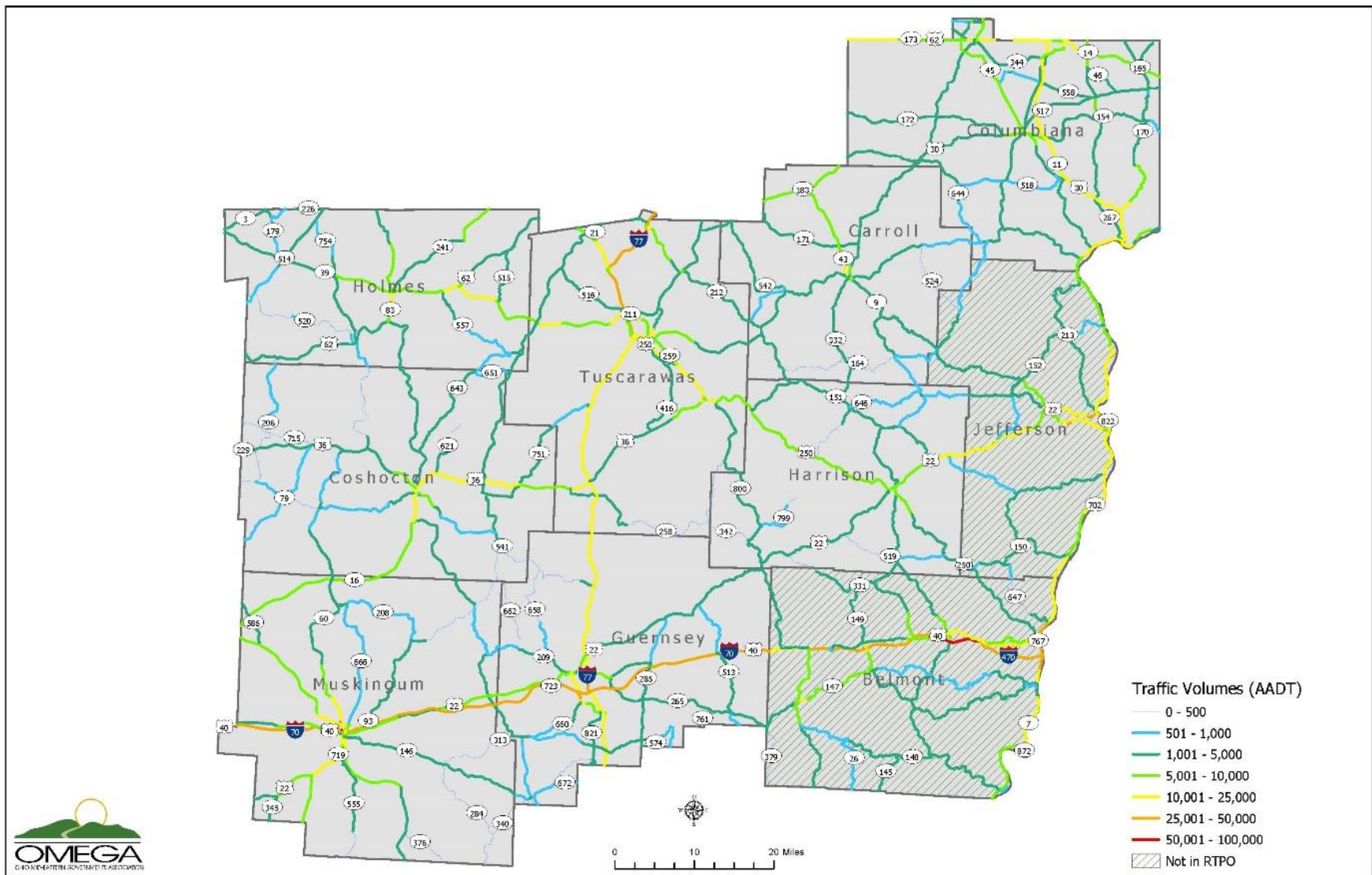


Figure 3-4: Traffic Volumes (AADT)

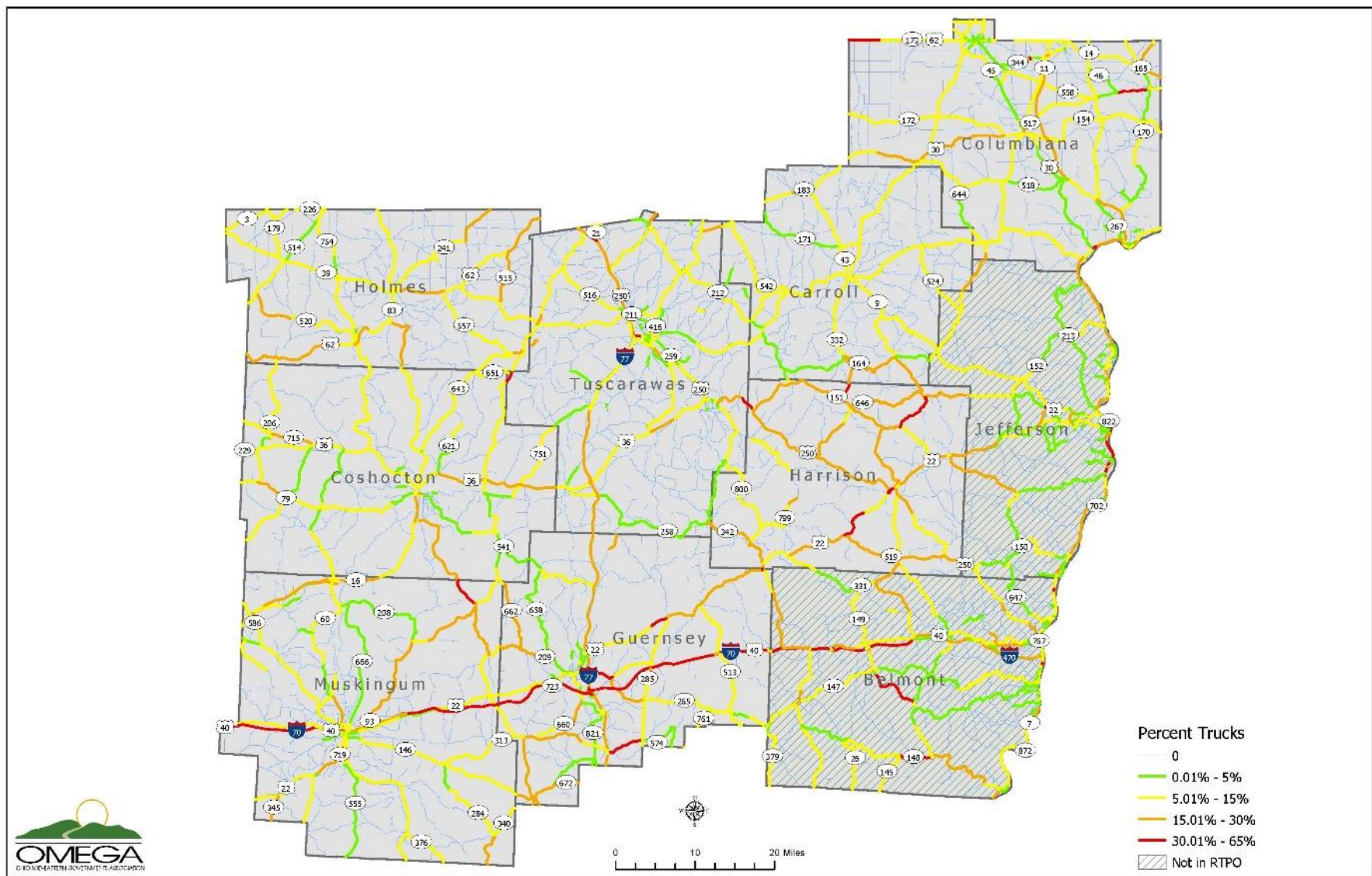


Figure 3-5: Traffic Volumes, Trucks

The transportation network is reaching capacity in a number of areas throughout the OMEGA RTP. The American Association of State Highway Transportation Officials' (AASHTO) Highway Capacity Manual defines capacity as: "The maximum sustainable flow rate at which vehicles or persons reasonably can be expected to traverse a point or uniform segment of a lane or roadway during a specified time period under given roadway, geometric, traffic, environmental, and control conditions."

Based on calculations using the best available data and as shown in **Figure 3-6**, we have categorized the volume to capacity ratio to fall into one of four:

- 0 – 0.54
- 0.55 – 0.79
- 0.8 – 0.99
- 1+

Values over “1” have exceeded their designed capacity and may experience delays and congestion, especially at peak travel times. Values nearing “1” (0.8-0.99) should be monitored, as these routes may be nearing or exceeding capacity in peak times, resulting in additional delays. The following routes in the OMEGA RTP are nearing or exceeding capacity:

- $V/C = 0.8-0.99$
 - US 250 at I-77 in New Philadelphia
 - Maple Avenue (SR 60) in Zanesville, north of I-70
 - Southgate Parkway (SR 209) in Cambridge, north of I-70
 - US 62/SR 173 between Alliance and Salem in Columbiana County
- $V/C = 1+$
 - Southgate Parkway (SR 209) in Cambridge, south of I-70
 - Intersection of SR 164/SR344 in the City of Columbiana

A majority of these routes which are nearing capacity also have a Level of D or worse.

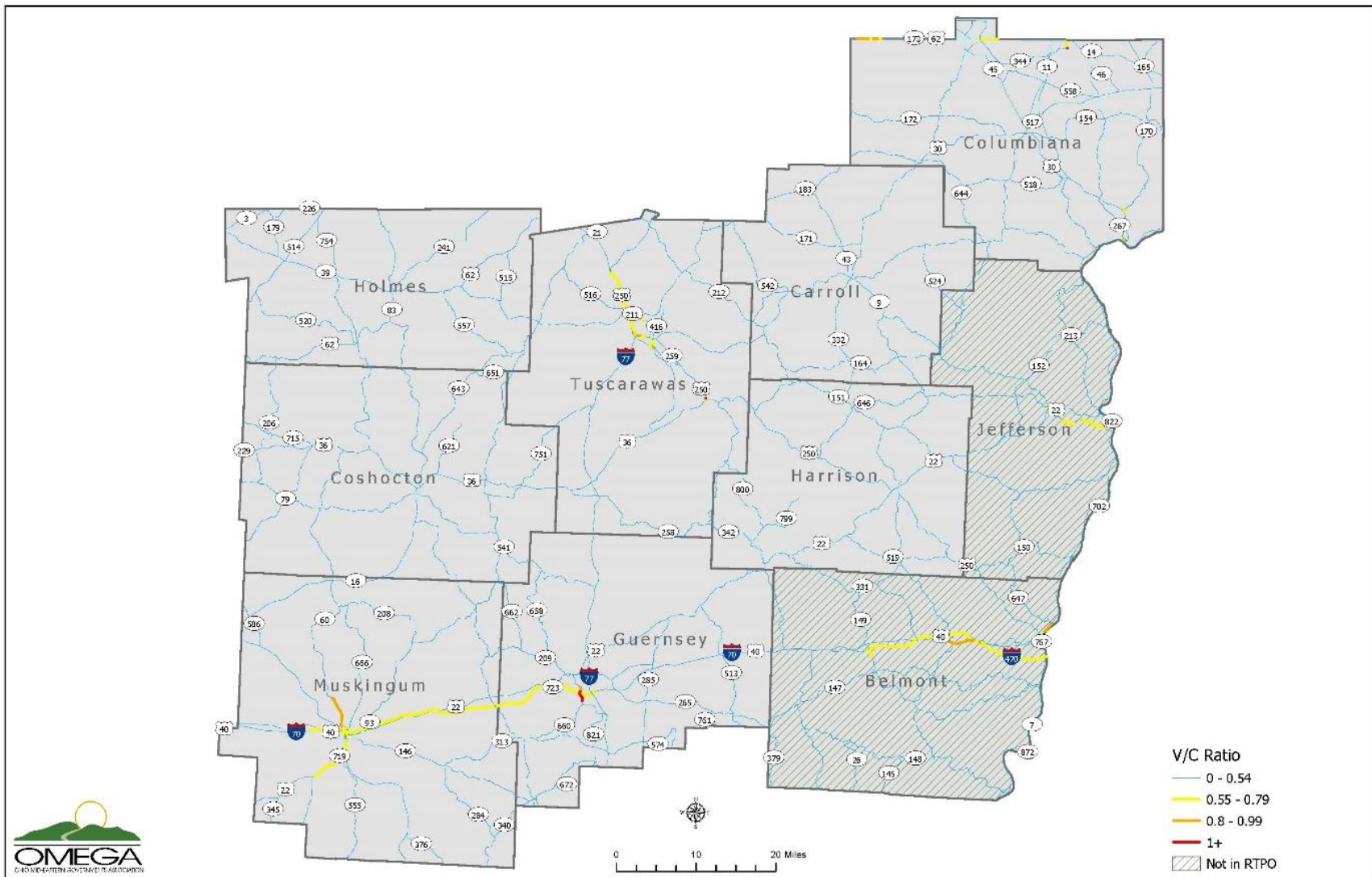


Figure 3-6: Roadway Volume to Capacity Ratio

State funded roadways are also rated based on the condition of their pavement. The Pavement Condition Rating is a distress index based on a continuous rating scale (0-100). Values closer to 0 indicate failed pavement, whereas values closer to 100 indicate new or non-distressed pavement. Thresholds are set to determine potential treatment actions. Depending on the level, the actions may be simple maintenance, a preservation treatment (asphalt overlay), or full rehabilitation or reconstruction. The threshold for rehabilitation or reconstruction is often used to separate acceptable from non-acceptable pavement conditions. This system is primarily used on the state-maintained system to assist in determining where preservation efforts will be targeted in the upcoming work program years.

Pavement Condition Rating		
0 – 40	Very Poor	Non-Acceptable
41 – 55	Poor	
56 – 65	Fair to Poor	May be Acceptable
66 – 75	Fair	Acceptable
76 – 90	Good	
91 – 100	Very Good	

Table 3-1: Pavement Condition Rating Thresholds

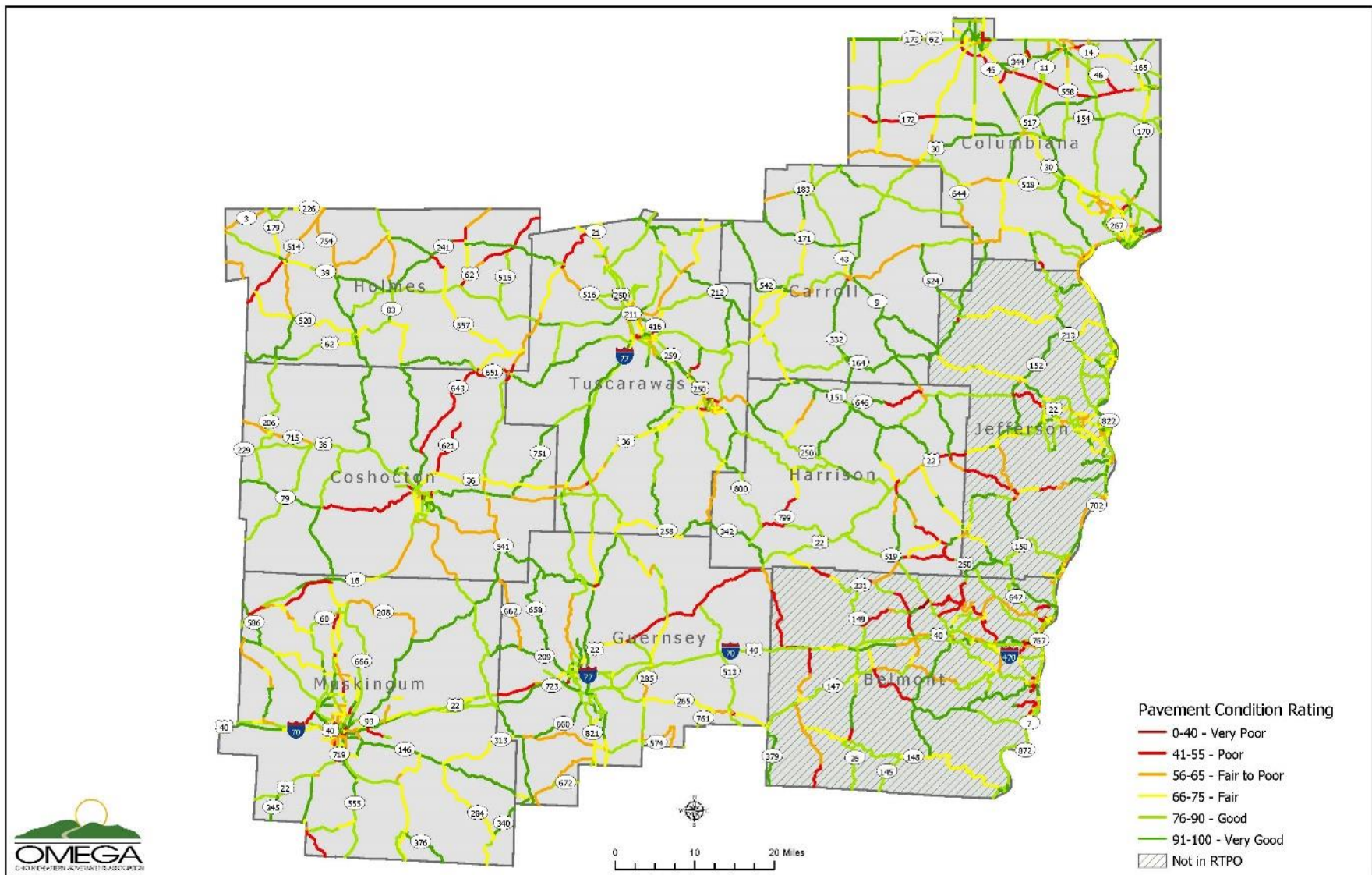


Figure 3-7: Roadway Pavement Condition Rating

Bridges

Bridges function as a vital component of the transportation system, especially in eastern Ohio. Ohio has 44,766 bridges systemwide and 3,423 (7.6%) are in the OMEGA RTPO area. This definition is set by the state and includes spans of 10 feet or greater. The General Appraisal Condition Rating is a composite condition measurement of the major structural items of a bridge. General Appraisal Rating values range from zero (0) to nine (9), with zero being out of service and nine being like new.

Rating	Condition Category	Description
0	Failed	Bridge is out of service and beyond corrective action
1	Imminent Failure	Major deterioration present in critical structural components. Loss may be present in structural support, affecting bridge stability. Bridge is closed to traffic, but corrective action may be sufficient to put bridge back into light service
2	Critical	Advanced deterioration of primary structural components. Cracks in steel or concrete may be present. Unless closely monitored, it may be necessary to close bridge until corrective actions are taken.
3	Serious	Defects and/or deterioration have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
4	Poor	Advanced defects and/or deterioration
5	Fair	All primary structural components are sound but may have minor defects or deterioration
6	Satisfactory	Structural components show minor deterioration
7	Good	Some minor problems
8	Very Good	No problems noted
9	Excellent	New or recently reconstructed

The higher the overall rating, the better condition a bridge is in. Bridges with a rating of four (4) or less are at-risk and maintenance or replacement of these bridges should be prioritized to ensure the safety of the network. In **Figure 3-8**, bridges with a General Appraisal Condition Rating of four (4) or less are shown. A total of 265 bridges are currently considered at risk within OMEGA, 183 of those being in the RTPO. Compared to 2015, this shows an increase of 127 bridges at-risk, or 92%, highlighting the need for additional investment in the region. **Table 3-2** shows the number of at-risk bridges per county on the local- and state-maintained systems.

County	General Appraisal ≤ 4 10 ft. Span				General Appraisal ≤ 4 20 ft. Span			
	Local	State	Unspecified	Total	Local	State	Unspecified	Total
Carroll	1	1	0	2	1	1	0	2
Columbiana	7	3	11	21	3	1	4	8
Coshocton	29	5	0	34	12	2	0	14
Guernsey	25	2	1	28	19	0	1	20
Harrison	8	3	1	12	7	2	1	10
Holmes	6	0	0	6	5	0	0	5
Muskingum	62	6	2	70	36	1	2	39
Tuscarawas	4	5	1	10	3	4	0	7
Total	142	25	16	183	86	11	8	105

Table 3-2: General Appraisal Rating ≤4

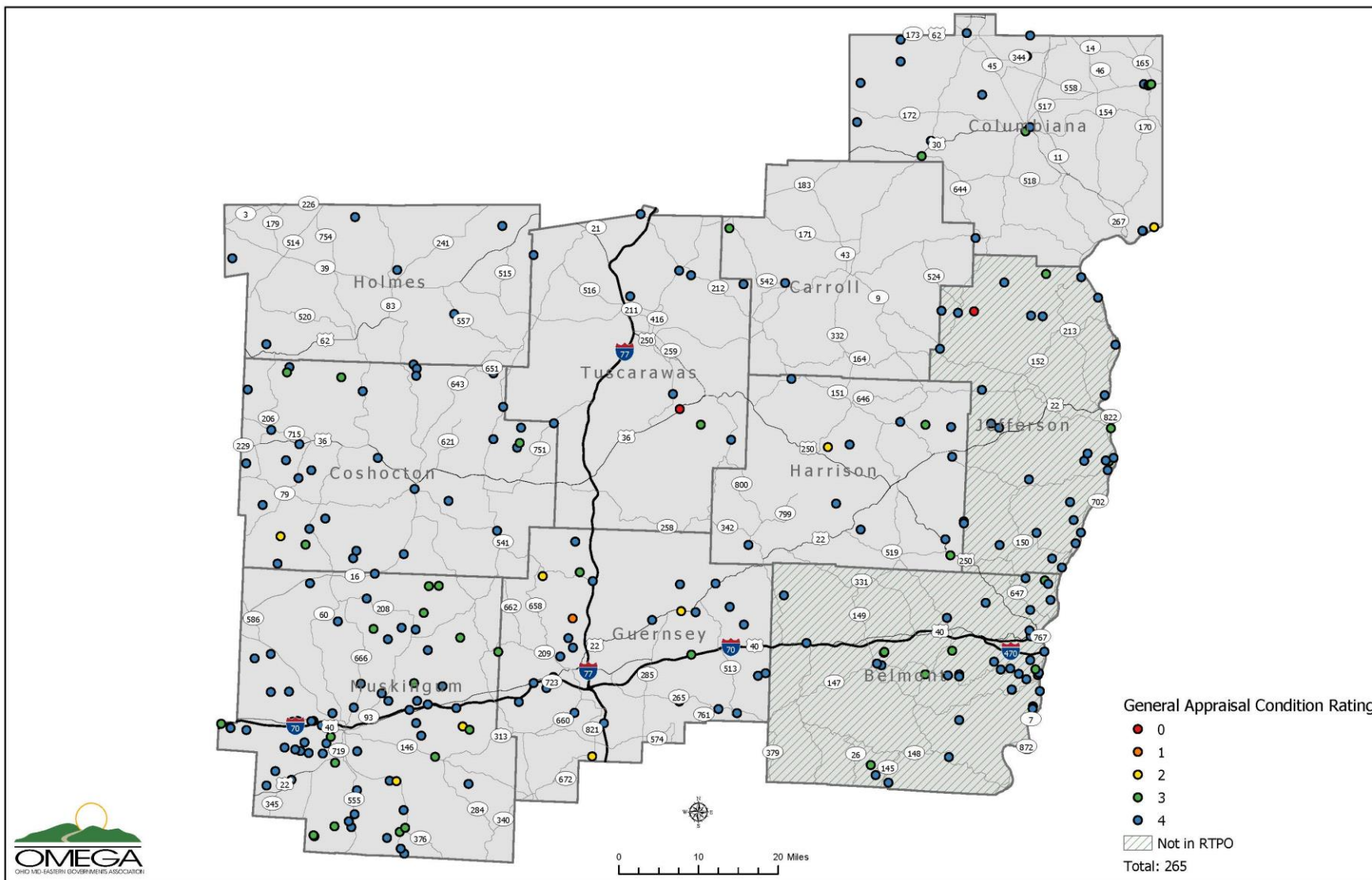


Figure 3-8: General Appraisal Condition Rating

OMEGA used the General Appraisal Condition rating to assess the overall condition of bridges within the RTPO. Federal funding assistance may be used on bridges with a span of 20 feet or greater. Some spans on the local system do not meet this requirement and may require additional funding sources to be considered. To assist local governmental agencies, convey their need OMEGA separated spans into 10-foot and greater and 20-foot and greater categories.

As shown in **Figure 3-9**, there are 766 bridges considered functionally obsolete in the OMEGA RTPO, of which 659 (19% of the total number of bridges) are on the local system. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand, or those that may be occasionally flooded. Twelve bridges in the OMEGA RTPO are closed and will need to be replaced or removed to ensure the safety of the network.

County	Closed				Functionally Obsolete			
	Local	State	Unclassified	Total	Local	State	Unclassified	Total
Carroll	0	0	0	0	46	3	0	49
Columbiana	2	0	2	4	81	16	7	104
Coshocton	0	0	0	0	79	2	0	81
Guernsey	4	0	1	5	127	22	2	151
Harrison	2	0	0	2	20	4	0	24
Holmes	0	0	0	0	109	5	1	115
Muskingum	0	0	0	0	172	16	2	190
Tuscarawas	1	0	0	1	25	21	6	52
Total	9	0	3	12	659	89	18	766

Table 3-3: Closed & Functionally Obsolete Bridges

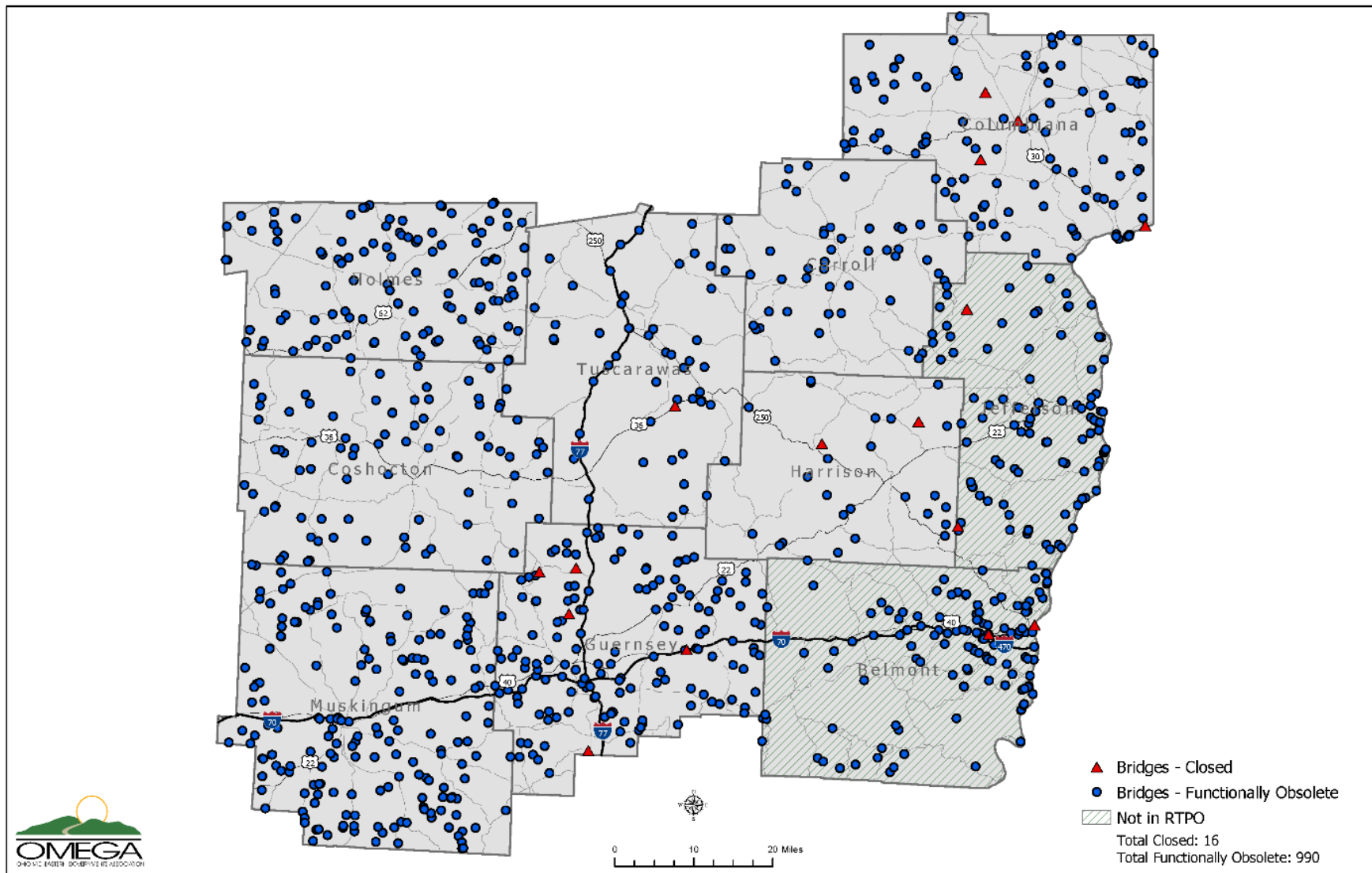


Figure 3-9: Closed or Functionally Obsolete Bridges

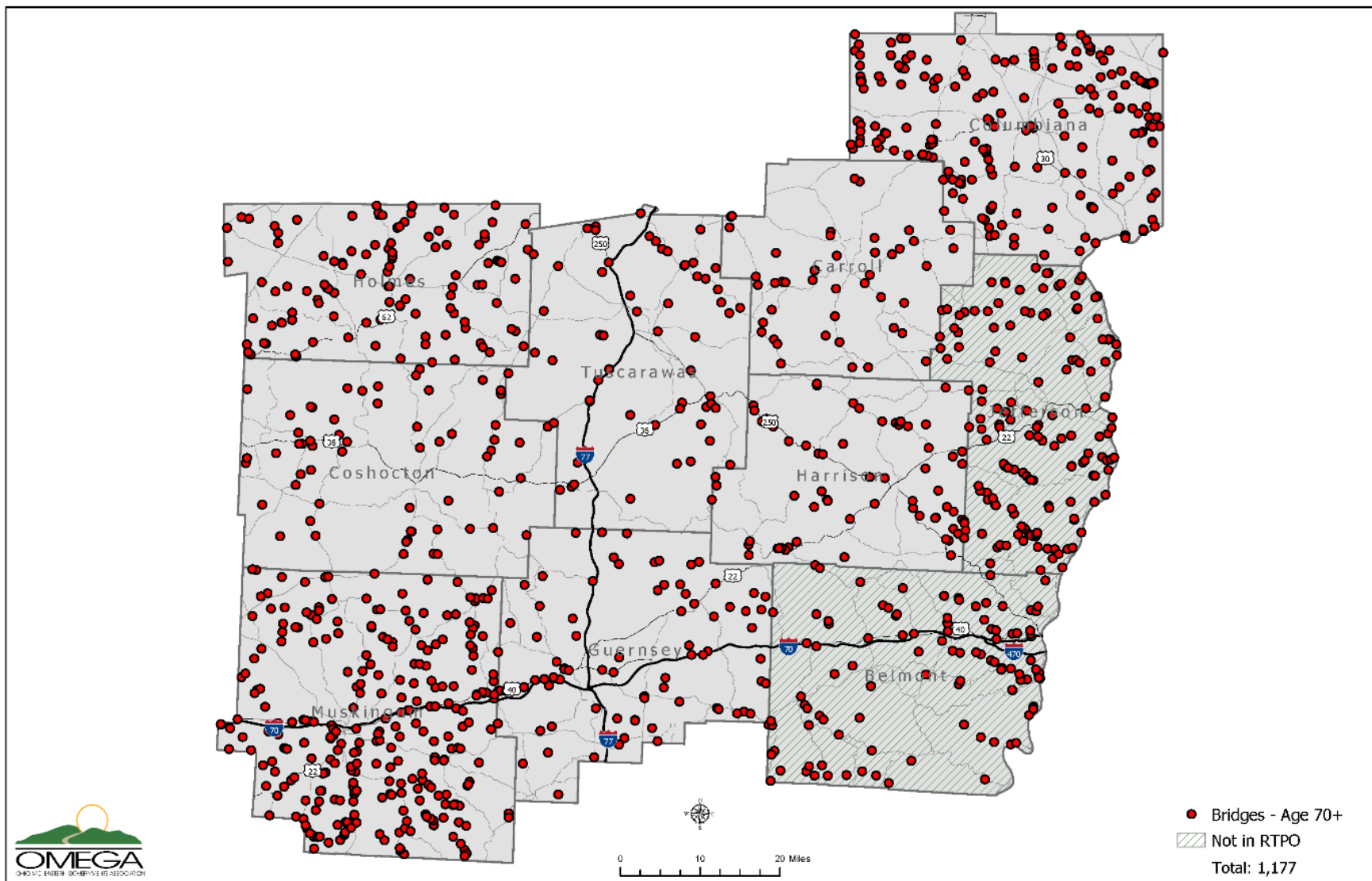


Figure 3-10: Bridges Aged 70 Years or Older

Bridges aged 70 years or older are facing the end of their designed lifespan and may require extensive repairs or complete replacement in the upcoming decades to maintain the present level of service on the network. Bridges over 70 years of age may need to be prioritized for maintenance and/or replacement when projects are considered throughout the region.

Currently, there are 658 bridges located in the OMEGA RTPPO that are 70 years or older. This is 19.2% of all bridges in the RTPPO. Geographically they are dispersed, though concentrations may be found in Columbiana and Muskingum Counties, the two most populous in the region. These bridges will require a substantial amount of investment between 2020 and 2045 to continue to function as designed. **Figure 3-10** shows the location of bridges aged 70 years and older.

Bridges aged 40 and over are also of interest, as these bridges will potentially be aged 70 and over at the horizon year of 2045, unless replaced. These bridges, which are currently functioning as intended, may become focus areas in the upcoming years, as traffic and weather will continue to deteriorate them accordingly. **Table 3-4** shows the total number of bridges on the local system aged 40 years and over, as well as those 70 years and over.

As shown in **Figure 3-11**, there are currently 1,127 local bridges aged 40 and over. 32.9% of all OMEGA bridges fall into this category, and this includes the 658 local bridges aged 70 and over. This puts an additional 469 local bridges on the list of structures to monitor more closely throughout the next 25 years.

County	Aged ≥ 70	Aged ≥ 40
Carroll	29	82
Columbiana	157	218
Coshocton	43	98
Guernsey	59	153
Harrison	36	55
Holmes	84	142
Muskingum	219	289
Tuscarawas	31	90
Total	658	1,127

Table 3-4: Age of Local Bridges

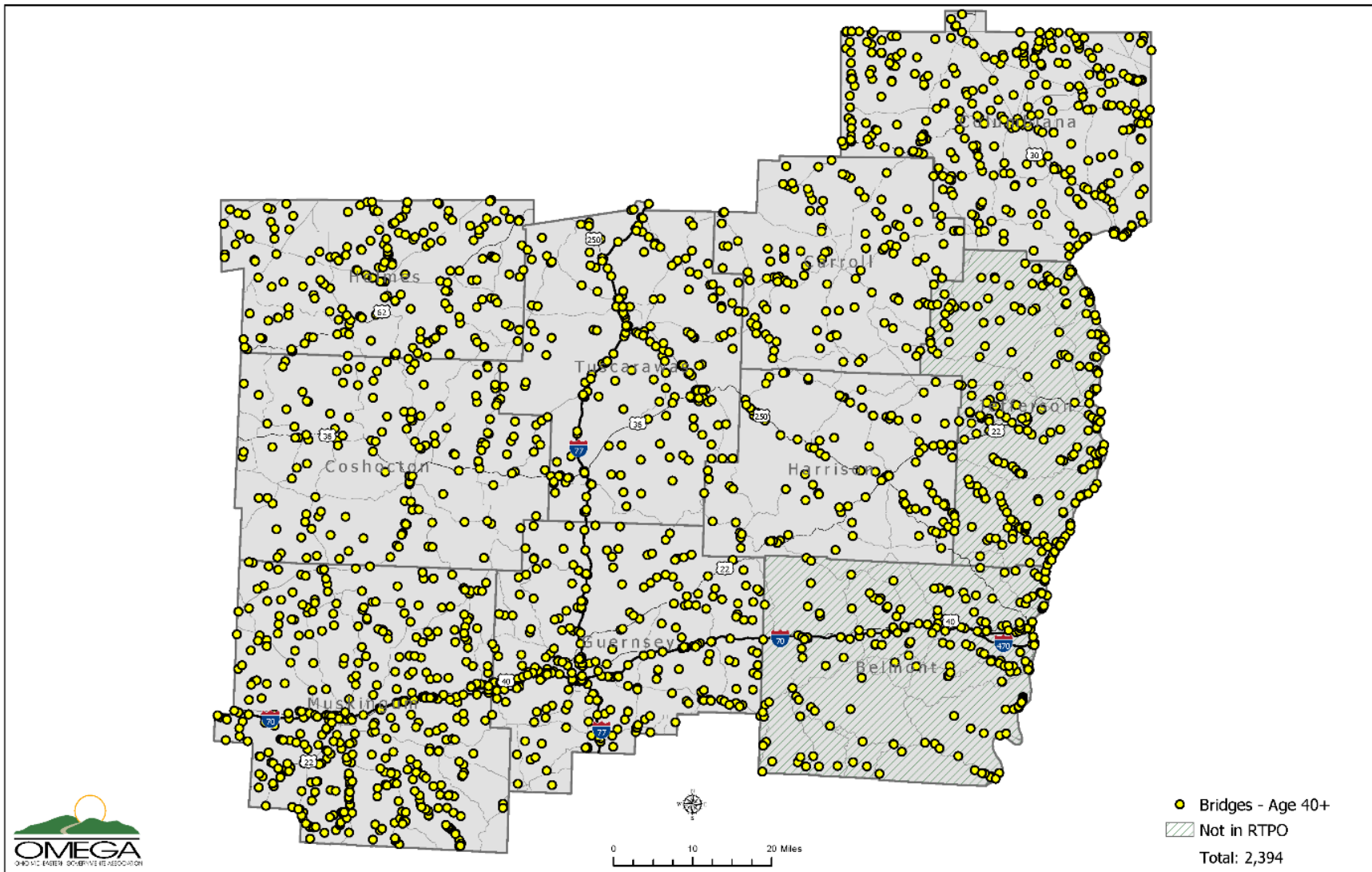


Figure 3-11: Bridges Aged 40 Years or Older

Safety

Roadway safety is a high priority for the OMEGA region. Between January 1, 2016 and December 31, 2018, there were 29,991 crashes logged on OMEGA RTPO roadways. Crashes are categorized by severity on a scale from 1-5, with 1 being Property Damage Only to 5 being Fatal. In December 2017, the OMEGA Executive Board adopted a resolution calling for a 1% reduction in the number and rate of fatal crashes, the number and rate of serious injury crashes, and the number of non-motorized crashes.

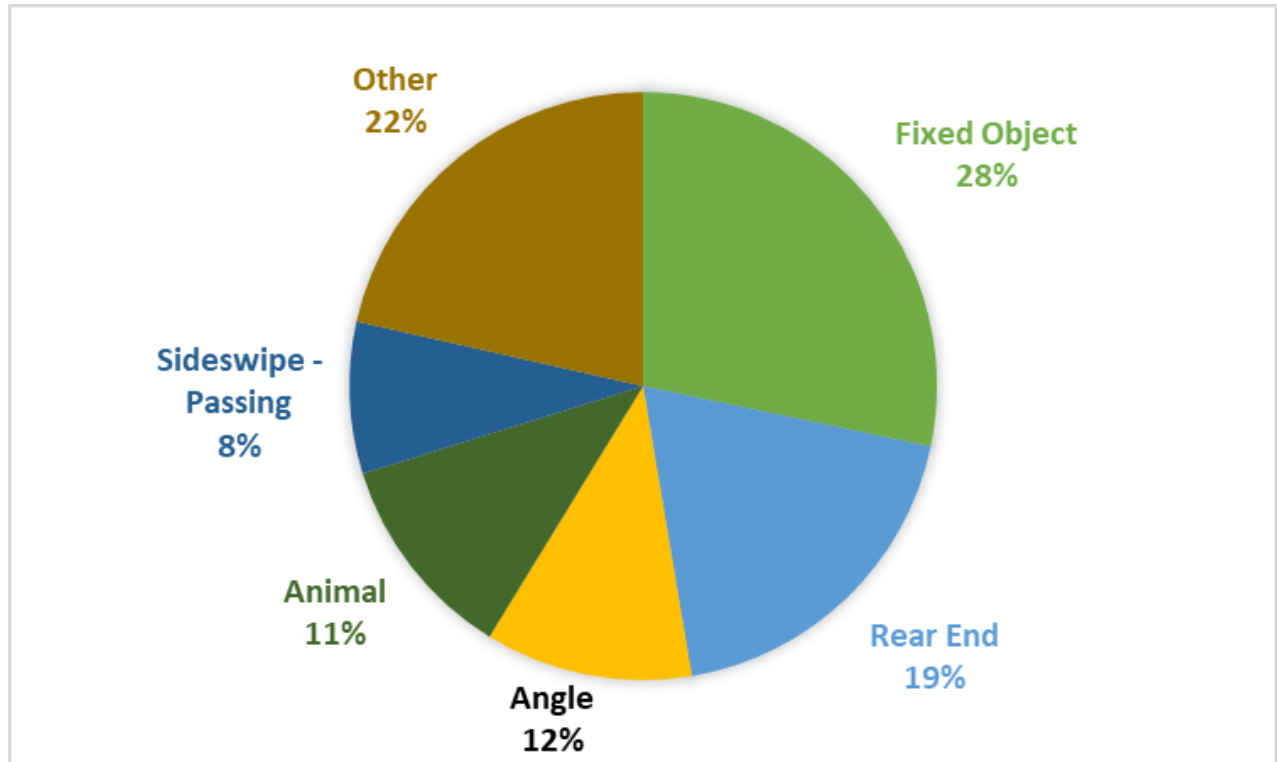


Figure 3-12: Top 5 Types of Crashes (2016-2018)

The leading type of crash in the OMEGA region is Fixed Object (28%). These crashes include crashes that leave the roadway and strike objects such as poles, trees, mailboxes, guardrails, ditches, or other items. This type of crash is common in rural areas due to the higher overall speeds, windy and hilly roads, and lower traffic volumes found on rural highways. The next most common type of crash is Rear End (19%). Again, this type of crash is common in rural areas due to the higher speeds. Topography may also be a factor, as windy roads and elevation changes may cause drivers to be unaware of stopped or turning vehicles.

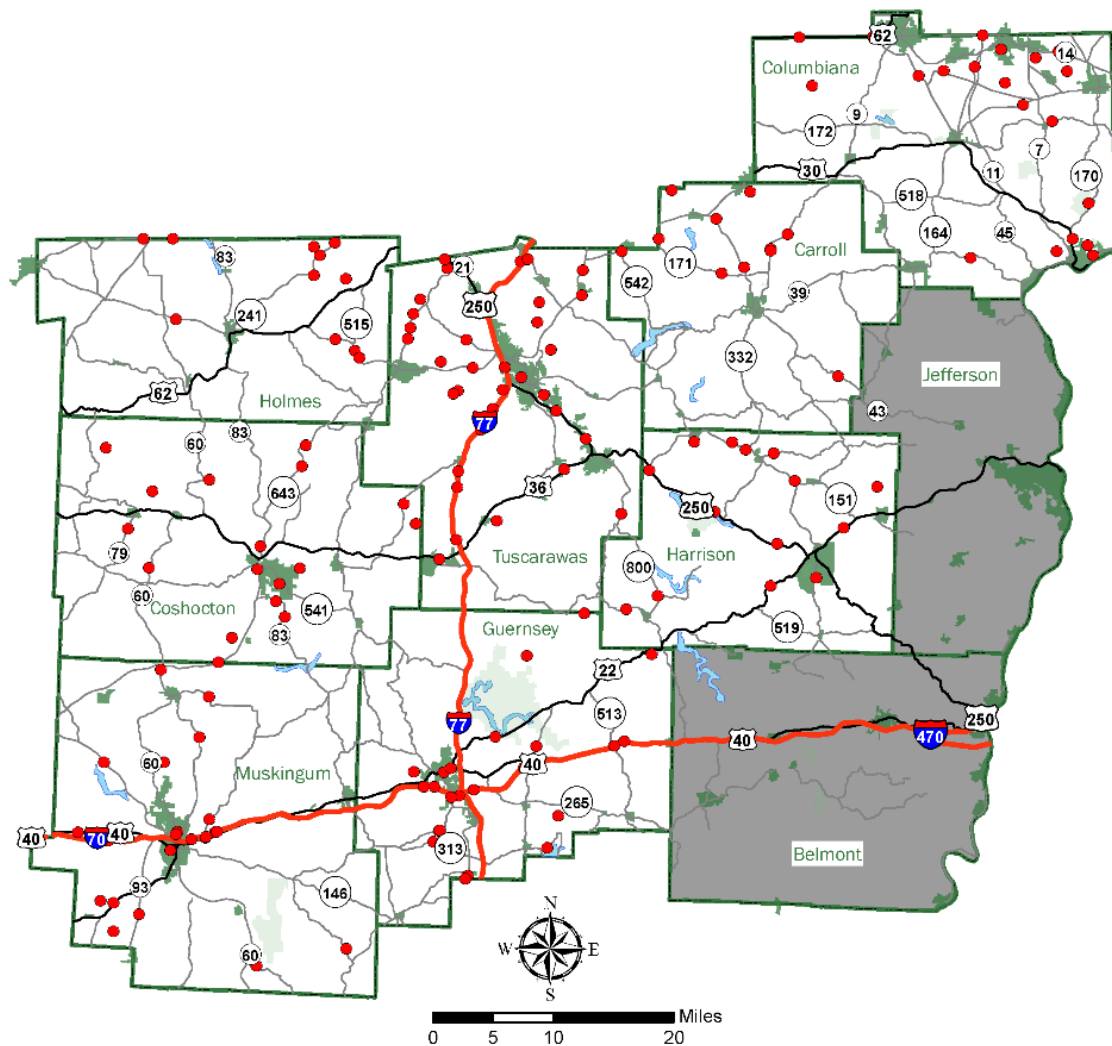


Figure 3-13: Fatal Crashes (2016-2018)

Figure 3-13 shows the location of all Fatal crashes from 2016-2018. A total of 170 fatalities in 164 crashes occurred during this time period, or approximately 0.5% of the total number of crashes. Many of these crashes occurred on the state-maintained systems (Interstates, US & State routes).

Figure 3-14 displays the location of serious (incapacitating) injury crashes. A total of 1,134 serious injury crashes took place on OMEGA roadways, or about 3.8% of all OMEGA region crashes. There is some clustering near urbanized areas and along major transportation corridors. Many of the serious injury crashes occurred on the state-maintained system, though a large number also occurred on the locally maintained system.

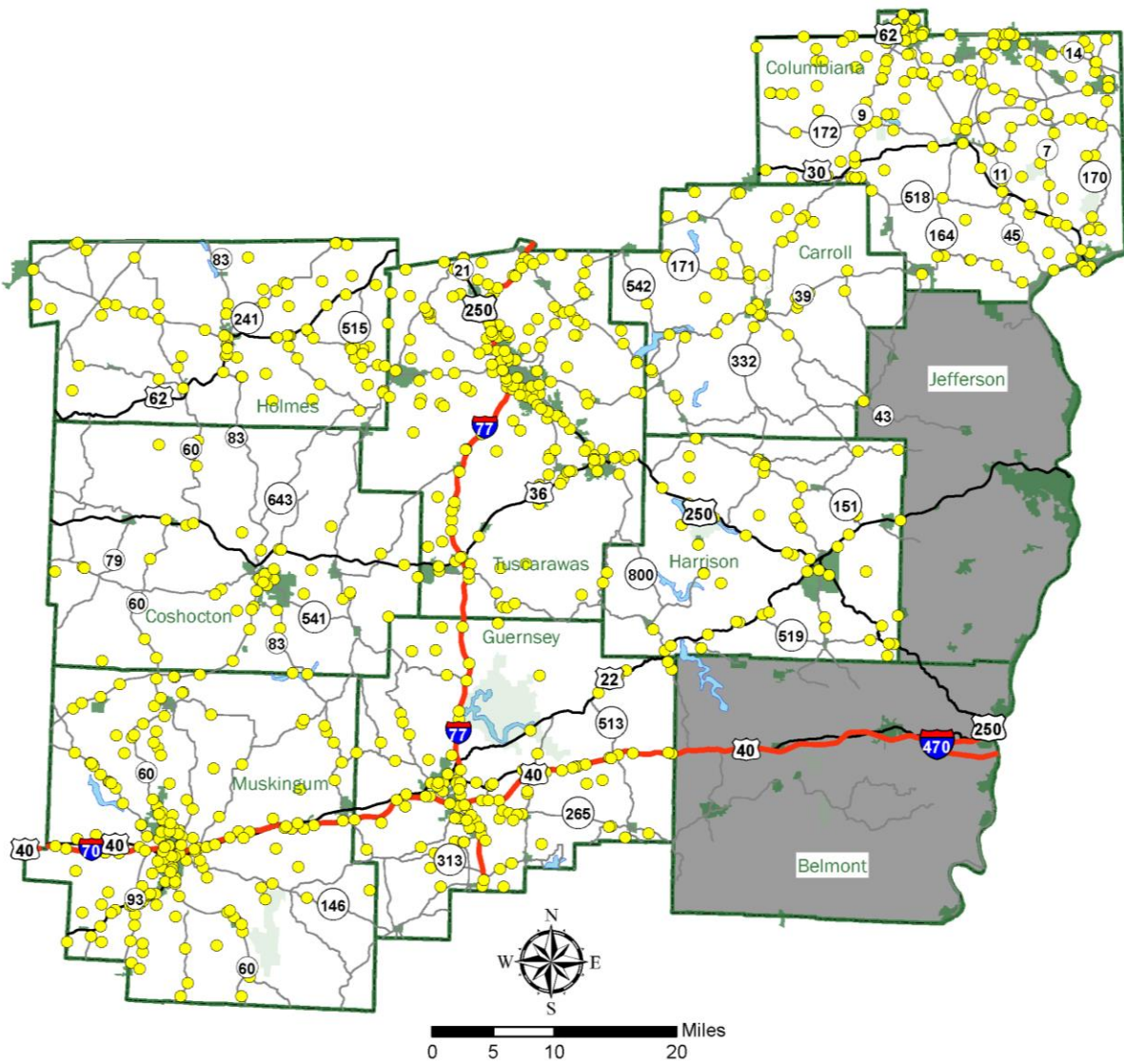


Figure 3-14: Serious Injury Crashes (2016-2018)

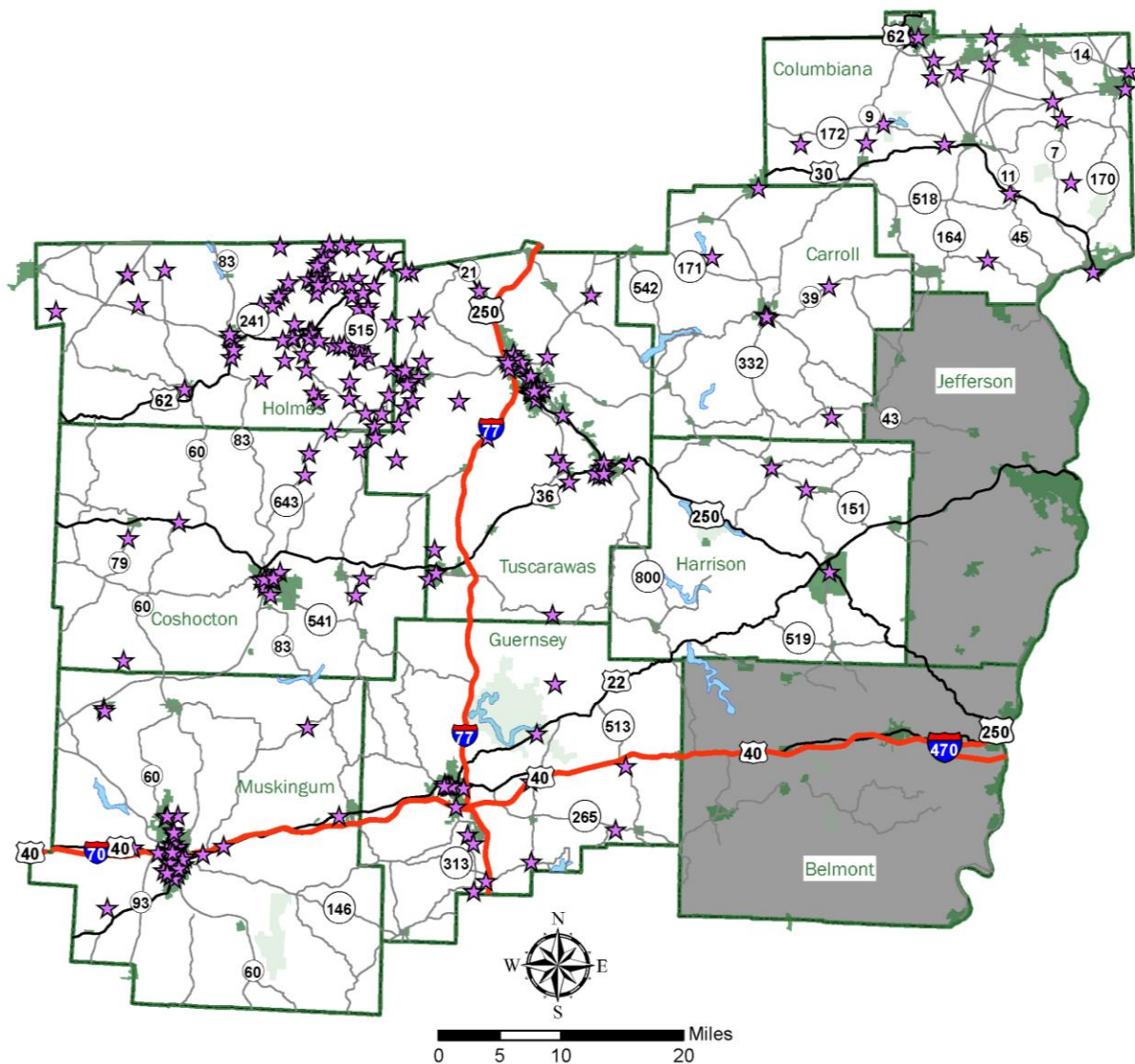


Figure 3-15: Pedestrian/Bicycle/Buggy Crashes (2016-2018)

Figure 3-15 shows the 245 crashes involving bicycles, pedestrians or animals (with riders/wagons/buggies). This does not include crashes involving wild animals, such as deer. Most of the buggy/wagon crashes occurred in Holmes County, which is in the epicenter of Amish Country. Clusters of bicycle and pedestrian crashes also occurred in this area, as well as in the urbanized areas, such as Zanesville, Coshocton, New Philadelphia/Dover, Cambridge, and Uhrichsville/Dennison.

Statewide initiatives, such as the 2019 Statewide Amish Travel Study identified priority areas of concern. This study identified three priority areas within the OMEGA RTP0:

- Kilgore Area (southeastern Carroll County)
- Mt. Hope Area (eastern Holmes County & northwestern Tuscarawas County)
- Charm Area (southern Holmes/northeastern Coshocton Counties)

Other areas within the RTP0 were noted for smaller, more localized clusters of Amish residents. These population centers are smaller than the priority areas but may still impact travel near their location. These centers include:

- Eastern Guernsey County near Quaker City
- Western Coshocton County, north of Warsaw
- Northeast Muskingum County, near Dresden
- Northern Harrison County, between Scio and Jewett
- Northern and Central Columbiana County
- West-Central and Southern Tuscarawas County

Other initiatives, such as the Local Safety Assistance program through ODOT has been utilized by members of the OMEGA RTP0. This program has funded consultant-led safety studies into high-risk intersections, corridors, and Federal-Aid networks within a city. Holmes County completed a county-wide Safety Action Plan through this program and has begun implementation of recommended countermeasures.

3.2 Transit Network

Public transit and human services transportation providers are an important resource for the OMEGA Region. ODOT used the Ohio Area Agency on Aging regions to select Region 2 (Miami Valley Regional Planning Commission) and Region 9 (OMEGA) to be pilot programs to regionalize transit and human services transportation coordination and mobility transformation. Altogether, there are a total of 71 transportation service providers or human service agencies that provide or contract transportation services to residents in the region. The residents served includes seniors, people with disabilities, zero-vehicle households, low-income individuals, unemployed, veterans, Medicaid-eligible individuals, people with low-English proficiency, and others that need regular and reliable transportation.

Prior to the development of the regional plan, each county was required to complete a locally developed plan for their transportation services in order to be eligible for potential grant funding that could help supplement capital or operational costs for their service. This was the status of each county's plan before the completion of the regional plan:

- Belmont* – Plan complete October 2018, approved until 2022
- Carroll – Plan complete November 2018, approved until 2022
- Columbiana – Plan updated 2019, approved through 2020
- Coshocton – Plan updated 2019, approved through 2020
- Guernsey – Plan updated 2017, approved until 2021
- Harrison – Plan complete October 2018, approved until 2022
- Holmes – Plan complete November 2018, approved until 2022
- Jefferson* – Plan complete February 2019, approved until 2023
- Muskingum – Plan complete September 2018, approved until 2022
- Tuscarawas – Plan complete 2017, approved until 2021

**Not in OMEGA RTP*

Having the regional plan approved and adopted, it will now be implemented and replace the need to draft a local coordinated plan. In order to apply and be eligible for grant funding, every transportation service provider will reference the regional plan developed for all transportation providers in the region. This allows each county to focus on their local unmet needs and set their own goals to address while still being able to receive funding.

In order to begin to draft a regional plan, a regional coordinated council was first developed which consisted of regional transportation service providers, public transit agencies, human service agencies, and all other stakeholders. A SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was created by the entire council to gain a perspective on what is needed in the regional transportation services to serve the public more efficiently. The regional coordinated council then focused on setting goals to work together to meet the unmet needs in the region.

Five goals were established:

1. Increase Ridership for all Transportation Service Providers and Transit Agencies in the Region.
2. More efficient Out-of-County and Out-of-Region Transportation Service.
3. Reduce Denials and No-Shows of the Riders that Use Transportation Service in the Region.
4. Cost-Effective Vehicle Replacement for all Regional Transportation Service Providers.
5. Increase Employment Transportation Options for Jobseekers and Employees.

These five goals consist of strategies, action steps, resources needed, and agencies that will lead and support the goal implementation. The goals will begin to address and meet some of the more common unmet needs communicated and ranked by the public:

Rank	Unmet Need Description
1	More Weekend Service
2	More Travel Service & Payment Options
3	More Efficient Employment Transportation
4	Expand Other Types of Transportation Service
5	Improve & Increase Bus Service
6	Expand Non-Medicaid Service Hours
7	Offer Transfers & Improve City Connections
8	Increase Medical Transportation Outside County & State
9	Easy Fare/Rate for Low Income Individuals for Regional Mobility
10	Simplify Public Information (i.e. brochures)
11	Local Area Hospitals Closing/Longer Trips for Providers & Patients

Table 3-5: Unmet Needs Rankings

There were several extra unmet needs from the public that were included from public survey comments such as more frequent trips, evening transportation service, transportation to and from the Akron/Canton Airport, bus stop shelters, and day and seasonal passes.

The primary benefit of regionalization is that nine counties have one plan saving each county time and resources instead of having to draft their own. The transportation service providers collaborate, share best practices and distribute resources in order to perform similar services. The regional plan produced an inventory of all transportation service providers, human service agencies, and mobility managers in the region sharing information that may not have been known across the region. Mobility managers are defined under the Ohio Mobility Management program which increases mobility for the public by integrating transportation into planning and programs. The region will have five mobility managers serving the region during the implementation phase. They are an unbiased and important asset to transportation coordination because they connect the public to the transportation providers and help make transportation services more accessible to the communities they serve. Below is a list of some of the providers from the counties in the region:

Another benefit from regionalization comes from helping to streamline project review from one plan for all 10 counties. In total, 37 projects were identified and proposed by the regional stakeholders for capital, operational, and mobility management projects. Several of these projects have already been piloted during the pilot phase of the plan and will continue during the implementation phase. These

successful projects were a regional call center (Mid-Ohio Mobility Solutions), CTS Scheduling Portal, and a Deviated-Fixed Route for southern Columbiana County.

Mid-Ohio Mobility Solutions is a one-call center that serves all 10 counties from the basic need of scheduling a trip in or out of the region as well as regular mobility issues such as helping people with disabilities with medical equipment go from their door to their destination. The CTS Scheduling Portal is an opportunity provided to the region for any willing participating agencies to place overbooked trips in an online portal for any transportation provider to pick up that trip and complete it for the rider. The goal is to reduce trip cancellations and denials. The Deviated-Fixed Route in Columbiana County is known as the “Make-the-Connection” Shuttle and is a low-cost, one-hour loop between East Liverpool and Calcutta that connects to low-income housing areas to public service locations, commercial stops, and employment centers.

County	Funding	Agency	Address	Service Area
Carroll	5310/5311	Carroll County Transit	2205 Commerce Dr., Carrrollton, OH 44615	Carroll County
Columbiana	5310/5311	CARTS	7880 Lincole Pl, Lisbon, OH 44432	Columbiana County + 50 miles w/in Ohio
	5310 – MM*	Deb Hill (CAAofCC)	7880 Lincole Pl, Lisbon, OH 44432	Columbiana County
Coshocton	5310	CCCTA	401 Main St., Coshocton, OH 43812	Coshocton County
	5310 – MM*	Tracy Haines	401 Main St., Coshocton, OH 43812	Coshocton County
Guernsey	5310	Guernsey County Senior Citizens Ctr	1022 Carlisle Ave., Cambridge, OH 43725	Guernsey County
	5311	SEAT	224 Main St., Zanesville, OH 43701	Muskingum, Guernsey Counties + 150 miles
Harrison	5311	Harrison County Public Transit	536 N Main St. Cadiz, OH 43907	Harrison County + 40 miles
Holmes	No Public Transit Providers			
Muskingum	5311	SEAT	224 Main St., Zanesville, OH 43701	Muskingum, Guernsey Counties + 150 miles
	5310 – MM*	Nichole Silver	375 Fairbanks St., Zanesville, OH 43701	Guernsey & Muskingum Counties
Tuscarawas	5310	SEA, Inc.	1458 5 th St., New Philadelphia, OH 44663	Tuscarawas County
	5310	Senior Center of Tuscarawas County	425 Prospect St., Dover, OH 44622	Tuscarawas County
	5310 – MM*	Shannon Hursey	425 Prospect St., Dover, OH 44622	Tuscarawas, Carroll, & Harrison Counties

MM* = Ohio's Mobility Management Program

Table 3-6: Public Transit/Human Services Transportation Agencies + Service Areas

There will be many more projects prioritized based on an order that serves the public in suggested categories:

- Mobility Management
- Vehicle Replacement/Procurement
- Operations (expansion, capital improvements)
- Technology
- Regional Initiatives (Education, training)

When implemented, the regional coordinated plan will continue to improve efficiency, mobility, and access to transportation for senior citizens, people with disabilities, impoverished, and others who rely on regular transportation service. For more information from the complete regional plan, please visit: <https://omegadistrict.org/programs/transit/regional>

Rural Intercity Bus Program

The OMEGA region is also served by Ohio's Rural Intercity Bus Program, known as GoBus. This program is administered by the Hocking-Athens-Perry Community Action Program (HAPCAP). The program utilizes Federal Transit Administration Section 5311(f) funds to address the intercity bus transportation needs of the entire state by supporting projects that provide transportation between non-urbanized areas and urbanized areas resulting in connections of greater regional and national significance.

GoBus stops within the OMEGA RTPD including Cambridge, Newcomerstown, and New Philadelphia. These stops lie along a route from Marietta/Parkersburg to Cleveland, where connections are made to other commercial bus operators (Greyhound or Baron's Bus) and/or Amtrak's intercity passenger rail network.



3.3 Active Transportation Network

Active transportation, such as walking, biking, or traveling by buggy, is an important part of OMEGA's transportation network, for commuting and for recreational purposes. Having a robust, connected network of active transportation facilities, such as sidewalks, designated bike lanes, multiuse trails, and buggy lanes, is critical to ensuring that each member of the community has access to safe, reliable transportation. This is particularly important in Amish and low-income communities who rely on these facilities every day as a primary mode of transportation to and from school, work, and other day-to-day activities. An extensive active transportation network is also a major key to enabling community and economic development, providing multiple ways to access local businesses, community resources, and activities.

As shown in **Figure 3-16**, the OMEGA RTPO has two US bike routes and five state bike routes designated in the region. All resolutions for the region's US bike routes were finalized in 2019. We are working with our local communities to finalize the state bike routes to ensure the accuracy of the routes and safety for bicyclists. As such, the state bike routes shown may be adjusted slightly before being finalized. As part of the larger active transportation network, OMEGA also has several bike trails and additional bicycle and pedestrian facilities. In total, there are approximately 712 miles of bicycle facilities that have been documented throughout the RTPO region. These facilities include buggy lanes and widened roadway shoulders that can accommodate bicyclists. We will continue working with our local communities to ensure all known active transportation facilities are accurately documented throughout the region.

Three counties in the region have trail plans finalized or in the planning stages:

- **Tuscarawas County Trail and Green Space Plan:**
Tuscarawas County has developed a Trail and Green Space Plan for the conservation, interpretation, development, and management of the cultural, natural, and recreational resources in the county. This plan identifies 92 miles of hiking and biking trails that, when complete, will provide linkages to cities and villages, parks, attractions, historical sites, and other points of interest in the county. The Panhandle Passage Trail, Ohio Erie Canalway Towpath, and Zoar Valley Trail are all part of this network. In addition, another bike trail is being planned to connect the City of New Philadelphia to the Village of Roswell.
- **Harrison County Trail Plan:**
The Harrison County Trail Plan was finalized in the fall of 2019, with the goal of developing a regional network of cultural, recreational, and natural resources that promote tourism, alternative transportation, community, and economic development. The county is uniquely positioned between the Ohio & Erie Canal Towpath Trail to the west, and the Great Allegheny Passage Trail to the east. Part of the vision of the plan is to make a multimodal connection between these two regional trail systems. Destinations such as Tappan Lake Park, Sally Buffalo Park, Clendening Lake, Piedmont Lake, Jockey Hollow Wildlife Area, County Fair Grounds and multiple museums will be easily accessible from the proposed trail.

- Mohican Valley Greenway Corridor Plan:**
 Led by the Ashland County, Knox County, and Holmes County Engineer's Offices, the Mohican Valley Greenway Corridor Plan seeks to provide a complete connection from the Loudonville Trail south to the Mohican Valley Trail along the Wally Road corridor. The corridor currently serves as the lifeline for up to 1 million visits per year from regional, national, and international tourists, generating millions of dollars per year for the local economy. This plan is currently in the initial planning stages, but once completed, will provide approximately 16.5 miles of new multimodal trail and parking facilities/access points along this section of the Mohican Scenic River Valley.

As part of a broader active transportation network, several counties in the OMEGA region are also part of the following larger trail network visions:

- Cleveland to Pittsburgh (C2P) Corridor:**
 Part of the Industrial Heartland Trails Coalition's (IHTC's) 1,500-plus miles network vision, the C2P multiuse trail corridor will travel from Cleveland, Ohio to Pittsburgh, Pennsylvania. In addition to the IHTC trail network connection, 146 miles of the C2P corridor will help complete the Great American Rail-Trail, a burgeoning 3,700-plus miles multiuse trail spanning across the country between Washington, D.C., and Washington State. A 63-page feasibility study outlines the vision for the corridor of "establishing the industrial heartland as a premier destination offering a unique multiuse trail network that will stretch across New York, Pennsylvania, Ohio, and West Virginia." The study also describes the opportunities, challenges, and costs associated with the corridor's completion. Portions of Carroll, Tuscarawas, and Harrison Counties have open and proposed segments along the C2P corridor, with a total of between 30 to 50 miles of proposed segments within those counties contributing to the corridor.
- Great Ohio Lake to River Greenway:**
 Part of the Ohio River Trail Council's vision of forming a mega-trail system from the great lakes region to the east coast, the Great Ohio Lake to River Greenway would help build the connection between Lake Erie and the proposed Ohio River Greenway Trail in Ohioville, Pennsylvania. A conceptual greenway segment has been identified in Columbiana County from Lisbon to East Liverpool at the Ohio-Pennsylvania state line. Once completed, the Great Ohio Lake to River Greenway will be an important part of the trail system beginning at Lake Erie in Ashtabula, Ohio, to the proposed Ohio River Greenway Trail, on to the Great Allegheny Passage in Allegheny County, Pennsylvania, and continuing on to the Chesapeake and Ohio (C&O) Canal Towpath to Washington, D.C.

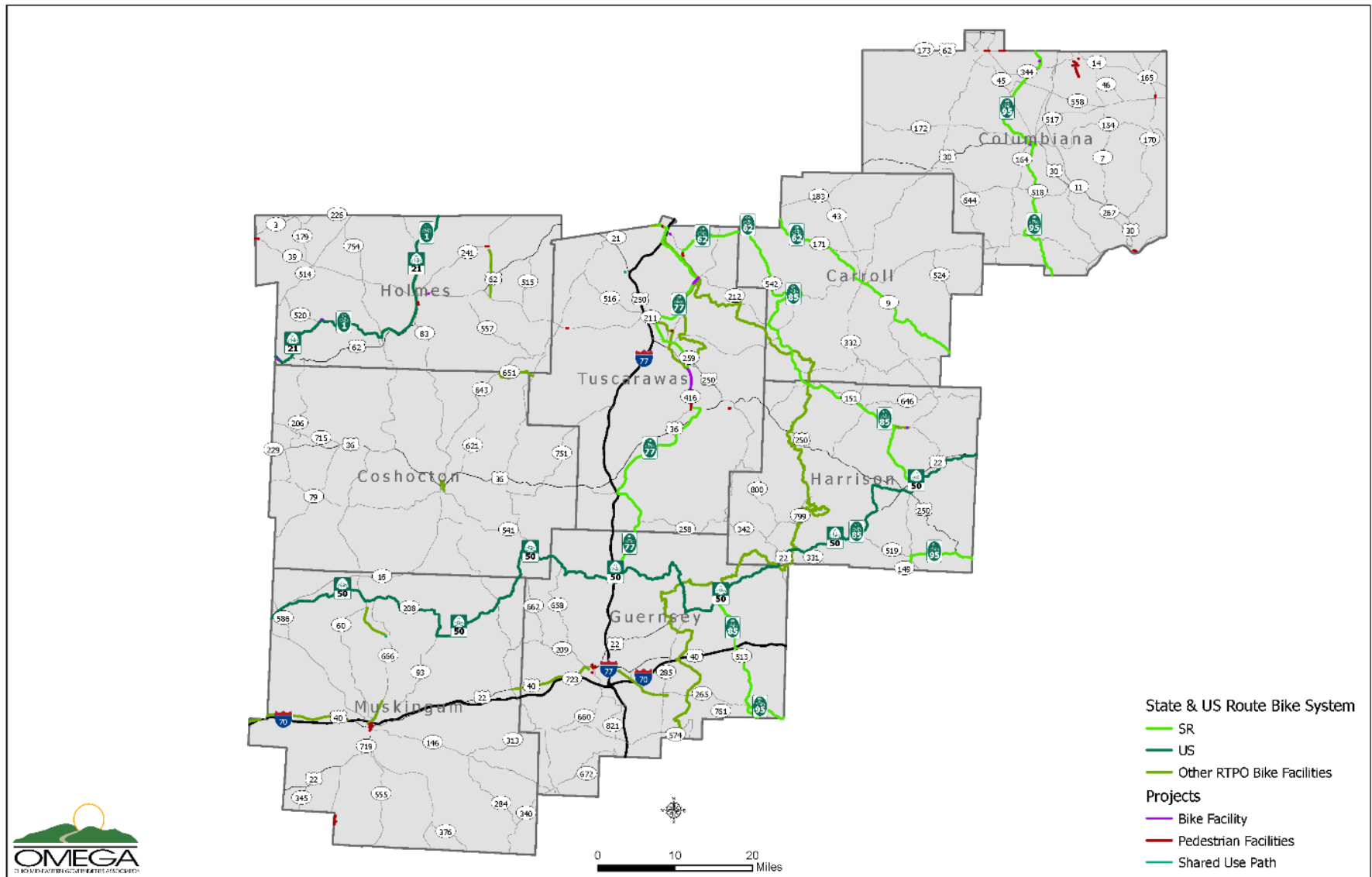


Figure 3-16: Regional Bike Routes/Facilities

3.4 Aviation, Rail & Maritime Networks

Airports

Ohio classifies public airports in five different categories:

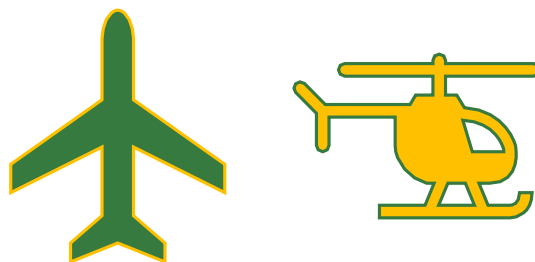
- **Air Carrier** – Intended to support commercial airline activities.
- **Level 1** – Intended to meet nearly all the needs of general aviation turbine powered aircraft and their users. These airports should be able to provide nearly all the services necessary to support corporate jet aircraft.
- **Level 2** – Intended to support smaller corporate aircraft, such as small jets and turboprop aircraft and meet many of their needs.
- **Level 3** – Intended to serve light, twin-engine and single-engine aircraft for business, pleasure, and training flights. Fulfills needs of piston-powered aircraft and may meet needs of turbine-powered aircraft.
- **Level 4 (GA)** – Intended to support flight operations of small general aviation aircraft. Primarily single-engine aircraft, but small twin-engine aircraft may be accommodated. Minimal support facilities.

Classification	Public	Private
Air Carrier	0	N/A
Level 1	1	0
Level 2	7 in RTPO, 8 total	0
Level 3	3 in RTPO, 6 total	0
Level 4 / General Aviation (GA)	0	26

Table 3-7: Regional Airport Classification

There are no Air Carrier-designated airports in the OMEGA RTPO. The nearest airports with commercial airline service are in Akron/Canton, Ohio; Columbus, Ohio; or Pittsburgh, Pennsylvania. In addition to the airports, there is one public heliport and ten private heliports in the OMEGA RTPO. There are an additional four public airports and one public heliport in Belmont and Jefferson Counties.

The locations of these airports are provided in **Figure 3-17** and a general summary is provided in **Table 3-8**.



County	Airport Name	Classification	Public/Private Use
Carroll	Adams Tree Farms	GA	Private
	Carroll County – Tolson	3	Public
	Furey	GA	Private
	Murray Energy	GA	Private
	Parsons	3	Public
Columbiana	Aeroflight	GA	Private
	Columbiana County	4	Public
	Crosswind	GA	Private
	East Liverpool City Hospital	Heliport	Private
	Koons	3	Public
	Mercer Aloft Acres	GA	Private
	Morris Field	GA	Private
	Salem Community Hospital	Heliport	Private
	Salem Lakefront	GA	Private
	Skydive/Petersburg Airport	GA	Private
	Stouffers	GA	Private
	Coshocton Co. Memorial Hospital	Heliport	Private
Coshocton	Richard Downing	1	Public
	Wrights Field	GA	Private
	Brothers	GA	Private
Guernsey	Cambridge Municipal	3	Public
	Hilltop Airport	GA	Private
	Salt Fork Lodge	Heliport	Public
	SE Ohio Regional Medical Center	Heliport	Private
	Taildragger	GA	Private
	Warehime	GA	Private
	Harrison Community Hospital	Heliport	Private
Harrison	Harrison County	3	Public
Holmes	Fairgrounds/Pomerene Hospital	Heliport	Private
	Holmes County	2	Public
Muskingum	Bethesda Hospital Maple Campus	Heliport	Private
	Daves Delight	GA	Private
	Double R Airfield	GA	Private
	Good Samaritan Hospital (Genesis)	Heliport	Private
	Graham Field	GA	Private
	Johns Landing	GA	Private
	Massengill	GA	Private
	Parr	3	Public
	Porter-Ware	GA	Private
	Riverside Zanesville	GA	Private
	Riverview	GA	Private
	Vensil Farms	GA	Private
	Zanesville Municipal	1	Public
	Gnadenhutten	GA	Private
	Harry Clever Field	2	Public
Tuscarawas	Plane Country	GA	Private
	Twin City Hospital	Heliport	Private
	Union Hospital (Cleveland Clinic)	Heliport	Private

Table 3-8: Regional Airports Summary

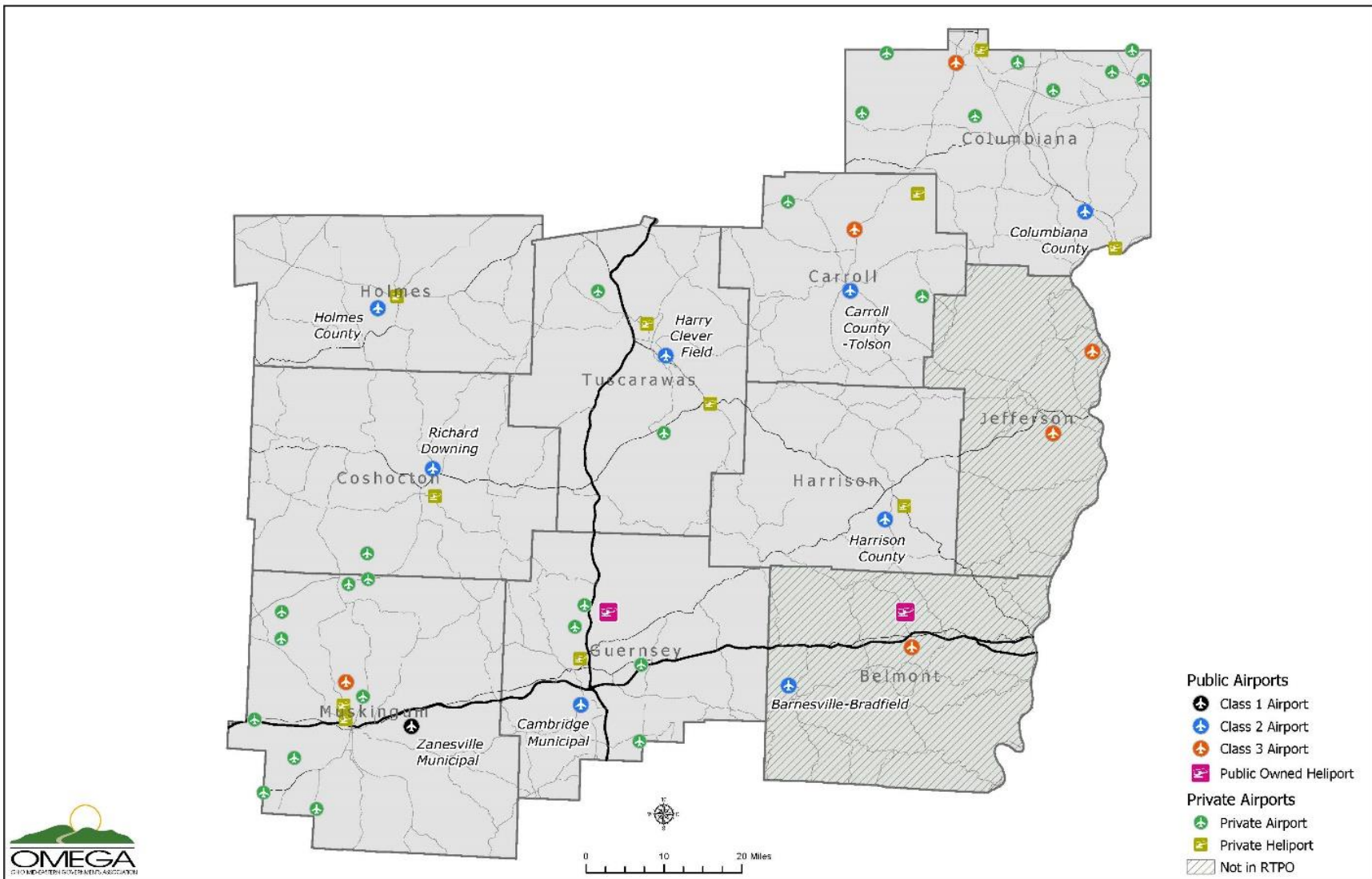


Figure 3-17: Regional Airports

Rail

As shown in **Table 3-9** and **Figure 3-18**, the OMEGA RTPPO is served by ten different railroad operators, with eleven different right-of-way owners. Altogether, there are nearly 1,085 miles of railroads within the region. Among the largest of these is the sole Class 1 railroad in the region, Norfolk Southern. Norfolk Southern owns lines in northwestern Holmes County and in Columbiana County. Their lines also follow the Ohio River to serve points in Belmont County and Jefferson County. Except for Norfolk Southern, all railroads in the OMEGA region are single tracked. Norfolk Southern owns and maintains two double-tracked mainlines through Columbiana County. The northern Columbiana County line is on the U.S. Department of Defense's Strategic Rail Corridor Network (STRACNET). The entire Norfolk Southern System covers approximately 21,000 route miles, of which 2,233 miles are in Ohio. As shown in **Table 3-9**, the Norfolk Southern rail line in the OMEGA RTPPO region covers nearly 356 miles and runs the length of the Ohio River connecting all the ports in the region. CSX Corporation is another Class 1 railroad and owns rail lines in the OMEGA RTPPO. However, CSX does not operate these lines, and have leased them to shortline or regional railroads for operations.

The Wheeling & Lake Erie Railroad is a regional Class 2 railroad and is the largest in the OMEGA region that is based in Ohio. The line connects the manufacturing and ports on Lake Erie to the ports on the Ohio River, creating a vital link in shipping.

Smaller shortline (Class 3) railroads interchange with the larger national and regional lines. These shortlines provide service to companies along their lines, providing another option to move goods to the global economy. The processing plants in Harrison County have installed several rail sidings in order to be able to ship products by rail. Companies with a sizable rail presence include, but are not limited to, Momentum in Scio, AMG Vanadium in Cambridge, Marathon's fractionation facility in Hopedale, and Kraton Corporation in Dover. With petrochemical development and increasingly congested highways, access to rail is critical for the success and expansion of industries throughout the region. Connectivity of these rail lines to product destinations will be a key component in the viability of shipping product by rail.

In the deregulation era of the 1980s, and continuing to the present day, large Class 1 railroads have streamlined their operations and spun off secondary or branch lines to regional and short line railroads for operation. In some cases, the lines were sold outright to these operators, though more commonly, the operator leases them from the Class 1 railroad. The Class 1 railroad reserves the right to reintegrate these lines into their core system once the lease is terminated. As shown in **Table 3-9**, there are numerous operators that operate on the tracks of different owners, and even own some of the track themselves.

Just over 50% of railroad owned mileage is abandoned within the OMEGA RTPPO. Abandonment generally occurs when there is no longer traffic on the line, and the cost to maintain the facility exceeds the value to the company. Due to the loss of the coal industry, and with Interstate access via I-70 and I-77, many rail lines were abandoned, especially once railroads no longer were mandated to maintain access to markets. This was the result of the Staggers Act of 1980. Abandoned rail corridors do provide potential opportunities for active transportation though, as they can be transformed into recreational trails.

Railroad Owner	Railroad Operator (if different)	Total Miles Operator	Total Miles Owner	% OMEGA Mileage
Norfolk Southern Corp.	Norfolk Southern Railway	110.9*	110.9*	10.2%
CSX Transportation, Inc.	Columbus & Ohio River RR	46.72	76.56	7.1%
	RJ Corman Railroad Group, LLC	29.84		
Genesee & Wyoming, Inc.	Columbus & Ohio River RR	6.01	9.23	0.9%
	Ohio Central RR	0.97		
	Ohio Southern RR	2.25		
Independence Rail Works, Ltd.	Zemba Bros. Rail Services	4.08	4.08	0.4%
MarkWest Energy Partners	Youngstown & Southeastern RR	15.39	15.39	1.4%
Ohio Central Railroad	Ohio Central RR	66.91	66.92	6.2%
Ohio Rail Development Commission	Columbus & Ohio River RR	131.26	161.39	14.9%
	Ohi-Rail Corporation	22.40		
	Zanesville & Western Scenic RR	7.73		
Ohio Southern Railroad	Ohio Southern RR	10.26	10.26	0.9%
Ohi-Rail Corporation	Ohi-Rail Corporation	9.22	9.22	0.8%
RJ Corman Railroad Group, LLC	RJ Corman Cleveland Line	2.93	2.93	0.3%
Wheeling & Lake Erie Railway Company	Wheeling & Lake Erie Railway	73.91	73.91	6.8%
Total Active Mileage			540.79	49.9%
Abandoned			543.96	50.1%
Total Mileage			1,084.75	100%

Table 3-9: Railroad Summary

* Mostly doubled tracked in Columbiana. Total mileage is per right of way only, not per track.

Passenger rail is also present within the OMEGA region. Amtrak's *Capitol Limited* route passes through northern Columbiana County. This route connects Chicago to Washington, D.C. with major stops in Cleveland, Ohio and Pittsburgh, Pennsylvania. The nearest Amtrak stop is just outside the region in Alliance, Ohio. This stop is only a platform and offers no shelter to awaiting passengers. Connections can be made in Cleveland or Pittsburgh to allow for travel east to Philadelphia, New York City, and the Northeast Corridor; or north/northeast to Niagara Falls, Toronto, and Montreal.

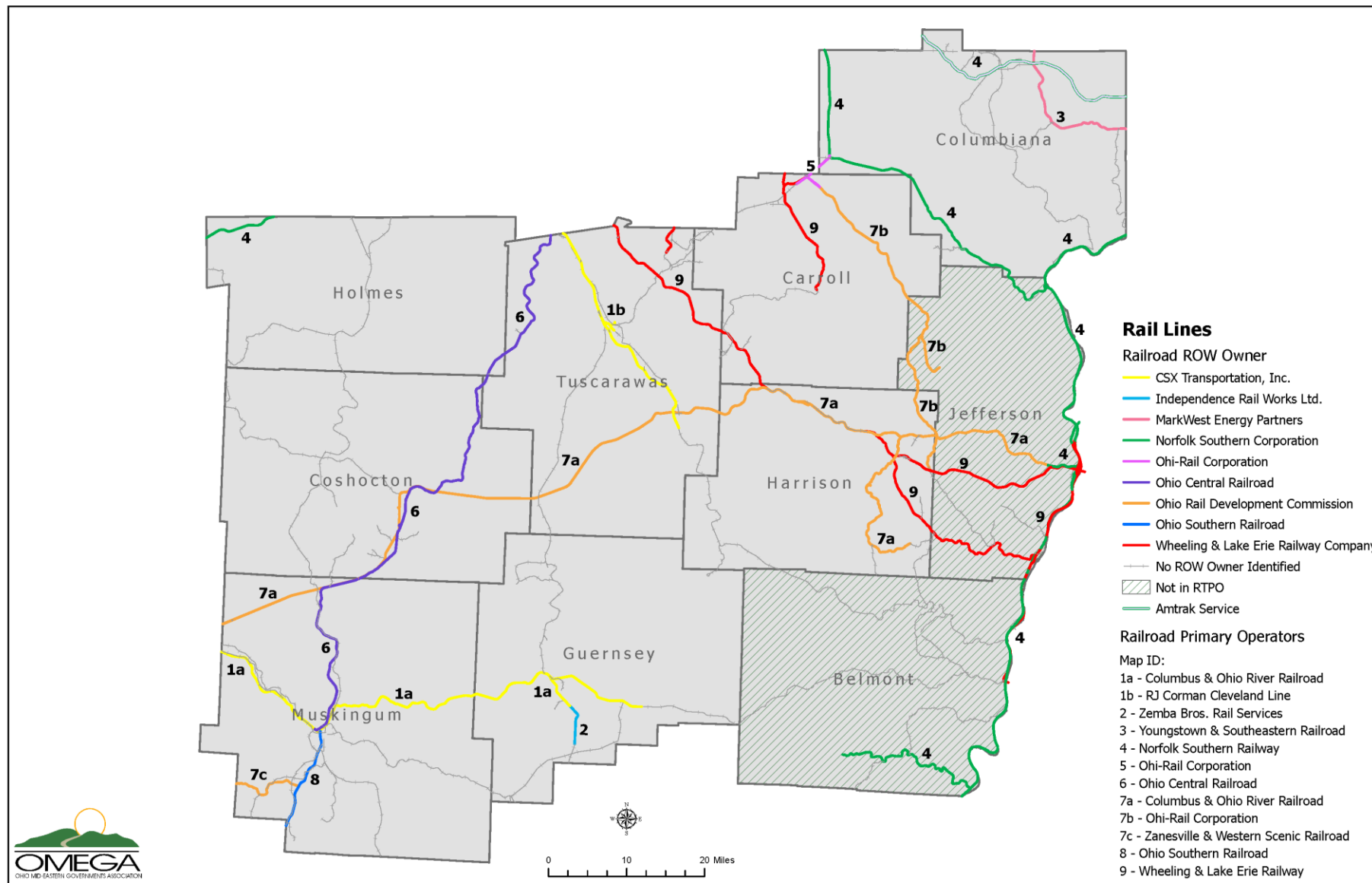


Figure 3-18: OMEGA Railroads

Maritime

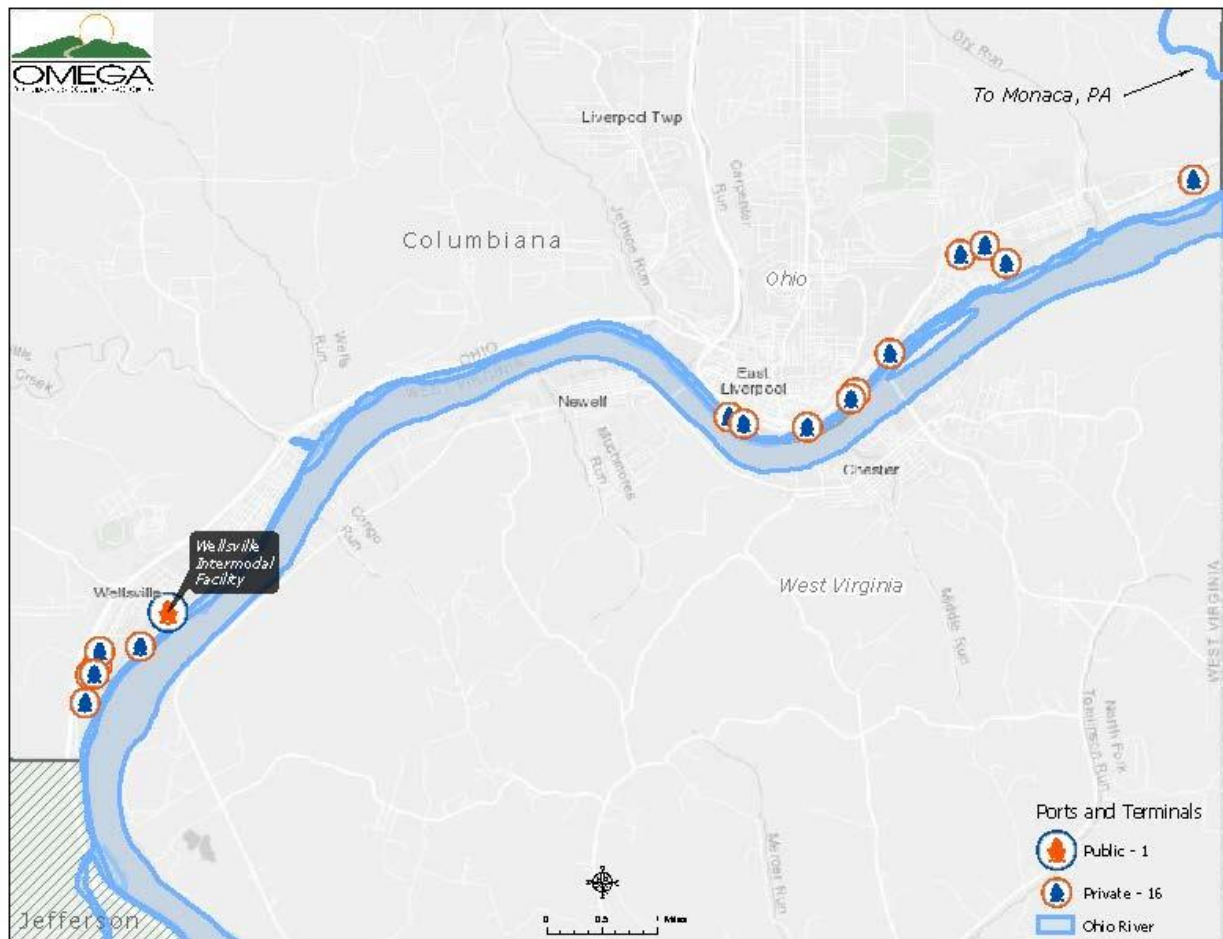


Figure 3-19: Maritime Facilities in OMEGA RTPo

The Ohio River is a primary shipping channel for the region and is also used for recreation. The Ohio River is one of the major shipping conduits in the nation, connecting the Gulf of Mexico ports to the Great Lake Ports. There are multiple dams and locks to help navigate the grade change over the course of the river, including one in the study area at the New Cumberland Lock at River Mile 54.3. Recreational users must be cognizant of these areas as well as the major shipping enterprises on the river. Three counties within the OMEGA region (Columbiana, Jefferson, and Belmont) have direct access to the Ohio River. However, only Columbiana County is included in the RTPo.

For the OMEGA RTPo region, there is only one pool in the Ohio River Navigation System. The New Cumberland Pool begins at River Mile 40, at the Pennsylvania state line, and ends at River Mile 54.3, in Stratton, Ohio at the New Cumberland Locks and Dam. Within Columbiana County, there are 16 river terminals that can be used for the shipment of goods along the river. The Columbiana County Port Authority operates the Wellsville Intermodal Park, a 70-acre facility that connects all modes of commercial transit, rail, road and water. The Intermodal Park is designated as part of Foreign Trade Zone #181. Approximately 15 million tons of cargo originates or is destined to be shipped within the New Cumberland Pool.

Intermodal Park – Wellsville, Ohio – Foreign Trade Zone #181 Located at River Mile 49.4, the Intermodal Park is one of the main connecting points to the Gulf ports in the South and the Great Lake ports in the North. The Park is located off State Route 7, a four-lane highway, and is 40 miles North of Interstate 70 and 40 miles South of Interstates 76/80. This allows the facility to be located within a one-day drive of five of the United States' six largest population markets. Also, on site is a 3,500-foot expandable rail siding that connects to the Norfolk Southern mainline. The 70-acre riverside terminal has a 60-ton overhead river crane and bulk cargo handling system with ready access to both rail and highway.

Fifty-seven percent of Ohio's waterborne freight moves by way of the Ohio River, which equates to 76% of waterborne cargo value. This translates to 45.4 million tons of cargo and \$8.7 billion of cargo value via the Ohio River. As shale development continues, use of the Ohio River for shipment of materials and products is expected to increase. Maritime transportation is the lowest cost mode of transport on a per ton basis over longer distances, making it an attractive transportation option for goods and commodities, and key to enabling the economic competitiveness throughout the region and state. With Northeast Ohio and the Cleveland-Pittsburgh corridor being among the top manufacturing regions in the country and the world, the Ohio River System is a critical transportation corridor for these industries.

The largest commodity type moving through the Columbiana County ports and terminals is crude petroleum, accounting for 28.2% of the 2.3 million tons of total cargo in 2018. This percentage could continue to increase as shale development continues throughout the region. Iron and steel cargo follow at 19.4%. A full breakdown of cargo composition is shown in **Figure 3-20**.

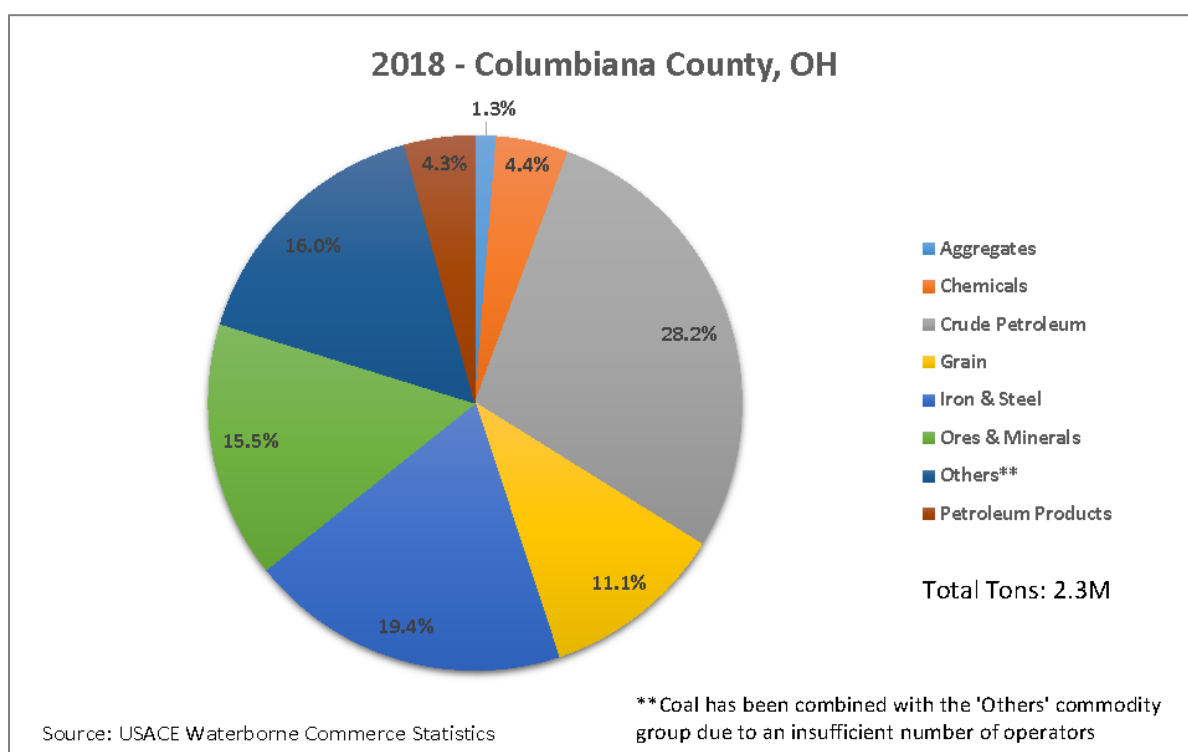


Figure 3–20: Cargo by Type – Columbiana County Ports & Terminals

4.0 Transportation System Development

Transportation of people and freight will remain a vital concern as the OMEGA RTPO's transportation system is continually updated and developed through 2045. The growth of direct-to-door shipping (via online shopping), petrochemical industry, and small manufacturing firms in the region will continue to increase demand for truck traffic throughout the region. The roadway network will bear most of this increased demand, though tonnage on the Ohio River and on the region's railroads may also increase. Due to the challenging topography of the region, the growth of the rail system will likely be slower than other rural areas and will be in more targeted locations, serving mostly large manufacturers and processing plants.

Future development of the transportation system in the OMEGA RTPO will center on gaining efficiencies, improving safety for all users, and increasing resiliency to facilitate community and economic growth. Future expansions of the transportation network should encompass all users, including pedestrians, bicyclists, motorists, and Amish buggies. Major new construction for increased capacity will likely be limited to a few targeted corridors and highway interchanges.

4.1 Demographics

According to projections from the Ohio Development Services Agency's Office of Research, the OMEGA region is forecast to lose approximately 10,000 people or 1.66% of its population by 2040. This trend is indicative of the rural nature of the region, as other rural areas in Ohio are experiencing similar trends in population loss. Large numbers of people are leaving the region for increased job opportunities in larger urban areas, such as Columbus and Pittsburgh. The projections below are based on historical Census data and analysis of historical trends. **Table 4-1** shows the projected gain or loss in population per county in the region.

County	Population 2018 Estimate	Population 2040 Projection	Percent Change
Belmont*	67,505	66,140	-2.02%
Carroll	27,081	23,390	-13.63%
Columbiana	102,665	104,710	1.99%
Coshocton	36,629	33,390	-8.84%
Guernsey	39,022	36,390	-6.74%
Harrison	15,174	15,100	-0.49%
Holmes	43,892	45,280	3.16%
Jefferson*	65,767	67,410	2.5%
Muskingum	86,183	81,900	-4.97%
Tuscarawas	92,176	92,840	0.72%
OMEGA Region	576,094	566,550	-1.66%

Table 4-1: 2040 Population Projections (source: Ohio Development Services Agency)

Local officials have questioned these current projections, as significant economic growth occurred during the 2010 decade, especially on the eastern side of the region. The current projections may change with the completion of the 2020 Census, and the OMEGA RTPO is preparing for additional growth in the region, owing to the ongoing expansion of the petrochemical and logistics industries. If growth does occur in the region, it is likely to be at a slower rate than urbanized areas in the state. Preservation of existing assets will remain a key driver of the maintenance of the transportation system.

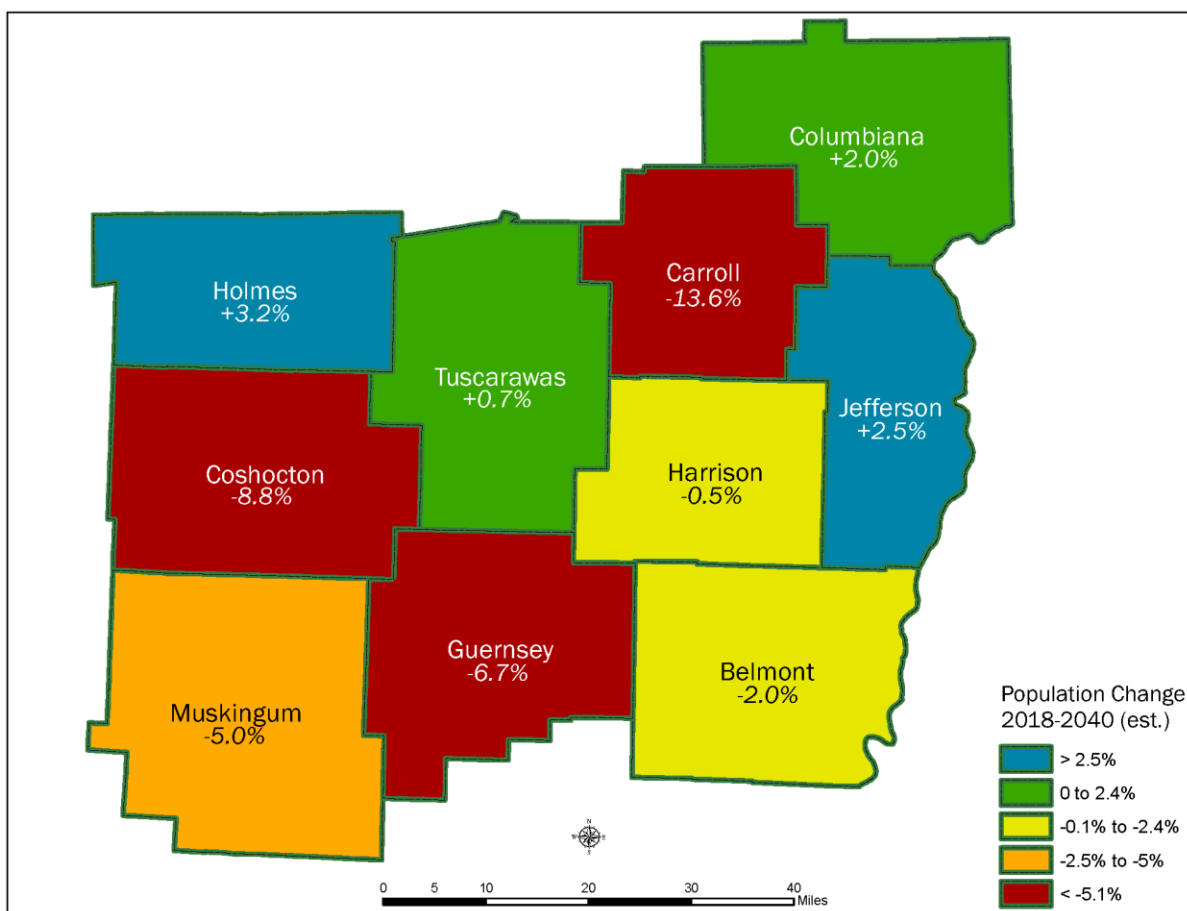


Figure 4-1: Population Change 2018-2040 (source: Ohio Development Services Agency)

Four counties are projected to gain population (Columbiana, Holmes, Jefferson, and Tuscarawas), one county is projected to stay nearly steady (Harrison), and five counties are projected to lose population (Belmont, Carroll, Coshocton, Guernsey, and Muskingum). In real numbers, the loss is small (in context of the regional and statewide population), and the level of demand on the transportation network will likely remain level or could even increase. Regardless of a population loss or gain, infrastructure will need to be maintained to ensure a safe, continuous network is available in the region.

4.2 Roadway Network

As shown in **Figure 4-2**, each county in the OMEGA RTPPO will see car growth rates on many portions of major roadways of at least 1.5% by the year 2045. Holmes County will see the greatest increase along the southern portion of SR 514 at 6.74% growth southwest of Nashville. Coshocton County will see the next largest increase in car volumes along the northern portion of SR 643 at 3.43% growth southwest of New Bedford. Additional motorized vehicles in both locations may increase the number of potential conflicts with non-motorized users, such as bicyclist and Amish buggies that are common in the nearby areas.

The growth projections were run primarily on the state-maintained system, except in areas with robust traffic datasets, such as municipalities, other federal-aid eligible routes, and important county roads (with data provided by county engineers). Growth on these higher-classified routes also indicate growth on the local feeder routes. In many areas, increased traffic is correlated with forecast population or employment growth near the affected area.

Most of the forecasted growth over the next twenty-five years is located primarily in rural areas, with a few exceptions. Areas near Calcutta (East Liverpool), Cadiz, Strasburg, and Newcomerstown will also see increased traffic. Increased traffic on rural highways will present a challenge, as many of the impacted routes are currently only two lanes, and some of the routes do not have accommodations for non-motorized users that use the routes currently. Additionally, many of the routes face challenging topography and curves, further complicating the synthesis of all users.

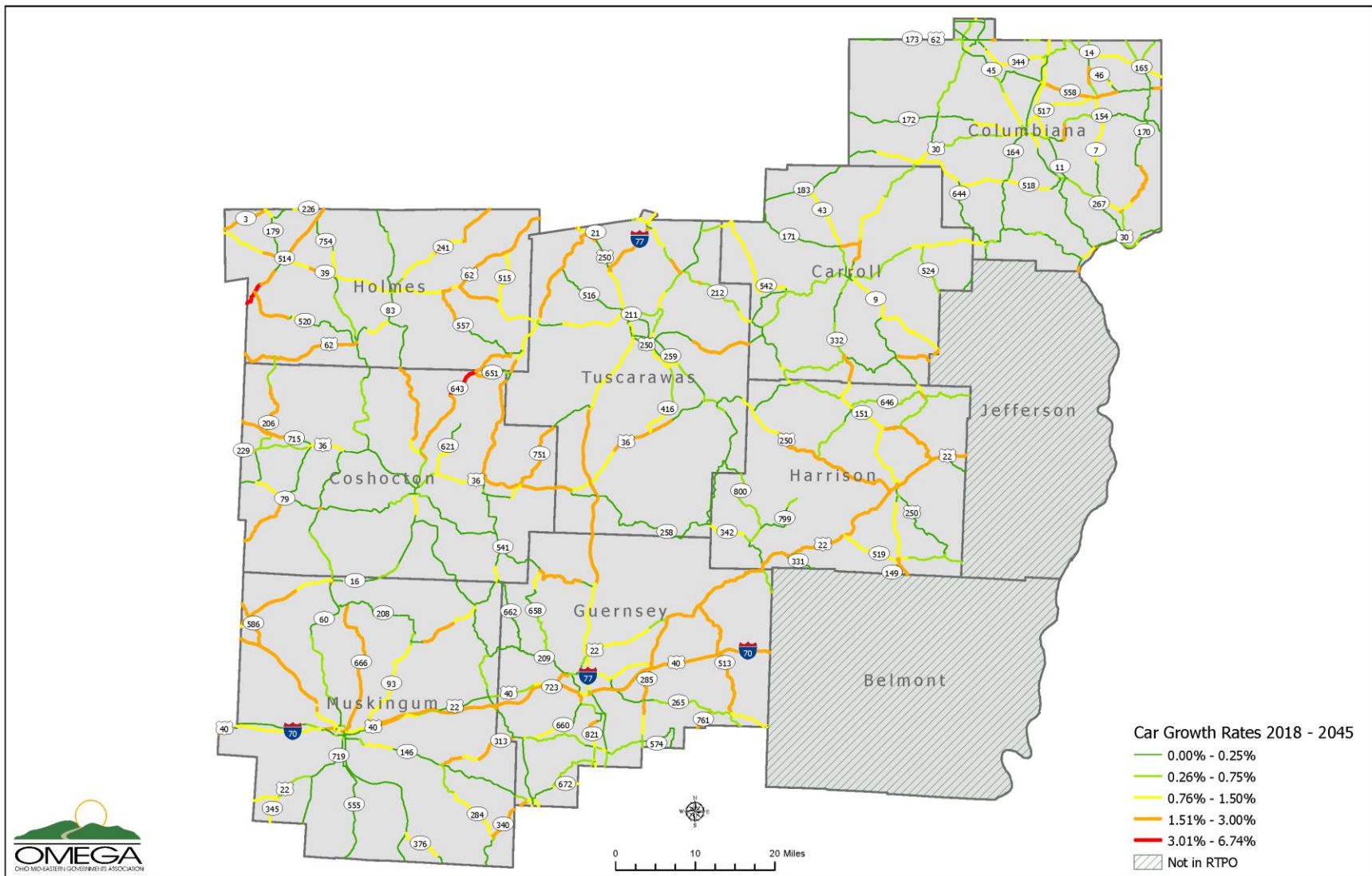


Figure 4-2: Car Growth Rates – 2045 Projection

As shown in **Figure 4-3**, total traffic volumes of both cars and trucks are predicted to increase by at least 10,000 vehicles on average per day along major roadways in all eight OMEGA RTPO counties. I-70 from Zanesville to Cambridge will see a sizable increase in traffic volumes, with the highest projected traffic volumes in the region being on I-70 on the west side of Zanesville at nearly 73,000 vehicles per day. This substantial increase in traffic volumes may be attributed to the current and continued anticipated growth of the Columbus metropolitan area. According to 2018 Census Bureau estimates, the area has seen an increase in population of 10.8% since 2010, with a total of 2,106,541 total residents. By 2050, an additional 1 million people are expected to reside in the Columbus metro area. This continued growth in population and business centers over the next 25 years will result in significant increases in traffic volumes to and from Columbus along the I-70 corridor.

The logistics industry has impacted growth in the region and will likely continue with the exponential growth of direct shipping to consumers, and further expansion of the petrochemical industry. In the western part of the RTPO, companies such as Avon, Dollar General, and AutoZone have distribution centers. Further west, in Licking County, Amazon built a large fulfillment center, serving many communities in the RTPO. In the north and eastern part of the RTPO, the focus of logistics changes from distribution centers to support facilities for the petrochemical industry.

I-77/US 250 between Strasburg and New Philadelphia will also see a significant increase in traffic volumes, with totals between 50,000 and 58,000 vehicles per day. I-70 and most of I-77 will see increases in average daily traffic volumes, with total volumes ranging between 25,000 to over 73,000 vehicles per day, which may create congestion and safety issues as additional traffic is added to the existing roadways.

Other regional corridors with higher traffic volumes include SR 11 north of East Liverpool, US 22 in eastern Harrison County, and SR 39 in eastern Holmes County. SR 11 and US 22 link to the higher populated urban centers of Youngstown and Steubenville/Weirton, respectively. Distinctly, SR 39 does not link directly to a higher populated urban center, and instead is currently a two-lane rural highway and runs through the heart of Amish Country. This introduces high numbers of non-motorized users onto this same highway as high volumes of tourists, many that may be unfamiliar with the area.

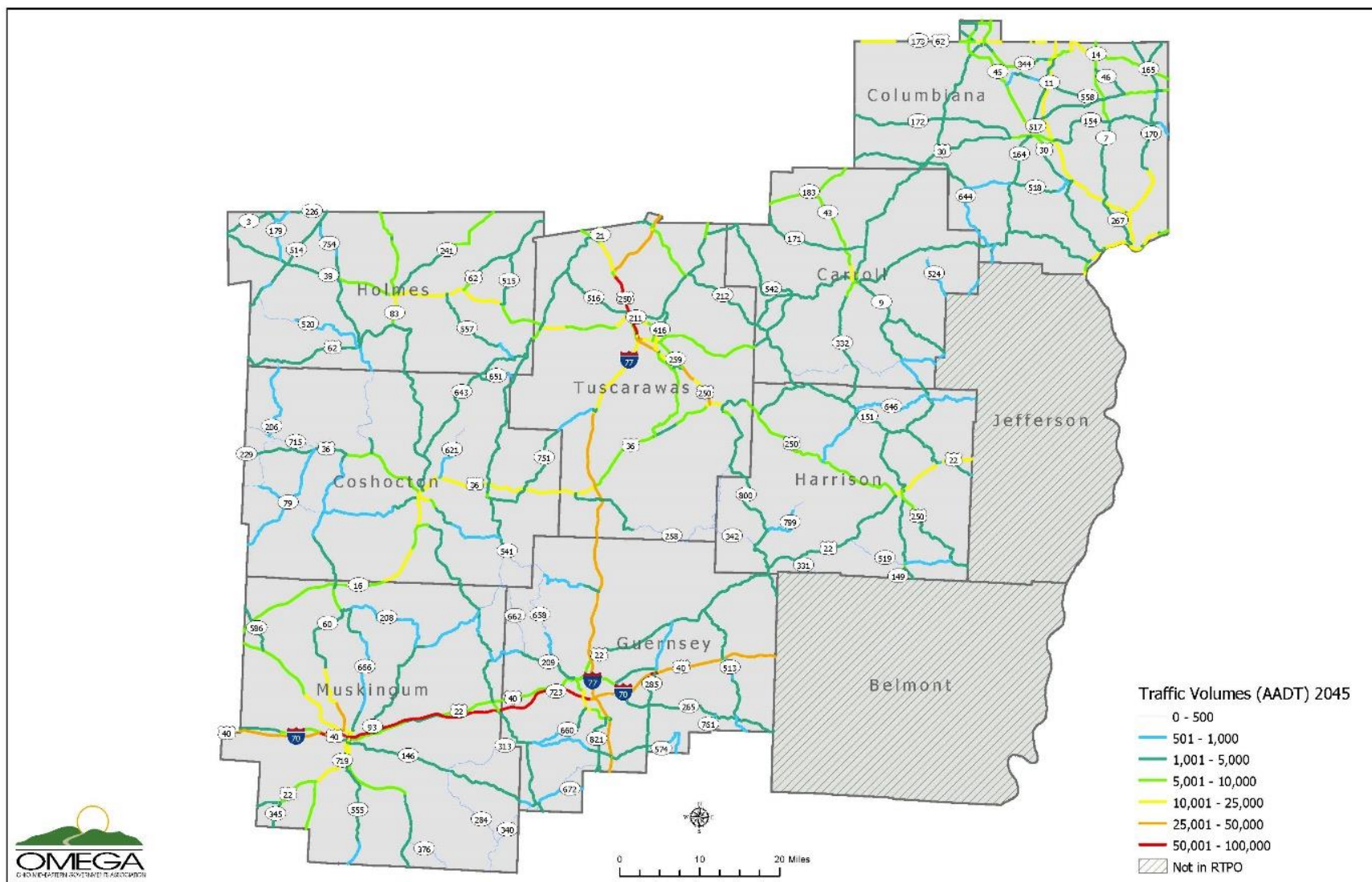


Figure 4-3: Traffic Volumes – 2045 Projection

As shown in **Figure 4-4**, many major roadways are expected to see an increase in truck growth rates between 3% to 4% by 2045. This is a region-wide phenomenon occurring in all eight RTPPO counties. Although truck growth rates are anticipated to increase in eastern counties of the OMEGA region due to oil and gas development, the regional growth suggests that this is not only due to oil and gas development. Rather, local deliveries throughout the region are also projected to increase, which may explain the high projected growth rates in truck traffic over the next 25 years.

Growing truck traffic engenders additional challenges, over and above additional traffic. The overall weight of trucks is greater than the average passenger vehicle, putting additional strain on aging infrastructure. Trucks are also hampered by low clearances on older overpasses, forcing them to make costly detours, increasing their mileage, emissions, and costs for maintenance. Furthermore, growth of truck traffic in areas that have not historically experienced high volumes of trucks may create new safety concerns.

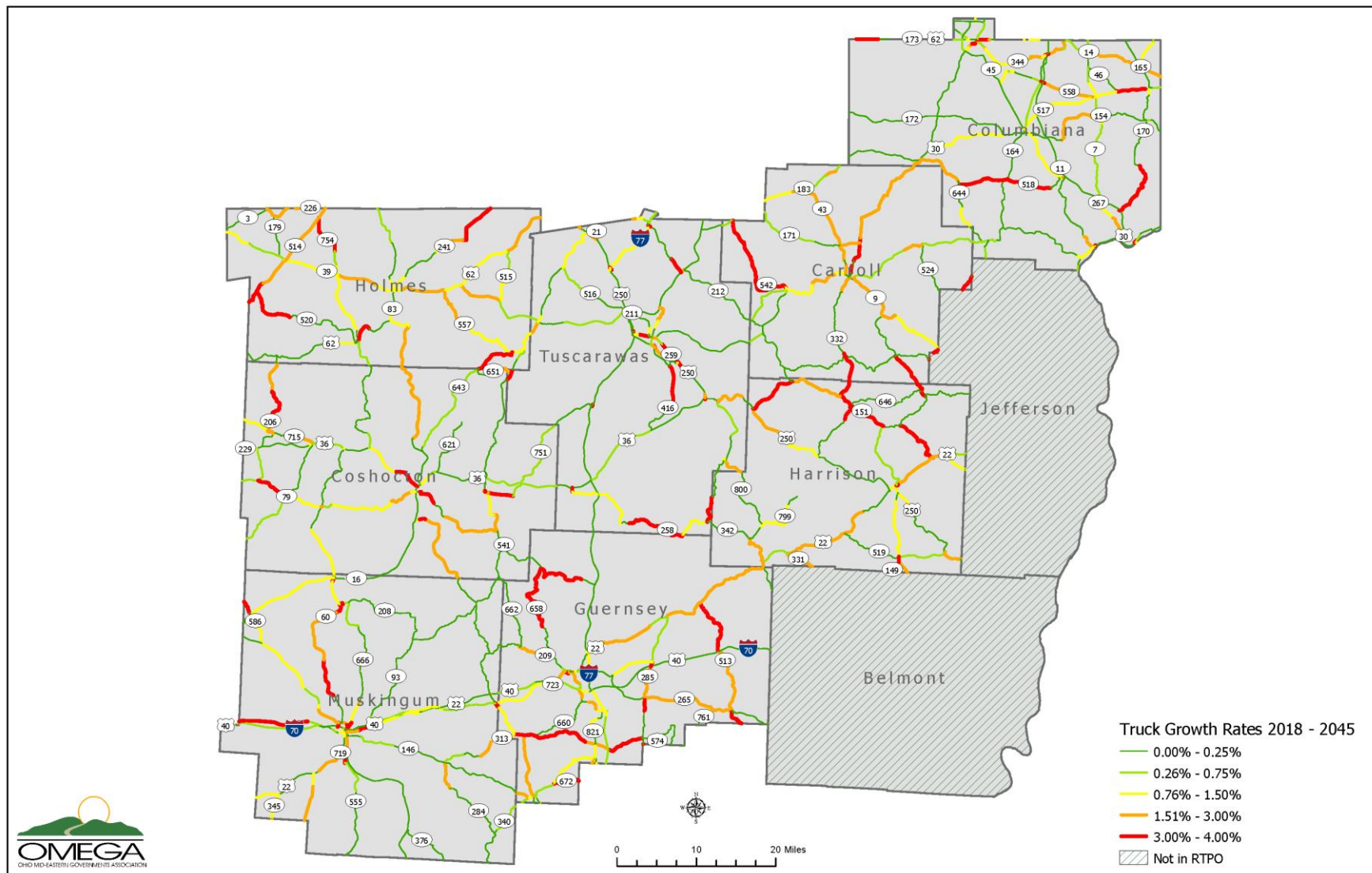


Figure 4-4: Truck Growth Rates – 2045 Projection

As shown in **Figure 4-5**, the projected change in truck volumes by 2045 is expected to increase by 7.5% to 15% or greater along portions of major roads in each of the eight RTPPO counties. A portion of US 250 near the intersection with I-77 is predicted to see the largest increase in truck volumes at 17.9%. Portions of US 62 near Alliance and SR 46 near East Palestine in Columbiana County, US 62 near Killbuck in Holmes County, and SR 93 near Baltic in Tuscarawas County are also anticipated to see major increases in truck volumes of 15.8%, 15.1%, 15.5%, and 15.2%, respectively. Conversely, sections of roadways in each of the RTPPO counties are also expected to see a decrease in truck volumes. SR 7 northeast of Wellsville in Columbiana County is projected to see the most significant decrease of 9.1% by 2045.

It should be noted that these truck figures may be not be entirely accurate due to the current and anticipated continued shale oil and gas development throughout the region. Because of this development, the region will likely see an even greater number of heavy trucks along major and local roads over the next 25 years, which is not reflected in ODOT's Congestion Management System (CMS) models.

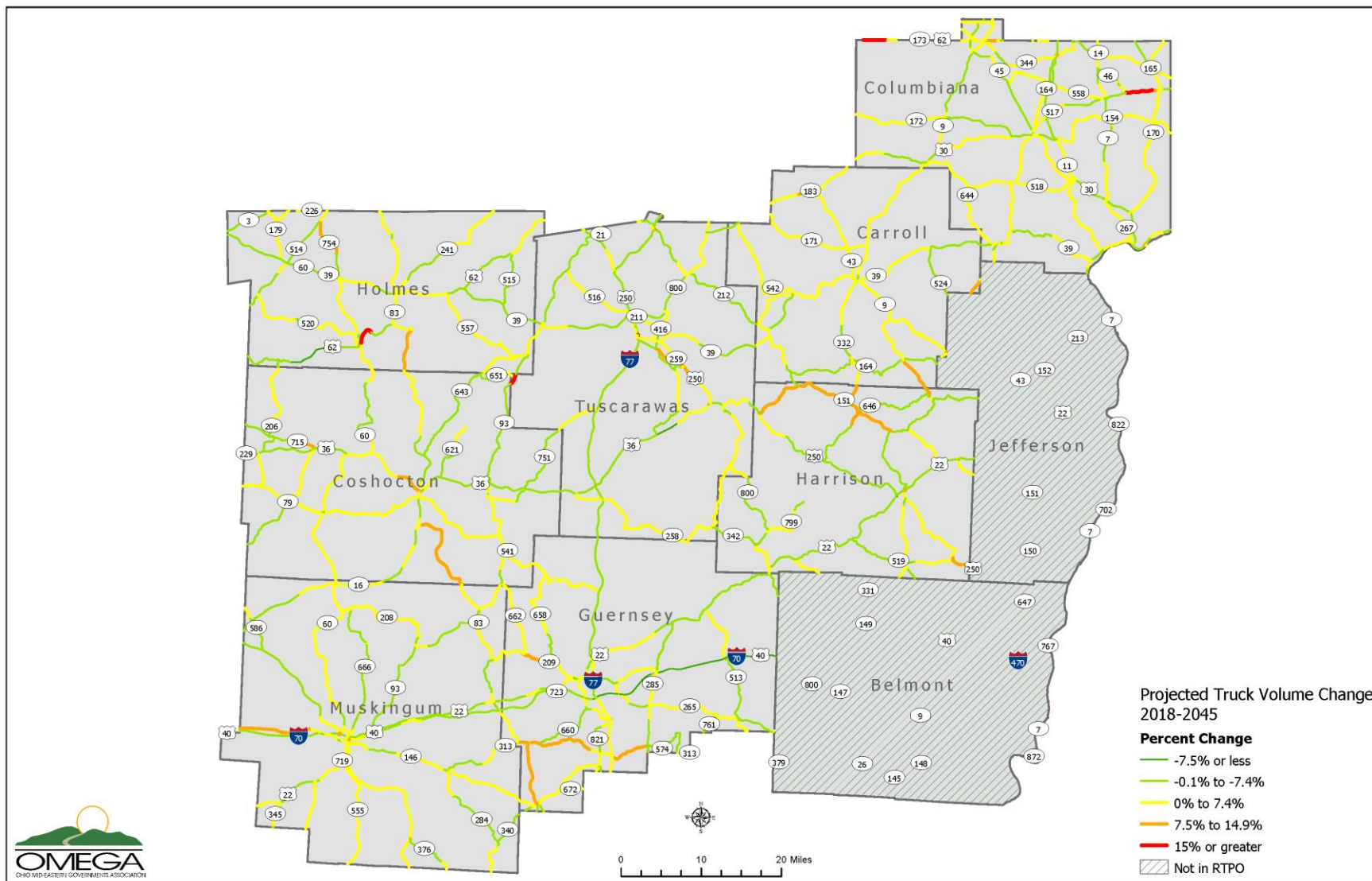


Figure 4-5: Change in Truck Volumes – 2045 Projection

As shown in **Figure 4-6**, the following major routes in the OMEGA RTPD are projected to have a Volume to Capacity (V/C) ratio indicating near or exceeding capacity by 2045:

- **V/C = 0.8-0.99:**
 - SR 60 (Maple Ave), north of I-70
 - I-70 between Zanesville and Cambridge
 - I-70 between Cambridge and Old Washington
 - SR 209 (Southgate Parkway) near I-70 interchange in Cambridge
 - US 250 from Strasburg to SR 39 interchange in Dover
 - SR 416 from SR 39/800 to near US 250 in New Philadelphia
 - SR 800 between Dover and New Philadelphia
 - SR 14 on the east side of Salem
- **V/C = ≥1.0**
 - SR 60 (Maple Ave) in Zanesville, north of I-70
 - I-70 between Zanesville and Norwich
 - I-70 between New Concord and Cambridge
 - SR 209 (Southgate Parkway) near I-70 interchange in Cambridge
 - SR 39 at I-77 in Dover
 - US 250 from SR 39 in Dover to SR 39 in New Philadelphia
 - SR 39 from US 250 to near SR 800 in New Philadelphia
 - SR 416 south of US 250 in New Philadelphia
 - US 62 east of Alliance

Many of these routes which are predicted to be at or nearing capacity by 2045 also have a predicted Level of Service of D or worse.

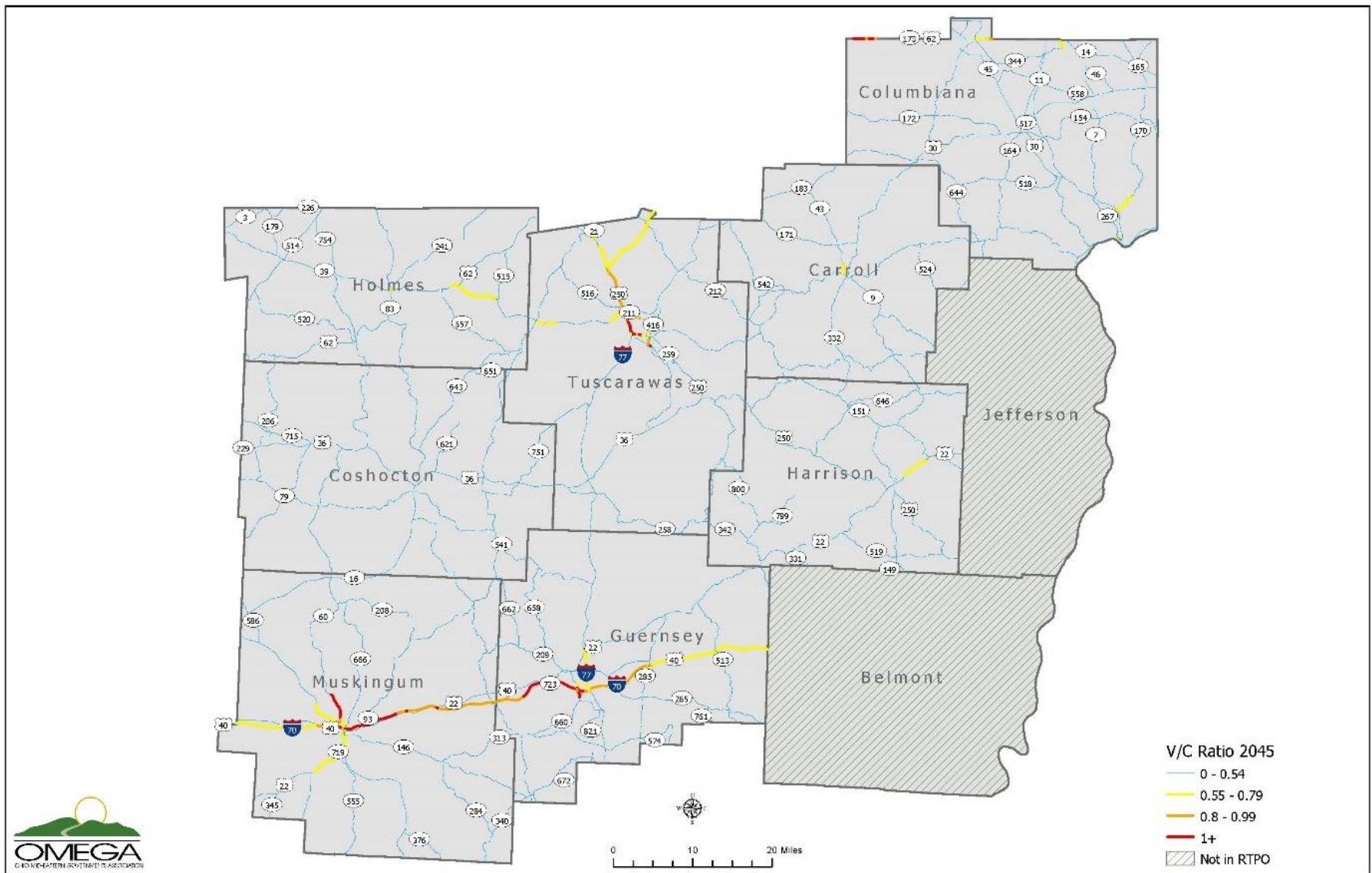


Figure 4-6: Volume to Capacity Ratio – 2045 Projection

As shown in **Figure 4-7**, several major routes within the RTPO are projected to have a Level of Service (LOS) of D or worse by the year 2045.

The following routes have a projected **LOS of D**:

- **Carroll County**
 - SR 43 from county line to Malvern
 - SR 183 from SR 43 to Minerva
 - SR 183 in Minerva
 - SR 43 from SR 183 to Carrollton
- **Columbiana County**
 - US 62 between Alliance and Salem
 - US 62 in north Salem at the Mahoning County line
 - SR 14 north of Washingtonville at the Mahoning County line
 - SR 14 in the City of Columbiana to SR 7
 - SR 7 from Mahoning County line to SR 46
 - SR 46 from SR 558 to East Palestine near SR 170
 - SR 14 from near SR 165 to Pennsylvania-Ohio border
 - SR 154 in east Lisbon
 - SR 170 north of East Liverpool
- **Coshocton County**
 - US 36 between Coshocton and Warsaw
 - SR 16 from Coshocton to Muskingum County line
- **Guernsey County**
 - I-70 from Old Washington to Belmont County line
 - I-77 from US 40 to I-70
 - US 40 from I-77 to SR 265
 - US 22 just east of I-77
 - SR 209 (Southgate Parkway) just south of I-70
- **Harrison County**
 - US 250 from SR 151 to US 22 in Cadiz
 - US 250 in Cadiz from US 22 to SR 9
 - SR 9 in New Athens from SR 519 to SR 149
- **Holmes County**
 - SR 39 from SR 754 to Millersburg
 - SR 83 from northern boundary of the Village of Millersburg to US 62/SR 39
 - US 62/SR 83 south of Millersburg
 - US 62/SR 39 from Millersburg to Berlin
 - SR 39 from SR 515 to Tuscarawas County line
- **Muskingum County**
 - SR 16 from Coshocton County line to SR 60
 - SR 146 from Licking County line to Zanesville
 - SR 60 between Dresden and Zanesville
 - SR 60 (Maple Ave), north of I-70
 - SR 666 in Zanesville, north of I-70
 - SR 93 from Perry County line to US 22
 - SR 60 north of Philo
 - US 40/22 from north of I-70 to Norwich
- **Tuscarawas County**
 - SR 39 from Holmes County line to Sugar Creek
 - SR 39 between Sugar Creek and Dover
 - US 250 between Stark County line and Strasburg
 - I-77 from Stark County line through Bolivar
 - SR 212/800 southwest of Mineral City
 - SR 39 in New Philadelphia between I-77 and SR 800
 - SR 800 north of US 250 in New Philadelphia
 - SR 39 between New Philadelphia and Roswell
 - SR 259 from southeastern New Philadelphia to US 250

The following routes have a projected **LOS of E**:

- **Carroll County** SR 43 in Malvern
SR 43 in north Carrollton
- **Columbiana County** Northwest portion of SR 164 traffic circle in the City of Columbiana
US 62 between Alliance and Salem
- **Coshocton County** SR 16 just southwest of Coshocton at intersection with SR 83
- **Guernsey County** I-70 between Muskingum County line and Cambridge
I-70 between Cambridge and Old Washington
SR 209 (Southgate Parkway) in south Cambridge at the I-70 interchange
- **Harrison County** US 250 from Tuscarawas County line to SR 151
US 22 between Cadiz and SR 151
- **Holmes County** US 62/SR 39 just east of SR 557
SR 39 from US 62 to SR 515
- **Muskingum County** SR 146 west of Zanesville
I-70 from SR 60 to just west of Zanesville
SR 60 at southern boundary of Zanesville
I-70 east of Zanesville to Guernsey County line
- **Tuscarawas County** US 250 from SR 93 to Strasburg
US 250 from Strasburg to New Philadelphia
SR 39 in Sugar Creek
SR 39 between Sugar Creek and Dover
SR 800 north of US 250 in New Philadelphia
US 250 east of Dennison to Harrison County line

The following routes have a projected **LOS of F**:

- **Columbiana County** Northeast, southeast, and southwest portions of SR 164 traffic circle in City of Columbiana
- **Guernsey County** I-70 between Muskingum County line and Cambridge
- **Muskingum County** I-70 from SR 93 to central Zanesville
I-70 between Zanesville and Norwich
- **Tuscarawas County** US 250 from SR 39 in south Dover to I-77/US 250/SR 39 interchange in New Philadelphia
SR 416 south of US 250 in New Philadelphia

The following routes have a projected **LOS of F+**:

- **Columbiana County** US 62 between Alliance and Salem
- **Guernsey County** I-70 through Cambridge
- **Muskingum County** I-70 in central Zanesville
I-70 between Zanesville and Norwich

The projected increase in traffic volumes, high volume to capacity ratio, and poor level of service rating on many of the RTPO's major roadways by 2045, along with continued oil and gas development, may result in further strain and deterioration of critical roadway infrastructure. This will result in a heightened need for resources to improve these roadways throughout the region over the next 25 years.

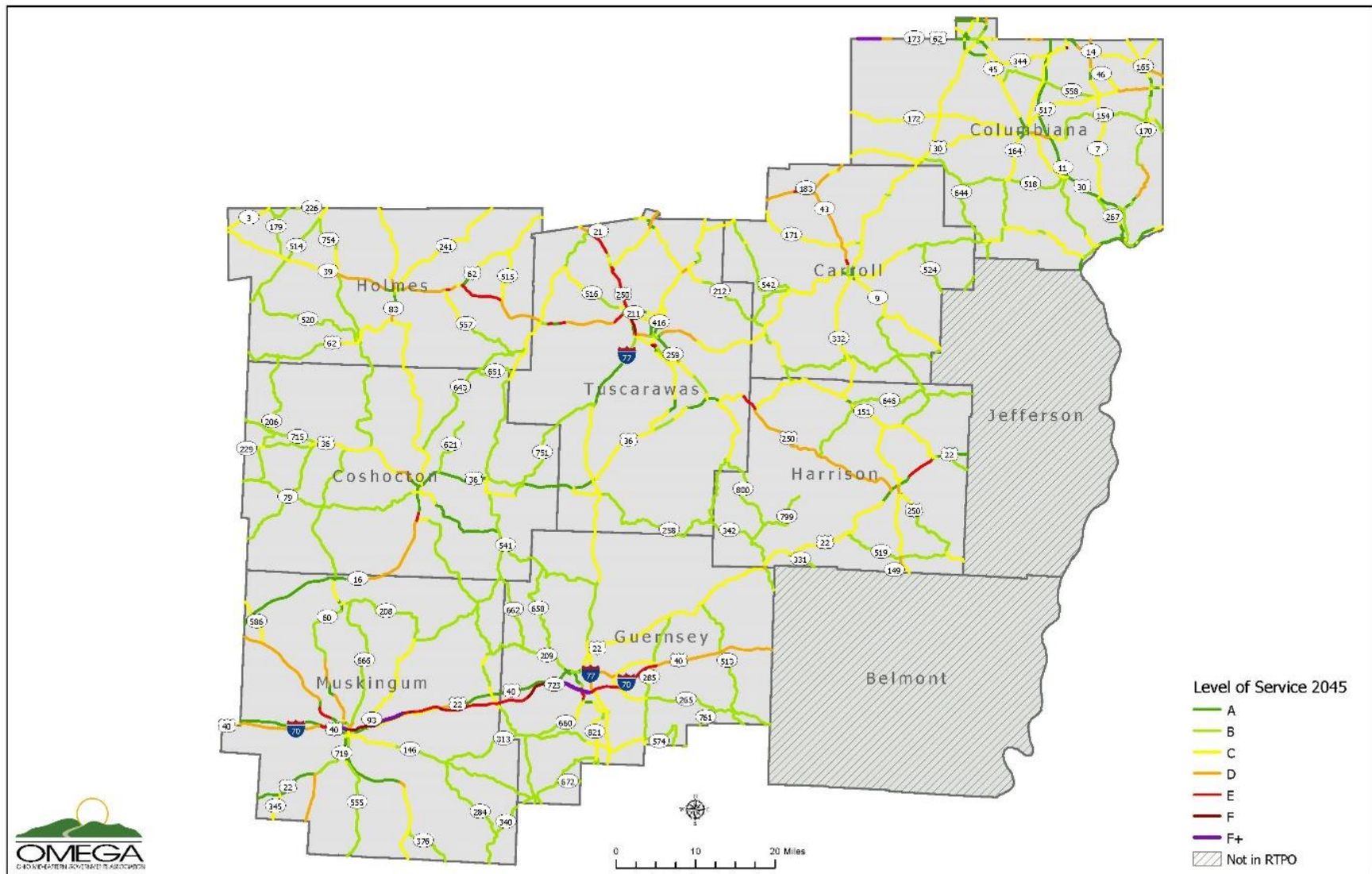


Figure 4-7: Level of Service – 2045 Projection

4.3 Bridges

By 2045, there will be 2,394 bridges in the OMEGA region aged 70 years or older, 1,913 of these in the RTPD region and 1,143 of these bridges are on the local system. This equates to 33.4% of all bridges within the RTPD. These bridges will be at the end of their useful and intended lifespan and may require significant upkeep to prevent deterioration. These bridges will need to be monitored closely over the next 25 years. OMEGA will continue to review bridge data and update local databases as bridges are rehabilitated. For current bridges over 40 years of age, please see **Figure 4-8**.

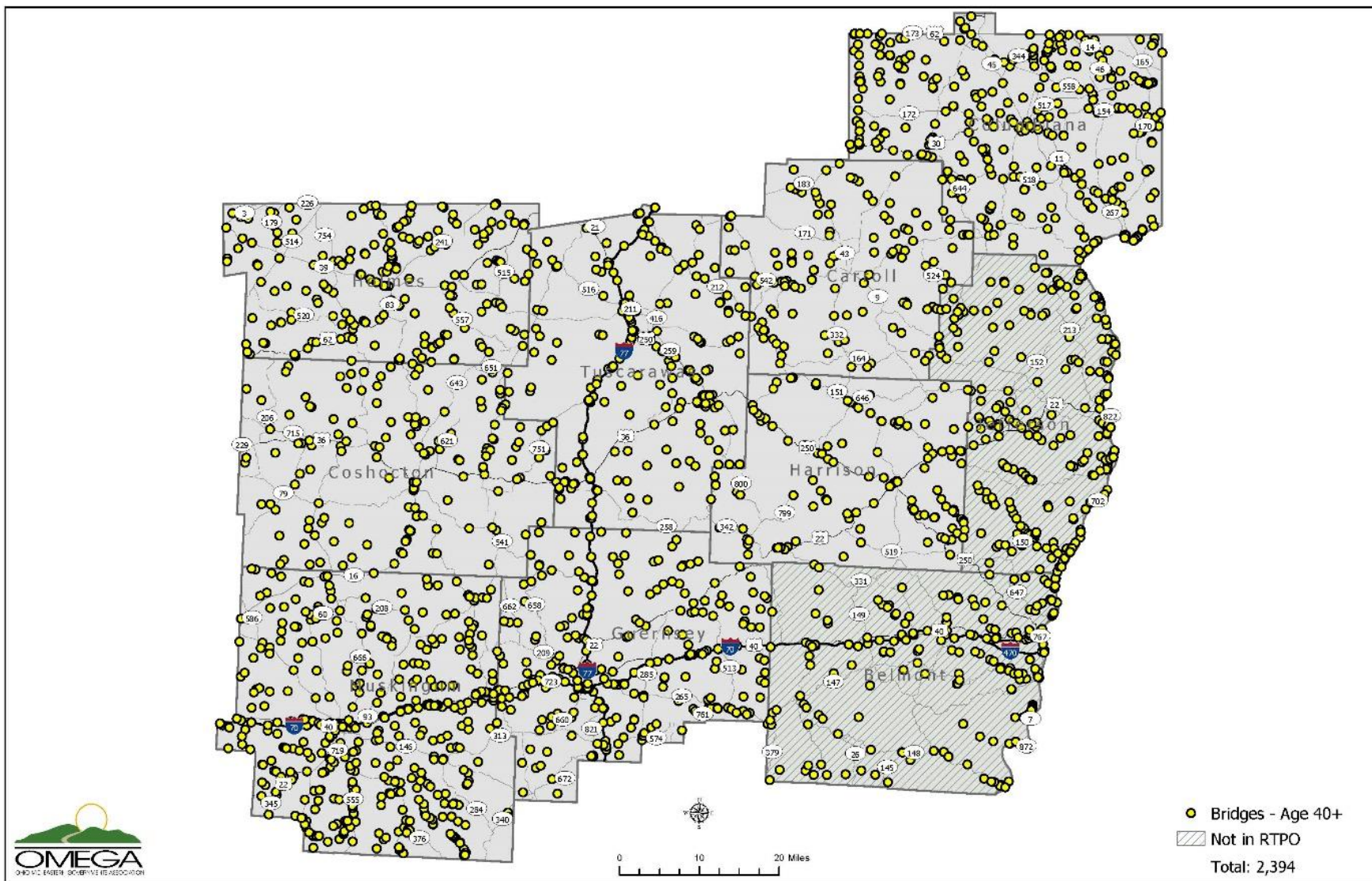


Figure 4-8: Bridges Age 40+ (70+ by 2045)

4.4 Transit Network

In 2019, OMEGA completed the first Regional Coordinated Public Transit/Human Services Transportation Plan for the region. The primary focus of this plan to address unmet transportation needs, develop goals and strategies to meet those needs, and identify projects that will improve transportation services throughout the region. This plan will also streamline the grant funding eligibility and processes. More importantly, the plan will help the region meet the overarching goal of the program to “Transport more people, especially seniors and people with disabilities, with quality service in efficient time at the lowest costs to the public and the providers.” Basically, everyone who needs a ride can get a ride.

The region has an aging population, and demand for transportation services is likely to increase to connect senior citizens and people with disabilities to the medical and additional services they will need. In conjunction with public and private transportation service providers, OMEGA’s Transit Planner compiled the current status of the regional transit network, as well as unmet needs and gaps in service that need to be addressed in the future to improve and enhance mobility throughout the region. These unmet needs are addressed in Section 5 – Needs Analysis.

To access the full Regional Coordinated Human Services Transportation Plan, please visit the OMEGA website: <https://omegadistrict.org/programs/transit/regional/>.

4.5 Active Transportation Network

Tuscarawas County and Harrison County have each developed county-wide trail plans. The plans’ goals are similar in that they both aim to create a robust multimodal network to provide access to cultural, natural, and recreational resources and support community and economic development throughout the counties. Having these trail plans gives these counties a leg up when applying for funds related to active transportation moving forward, as they are demonstrating that they are forward-thinking and have an investment in the future of their communities.

Holmes County, in partnership with Ashland and Wayne Counties, are in the initial planning stages of the Mohican Valley Greenway Corridor Plan. Once completed, the plan aims to provide approximately 16.5 miles of new multimodal trail and parking facilities/access points along the section of the Mohican Scenic River Valley from the Loudonville Trail south to the Mohican Valley Trail along the Wally Road corridor.

Carroll, Columbiana, Harrison, and Tuscarawas Counties are also part of two larger trail network visions extending from eastern Ohio to Pittsburgh, and beyond.

- The Cleveland to Pittsburgh (C2P) Corridor is an envisioned 200+ miles multiuse trail corridor traveling from Cleveland, Ohio to Pittsburgh, Pennsylvania. 146 miles of this corridor will help complete the burgeoning 3,700-plus miles Great American Rail-Trail, spanning across the country from Washington, D.C. to Washington State. Carroll, Harrison, and Tuscarawas Counties have a total of approximately 30 to 50 proposed miles of trail segments contributing to the C2P Corridor.

- The Great Ohio Lake to River Greenway (GOLRG) is part of an envisioned mega-trail system beginning at Lake Erie in Ashtabula, Ohio and ultimately connecting to the Washington, D.C. trail system. Columbiana County has a proposed GOLRG greenway segment identified from Lisbon to East Liverpool at the Ohio-Pennsylvania state line, which will be the start of the proposed Ohio River Greenway Trail that will connect the great lakes region to the east coast.

As part of the region and state's ongoing development and implementation of new and existing trail plans, OMEGA is developing a Tri-County Active Transportation Plan with Coshocton, Holmes, and Tuscarawas Counties. These three counties have a large Amish population who already travel on foot, by bicycle, or by buggy as their primary mode of transportation to work, school, and throughout the community each day. According to the Young Center for Anabaptist and Pietist Studies at Elizabethtown College, the Holmes County area has the second largest Amish community in the world with over 35,000 Amish residents estimated living within the county in 2018¹⁰. The goal of the Tri-County Active Transportation Plan is to create a connected network of multimodal facilities for people of all ages and abilities. This includes the construction of ADA compliant sidewalks, bicycle lanes, buggy lanes, and trails to promote and encourage healthy alternatives to driving, provide safe and reliable access using all modes of transportation, and boost community and economic development. As part of this effort, OMEGA will organize a group of key stakeholders to identify needs, gather input, discuss opportunities, and identify potential funding sources for underlined projects. Using GIS and input from the communities, OMEGA will gather data on existing active transportation infrastructure, planned future projects, crash locations, and begin identifying possible connections. See **Section 3.3, Figure 3-15** for locations of currently known bicycle routes and facilities in the region.

Figure 4-9 shows the approximate locations of proposed active transportation routes envisioned for the future throughout the OMEGA region, along with current facilities. These proposed routes include, but are not limited to, designated bike lanes, trails, wide shoulders, buggy lanes, and active and abandoned railroads.

¹⁰ <http://groups.etown.edu/amishstudies/statistics/twelve-largest-settlements-2018/>

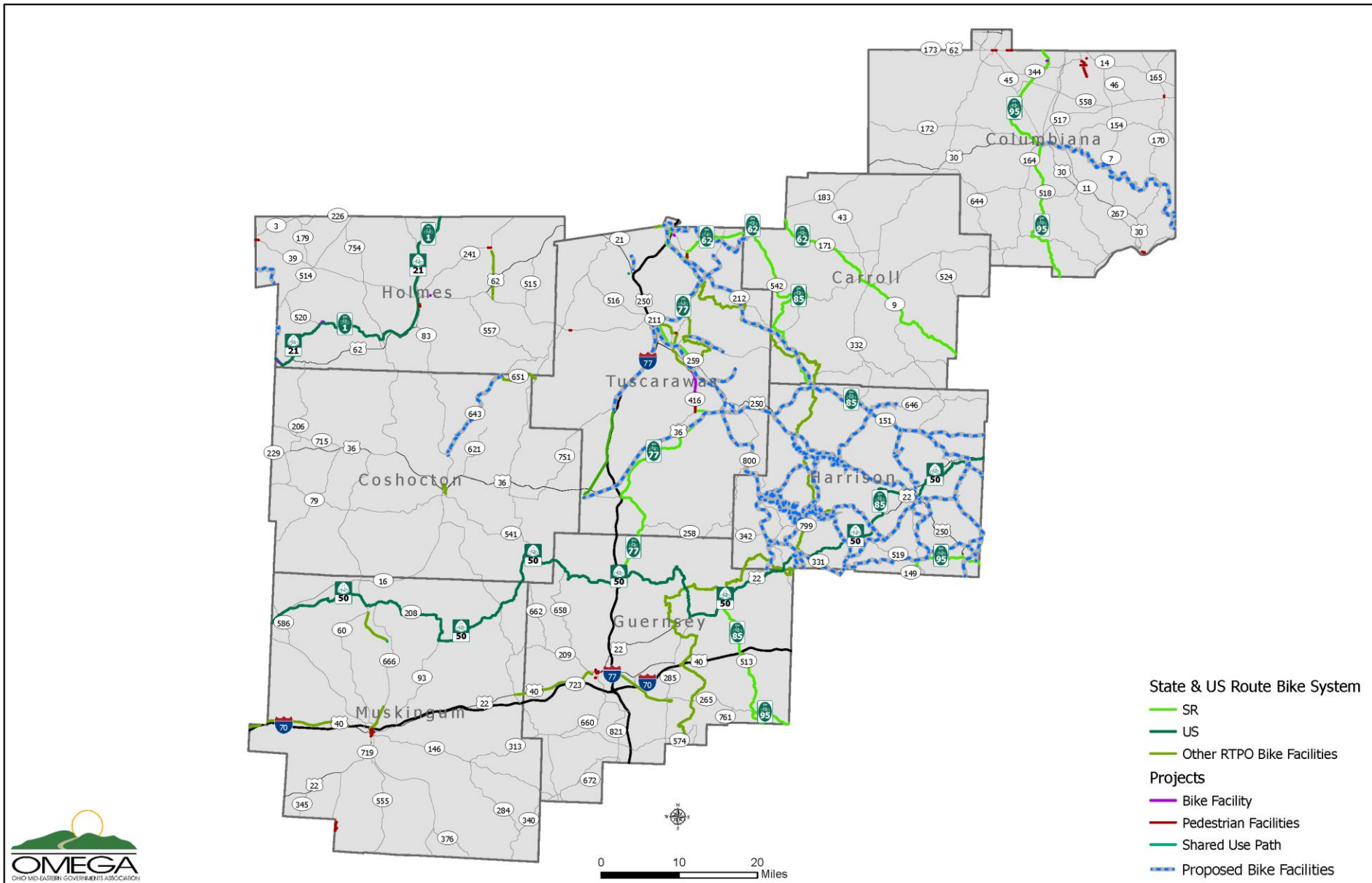


Figure 4-9: Current & Proposed Active Transportation Network
Regional Transportation & Development Plan

4.6 Aviation, Rail, & Maritime Networks

Aviation

In 2014, ODOT completed a Focus and Economic Study on all public airports within the state. This study resulted in recommendations for each airport to enhance local aviation access, increase safety, and bring all airports into compliance with Ohio System Plan objectives. Each of the recommendations of the plan are specific to the general aviation category (1-3) of the airport. These recommendations provided the planning basis to pursue Federal Aviation Administration grant funds.

Typical recommendations of the study include, but are not limited to:

- Completion of parallel taxiways
- Visual Approach Aids
- Administrative or Terminal Building
- Automated Weather Reporting
- Instrument Approach Procedures
- Runway lighting

All recommendations from the 2014 study will be in **Appendix D**.

Rail

The Ohio Rail Development Commission released the updated State of Ohio Rail Plan in 2019. Contained in this updated plan were three statewide planning considerations that may impact the OMEGA RTPD within the horizon year of this plan, 2045:

- 3-C Corridor Study
 - A study for the reintroduction of passenger rail service linking the three largest cities in the state. While this corridor would likely be located west of the RTPD, access to proposed stations may impact communities in the northwestern corner. Currently, this corridor remains in a planning phase.
- Ohio Hub Study
 - A study to determine the feasibility of reintroducing or enhancing passenger rail throughout the Midwest, focused on Chicago as the primary hub, and Ohio connecting the Midwest to the Northeast and Mid-Atlantic. The 3-C Corridor is considered, as well as improved service between Cleveland and Pittsburgh (currently served by Amtrak once daily) and new service between Columbus and Pittsburgh.
- Hyperloop
 - A study to determine the feasibility of building a new type of transportation, like rail, though not technically a train. This new method of transport would be in a pneumatic tube and propel a vessel along a corridor at speeds exceeding 600 mph. The corridor linking Chicago to Pittsburgh, via Columbus, was a finalist in a global competition. The corridor would likely cross the RTPD along an unspecified alignment.

Other potential rail considerations should also be considered for the OMEGA RTPD. A changing regional/national economy is impacting the role of rail. These new challenges, that will unfold over the next two and a half decades, will realign partnerships and form new alliances to expand, enhance, or revitalize rail service throughout the OMEGA RTPD:

- **Petrochemical Industry Expansion**
 - A newly developing petrochemical industry in eastern Ohio is a natural outgrowth of the expanding oil and natural gas extraction activities that have taken place in the region. Current refining capacity is largely on the US Gulf Coast, and processing plants to convert crude oil to usable polymers for the plastics industry are now being built/proposed near the Ohio River. Shipment by rail from nearby processing plants to plastics manufacturers would reduce costs and enhance the region's attractiveness for new companies to locate in or near the region.
- **Mineral Shipments Drop**
 - Nationwide, the number of tons of coal shipped via rail (or any other method) has continued to drop, due to the changing energy portfolios of domestic and international power suppliers. The OMEGA RTPO, formerly a large coal production region, has witnessed this decline of the past half century, with a steep decline in the late 2000's continuing through 2020. This trend is expected to continue.
- **Lack of Rail Served Industrial Sites**
 - Due to the large number of miles of abandoned rail mileage in the OMEGA RTPO, coupled with the development of new industrial sites has led to a shortage of developable, rail-served sites. Additional capacity will need to be built to connect new sites to the existing rail network.
- **Lack of Interchanges**
 - Topography and the deregulated rail sector combined to reduce the number of interchange points for rail traffic into and out of the OMEGA RTPO. Additional miles must be traveled to move freight from origin to destination, and this may necessitate the move from rail to truck for shippers to experience and time and/or cost savings. Additional capacity may be needed to improve connectivity of existing lines to facilitate the smoother transition of goods from one railroad to another.
- **Abandoned Corridors**
 - The high number of abandoned lines (over half of OMEGA RTPO rail mileage) poses a challenge for new development to occur. Extensive research must be done by prospective builders to ensure the status of land ownership along formerly abandoned corridors. The cost of installing new rail lines is also expensive and will require extensive financial commitment, likely from the private and public sectors.
- **Positive Train Control**
 - Positive Train Control is an advanced system of control, used by railroads to reduce the number of accidents involving rolling stock. Locomotives are fitted with a control unit that is constantly monitored by the dispatching railroad. If a switch is misaligned, a vehicle is stuck at a grade crossing, or another train derails, then all other rail traffic can be stopped or diverted. Challenges to the implementation are high costs, antiquated technology in existing locomotives, and the lack of a national standard software. As these challenges are addressed at the national and corporate levels, increased implementation may begin impacting regional and short line railroads.
- **Grade Crossing Issues**
 - Crashes at grade crossings have been reduced over the preceding thirty years but remain an issue.
- **Non-compatible Rail Assets**
 - Railroads were first developed in the 1800s and reached their zenith in the mid-1900s. Legacy infrastructure, such as bridges, remain in place nearly 80 years after

their construction. With advances in motor vehicle design and updates to engineering criteria, many of these structures are no longer compliant with existing standards and pose a challenge to the future development of areas throughout the RTPO.

- Public Acquisition
 - A consortium of Tuscarawas County partners is seeking to acquire a CSX-owned, RJ Corman-operated rail line from Uhrichsville to Dover, Ohio. This public acquisition would enable the municipalities along the line to create a robust economic development strategy for the corridor. This strategy may include passenger/tourist railroad operations, continued freight operations, and additional location of new and expanding businesses to a rail line that interchanges with larger regional and Class 1 railroads to the north.

Maritime

With three major rivers in the OMEGA RTPO region, both commercial and recreational maritime uses are projected to increase.

Commercial

Continued development of the Ohio River inland waterway system is critical to the economic success of the OMEGA region. The Ohio River is critically important to the region's economy for transport of oversized loads of equipment for natural gas-fired power plants, processing plants, and the potential ethane cracker plant in southeastern Belmont County. The OMEGA RTPO access this waterway through Columbiana County, specifically in the City of East Liverpool and Village of Wellsville. The intermodal facility in Wellsville is capable of transferring freight from barges to either road or rail for final delivery. Additional road and rail capacity may be needed as this port matures and becomes more fully developed.

Along the Ohio River are port districts, which report the amount of tonnage of freight moved originating, terminating, or passing through the region. To the east of the OMEGA RTPO, lies the Port of Pittsburgh, starting at the Pennsylvania state line. To the south lies the Port of Huntington Tri-state. There is no official designation between Gallia County, Ohio and the Pennsylvania state line, resulting in no data collection of freight originating or terminating in the region. OMEGA has worked with stakeholders to pursue the designation of this area as a new statistical port, which enjoys the support of a broad spectrum of private and public partners.

The designation of the new statistical port will enable regional stakeholders to accurately report data to encourage new development, advocate for increased maintenance spending from the US Army Corps of Engineers and calculate the impact to the regional economy. The data will also assist local entities in pursuing funding opportunities to expand or enhance their facilities.

The New Cumberland Lock and Dam is located near Stratton, Ohio in Jefferson County, south of the OMEGA RTPO. These locks were opened in November 1959. The Pike Island Locks and Dams were opened in November 1963. This facility is in southern Jefferson County, near the Villages of Yorkville and Tiltonsville. Both facilities are critical to waterborne access to the OMEGA RTPO and further into the Port of Pittsburgh, where the first ethane cracker in Monaca, Pennsylvania is located. Continued industrial development in the future along the Ohio River corridor is dependent on the safe operation of these locks and dams. By 2045, both facilities will be over eighty years old.

Recreation

The Ohio Department of Natural Resources (ODNR) has designated three rivers as Water Trails, with another two (Tuscarawas and Walhonding) being considered for future Water Trail status. This designation is the result of local planning efforts to promote public boating (canoes, kayaks, etc.) for recreational purposes. **Figure 4-10** shows the location of current and future Water Trails.

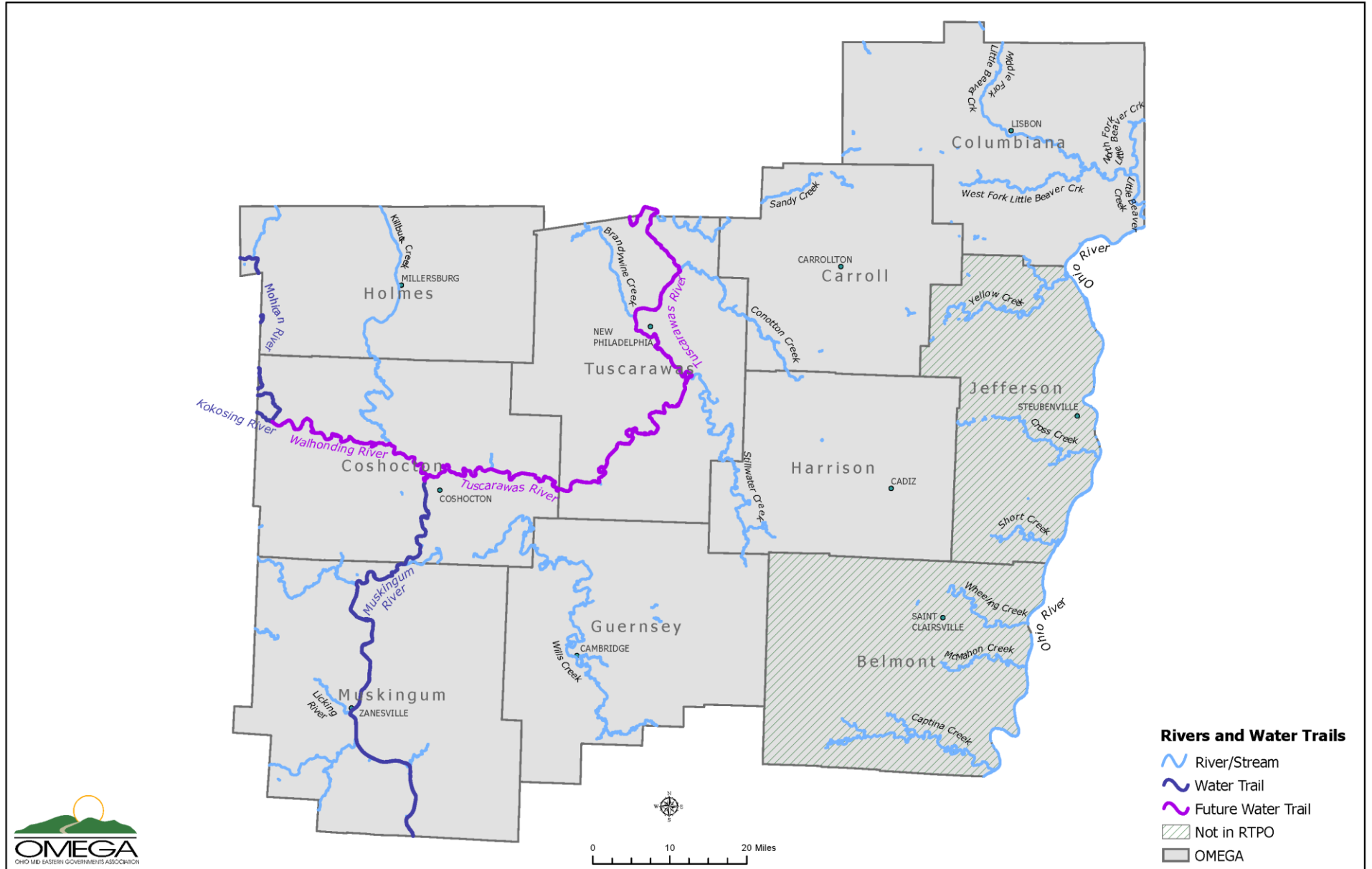


Figure 4-10: Current and Future Water Trails
Regional Transportation & Development Plan

4.7 Future Regional Developments

Throughout the region, there are several large developments proposed that will impact the transportation network. These developments are a mixture of residential, commercial, and industrial sites, and spread throughout the RTPo. **Figure 4-11** shows the current shale oil and gas activity in the OMEGA region as of January 2020. Within the RTPo region alone, there are 1,186 active wells, 165 permitted wells, 43 injection wells, and 5 processing plants. In addition to these wells and processing plants, there is another processing plant planned for northwestern Harrison County and the multi-billion-dollar ethane cracker plant planned for southeastern Belmont County. Though the ethane cracker plant is outside the RTPo, the direct and indirect impacts to the region's transportation network will be felt within the RTPo as additional industries seek to locate near their supply source.

Figure 4-12 shows several other proposed developments that will highly impact the local transportation network, both during construction and after opening. Freight shipments, consumers, and workers will increase traffic significantly in these locations.

- PTTGCA-Daelim Cracker Plant (Belmont County)
- Proposed mixed-use development west of I-77 at Exit 81 in New Philadelphia
 - May include big box stores, other retail/restaurants, and residential
- Proposed processing plant – northwestern Harrison County
- Dormitories added to Kent State University – Tuscarawas Campus in New Philadelphia
 - Historically this campus has been commuter students only
- Augusta Twp. Road Project, northeast of Carrollton
 - Growing businesses in the region are increasing heavy truck traffic on township and county roads. The proposed project would reconstruct two township roads to accommodate trucks and construct a new segment of a township road to intersect with another county road, enhancing ingress/egress of large trucks and consumers.
- Carroll County Commerce Park, northeast of Carrollton
 - New industrial park located off of SR 9
- D.O. Hall (south of Cambridge and I-70)
 - Expansion of existing industrial park near Cambridge
- National Road Business Park
 - Development of a new industrial park near the Airport Rd exit off I-70 east of Zanesville (Exit 160).

OMEGA has also highlighted two proposed corridors for future development, to enhance the efficiency of people and freight to access the region and to allow the region to be more economically competitive by providing ready access to a four-lane highway.

- US 30
 - Completion of a four-lane highway from Trump Avenue in East Canton to the intersection with SR 45 and SR 11 southeast of Lisbon in Columbiana County and improve connectivity to the Wellsville Port. This project would also add additional capacity to SR 43 to access Carrollton.
- Columbus to Pittsburgh Corridor
 - Completion of a four-lane highway along SR 16/US 36/US 250/US 22. Enhancements to this corridor would relieve traffic congestion along Interstate 70.

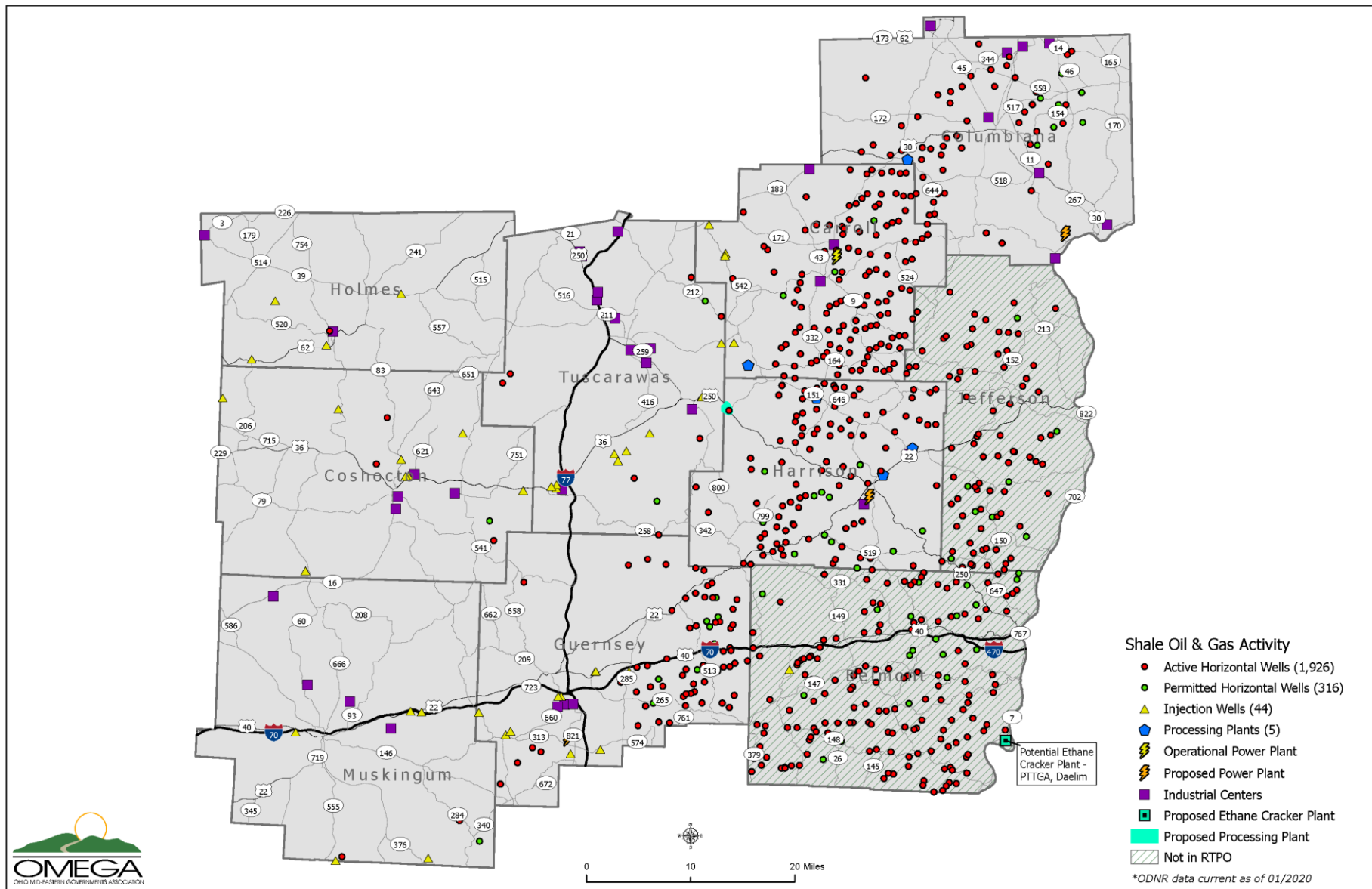


Figure 4-11: Shale Oil & Gas Development

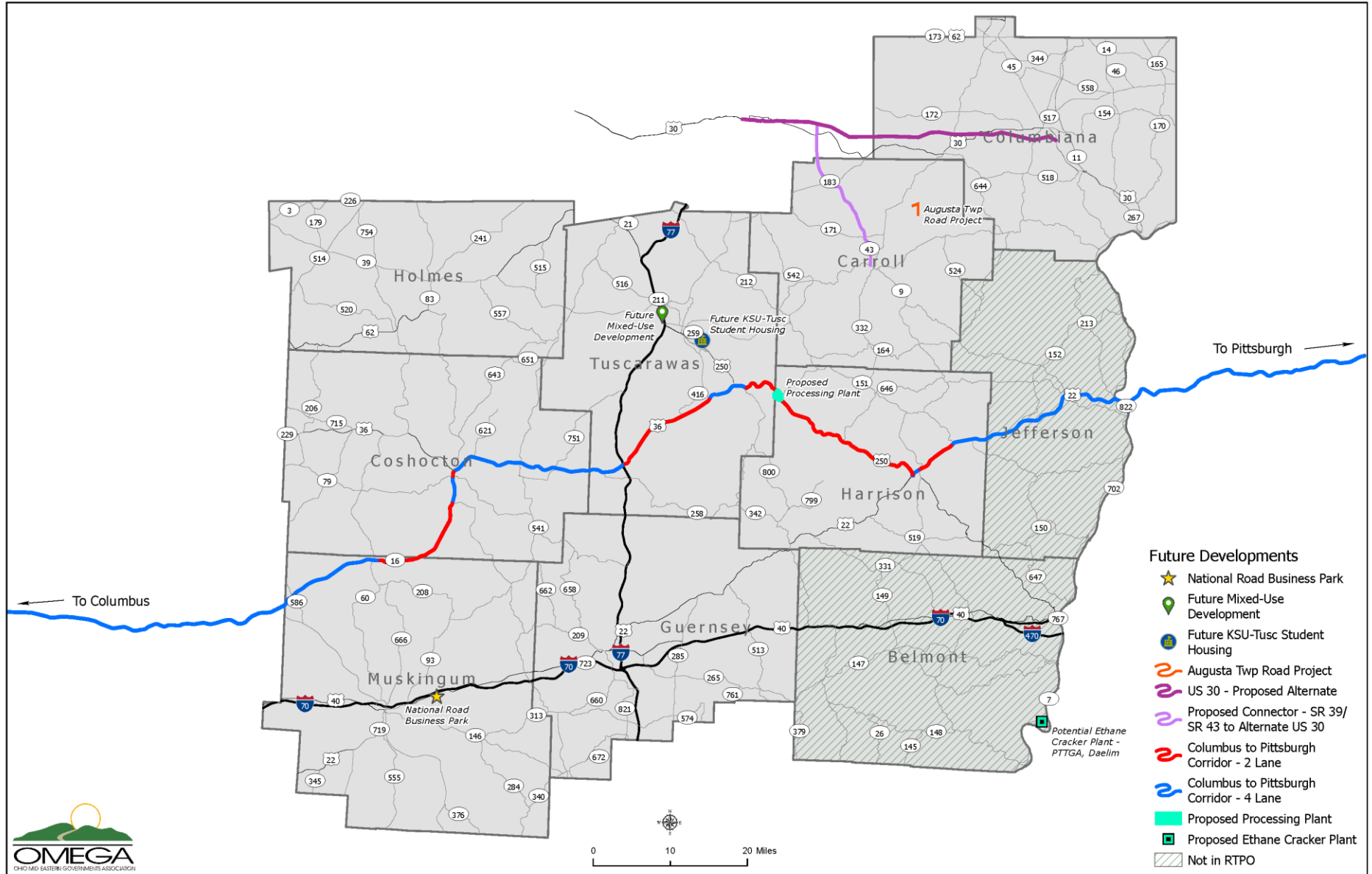


Figure 4-12: Future Regional Developments

5.0 Needs Analysis

In Section 1, OMEGA established four goals for the development and implementation of the Regional Development Plan. The goals are:

1. Preserve Regional Assets to Support Local Economies
2. Increase the Safety of Regional Infrastructure
3. Facilitate Economic and Community Development
4. Develop and Maintain Regional Resiliency

These four goals, and their related objectives provide the overall guidance to assess the transportation and other needs of the region. These goals, together with the analysis of the Existing and Future Conditions of the transportation system of the region and the input provided by the members of OMEGA's Executive Board, Transportation Advisory Committee (TAC), and other stakeholders provide the framework for the Needs Analysis. Regional needs associated with these four goals will be covered within this section. Fiscal constraint will be addressed in Section 7 – Recommendations.

5.1 Preserve Regional Assets to Support Local Economies

The preservation of regional assets is vital to the long-term viability of the region. With a resurgent, restructuring, and expanding economy in the region, these assets will play an ever-increasingly important role in facilitating the movement of goods, people, services, and resources safely and efficiently. This section will summarize the needs to maintain for transportation and non-transportation infrastructure, such as water distribution and wastewater systems.

Roads

As indicated in Section 3.1, the OMEGA RTPO has 10,520 center line miles of roadway. Of this total, 71% are under local jurisdiction, and therefore may not be eligible for federal funding. In 2019, the state of Ohio raised the motor vehicle user fee by 10 cents/gallon to 38.5 cents/gallon total. This increase was distributed both to the Ohio Department of Transportation and to the local maintenance authorities (municipalities, counties, and townships). Keeping roads in a state of good repair, even with this modest increase, is a challenge for local maintenance authorities, especially in areas with high volumes of heavy truck traffic and areas where the population or jobs are decreasing (reducing local revenues). Compounding this issue is the fact that some locations are facing increasing traffic congestion as new development/reinvestment occurs, and as cities throughout the region begin adding population again, after years of decline.

OMEGA may need to assist local maintenance authorities with pursuing additional federal and state funding sources to complete necessary preservation and rehabilitation projects. OMEGA will also need to work collaboratively with ODOT and neighboring MPOs to ensure creative funding solutions are developed for complex projects in areas without adequate resources. This will support OMEGA's objective of increasing the number of lane miles in "Acceptable" pavement conditions on the Federal Aid system.

Bridges

As indicated in Section 3.1, the OMEGA RTPO has 3,423 bridges. Of these, 183 are considered at risk, as their General Appraisal Rating is less than or equal to four. Bridges are critical links in the transportation system. The loss of a bridge through deterioration or closure could force residents and business inbound and outbound deliveries to detour several miles. Currently there are 12 closed bridges in the RTPO and another 766 that are considered functionally obsolete.

Furthermore, 658 bridges are over 70 years of age. In the short term, many of these bridges will require more robust maintenance to keep them functioning as intended. Another 469 bridges (for a total of 1,127) will be 70 years or older by 2045, putting them near their end of their useful life. By 2045, nearly one third of all OMEGA RTPO bridges will be 70 years or older. The level of investment needed to repair and/or replace these bridges will continue to climb as the infrastructure ages.

OMEGA will need to assist local maintenance authorities pursue additional federal and state funding sources to complete necessary preservation and rehabilitation projects. This supports OMEGA's objective of reducing the number of bridges on the local system with a General Appraisal Rating of four or less.

Active Transportation

The RTPO currently has over 700 miles of existing bicycle facilities which includes designated national and state bike routes throughout each of the eight counties. Moving forward with the development and implementation of tri-county and eventual regional active transportation planning, OMEGA will work to preserve and maintain these existing facilities along with other existing infrastructure including sidewalks, trails, and buggy lanes. This work will include partnering with local communities to identify and assist with relevant funding applications.

Aviation

Each of the eight counties in the RTPO is served by at least one public, general aviation airport. There has not been a new statewide study conducted since the 2015 Regional Transportation Plan. In that plan, the estimated cost to maintain system compliance for the current classification for each airport totaled \$33 million. Approximately \$31 million (94%) of that funding was for the maintenance of the primary runway and other pavements. A new study is scheduled in 2020 or 2021, and these totals will be revised upon the findings of that study.

Rail

Railroads in the OMEGA RTPO are largely privately owned and maintenance of the railroad and its related structures falls to the owner or operator of those rail lines. OMEGA will provide a clearinghouse of current grant opportunities to local owners or operators that subscribe to the OMEGA mailing list to ensure the timely dissemination of information.

Maritime

Keeping maritime facilities in a state of good repair is imperative to the movement of waterborne goods along the Ohio River. Wellsville, Ohio (Columbiana County) is home to the only public intermodal port along the Ohio River that is located within the OMEGA RTPPO. The Wellsville port is owned by the Columbiana County Port Authority. This port is crucial to development in Eastern Ohio, as barge traffic allows oversized loads to be transported close to the final assembly/installation site, reducing the amount of wear to the road and rail systems. This form of transportation is also largely cheaper than others, especially in bulk shipments. Maintenance of this port is vital to the continued economic growth of the region.

South of the Wellsville, along the Ohio River, are two lock and dam systems that could greatly impact the movement of maritime freight into and out of the RTPPO. The first one downstream is the New Cumberland Lock and Dam located near Stratton, Ohio in Jefferson County, south of the OMEGA RTPPO. These locks were opened in November 1959. The Pike Island Locks and Dams were opened in November 1963. This facility is in southern Jefferson County, near the Villages of Yorkville and Tiltonsville. Both facilities are critical to waterborne access to the OMEGA RTPPO and further into the Port of Pittsburgh, where the first ethane cracker in Monaca, Pennsylvania is located. Continued industrial development in the future along the Ohio River corridor is dependent on the safe operation of these locks and dams. By 2045, both facilities will be over eighty years old.

OMEGA will work collaboratively with the Columbiana County Port Authority to pursue federal, state, and other funding opportunities to keep the Wellsville Intermodal Facility in operational condition. OMEGA will also work with the Brooke-Hancock-Jefferson Metropolitan Planning Commission and Belomar Regional Council to advocate for increased spending on the maintenance of the locks and dams along the Ohio River to ensure the movement maritime freight is not delayed or impeded due to facility failures.

Other Infrastructure

It is essential for OMEGA to work to support the preservation of the high public investment into the region's infrastructure so far. The maintenance of existing infrastructure to include water and wastewater systems is a key component for community and economic development. Many of the existing water and wastewater systems in our region are nearing the end of their useful life and need to be replaced. Implementation of asset management programs will provide the framework for maintaining these systems and developing a financially sound strategic plan for replacement and rehabilitation.

While the need for new infrastructure exists, maintenance of existing assets will support new investments, paving the way for future investment and builds that can be built off well-maintained existing infrastructure.

5.2 Increase the Safety of Regional Infrastructure

Safety is an integral part of all networks that serve the OMEGA region. Transportation safety endeavors will be aligned with ODOT's new and existing efforts to make the regional network safer for all users. OMEGA will also work with communities to enhance or replace deficient water and wastewater systems to ensure that a safe reliable supply of drinking water is available, and that wastewater collection and treatment systems are protective of human health and the environment. Further assistance will be given to communities to provide safe public spaces and procure additional resources for public safety departments, such as police and fire.

Roads, Bridges, and Active Transportation

Roadway safety is an integral part of transportation planning. Safety is not limited to motorists, but also includes pedestrians, bicyclists, horse and buggy operators, and agricultural vehicle operators. Between January 1, 2016 and December 31, 2018, there were 29,991 reported crashes, just shy of 10,000 crashes per year on OMEGA RTPO roadways. The leading type of crash was Fixed Object (28%). This type of crash also includes roadway departures, where the vehicle strikes another vehicle, a mailbox, utility pole, tree, or ditch. This type of crash is common in rural areas, due to the higher speeds and narrower lane widths found on many county and township roads.

In December 2017, the OMEGA Executive Board adopted a resolution calling for a one percent reduction in the number and rate of fatal crashes, the number and rate of serious injury crashes, and the number of non-motorized crashes (bicycle, pedestrian, and buggy). This resolution supported a larger statewide initiative to add performance measures to the transportation planning process. In 2019, a new gubernatorial administration increased their focus on roadway safety for all users. Ohio's highway safety program, already one of the largest in the nation, was expanded and directed to improve dangerous intersections throughout the state.

OMEGA will work with a consultant to develop a systemwide screening tool to provide annual regional updates on dangerous intersections and road segments. This tool will be developed in FY 2021, and regional updates will be completed annually. OMEGA will also continue to work with the ODOT Local Safety Assistance program (or its equivalent) to study selected high-risk locations and provide consultant-led safety studies and/or safety funding applications.

These efforts will support OMEGA's objectives of reducing the number and frequency rate of fatal and serious injury crashes and reducing the number of fatal or serious injury non-motorized crashes.

Rail

In the OMEGA RTPO, grade crossing incidents are not common (4 incidents in 3 years). When they do occur, however, they are generally severe or fatal. Unfortunately, there were two incidents in Salem and Columbiana, that returned this type of crash to the safety spotlight. This type of crash is largely preventable. OMEGA will work with local officials, PUCO, ODOT, and the Ohio Rail Development Commission to study any grade crossing crashes and assist in funding applications for appropriate countermeasures, if needed. OMEGA will also work with Operation Lifesaver, a national non-profit, to incorporate educational materials for communities within the RTPO. This effort will support OMEGA's objective to reduce at-grade railroad crossing crashes to zero.

5.3 Facilitate Economic & Community Development

Facilitating economic and community development is the bedrock of OMEGA's existence as an LDD and EDD. With the addition of the RTPO, these efforts will utilize additional tools in creating opportunities for new businesses to move into the region or to allow existing businesses to expand. Historically, the Appalachian region has lagged the rest of the nation in many indicators of economic success. With an assortment of instruments spanning several distinct programs, OMEGA is uniquely positioned to assist communities in broadening and growing their economies for the advancement of the region.

Road

Access to employment and educational opportunities are critical for the success of the region. OMEGA will work with regional partners to determine the need for road or bridge improvements necessary to facilitate future economic or community development projects. OMEGA will assist in data collection and pursuing funding opportunities for projects as they are developed by local partners. OMEGA will also identify corridors that promote economic development and connectivity. OMEGA will advocate for the development of economic development corridors, such as the US 30 and Columbus to Pittsburgh Corridors. These efforts will support OMEGA's objective to increase the average number of jobs accessible within 30 minutes of driving and increase employment by attracting new businesses to the region or facilitating the expansion of existing businesses.

Transit

Investments in public transit and human services transportation will be essential for mobility throughout the region. As the population continues to age, the number of residents needing assistance to access non-emergency medical and other services will likely increase. A robust transit/human services transportation system will allow senior citizens, and persons with disabilities to age in place and remain in their houses independently for longer periods of time. Continuing work with regional transportation service providers to enhance collaboration and connectivity will support OMEGA's objectives to:

- ✓ Increase the number of commuters using transit
- ✓ Reduce denials
- ✓ Reduce cancellations and no-shows
- ✓ Track call volume to Transportation Service Providers (TSPs) and regional call center

Below is the list of current unmet needs, as outlined in the Regional Coordinated Human Services Transportation Plan:

- More weekend services
- More travel service and payment options
- More efficient employment transportation
- Expand other types of transportation service
- Improve/increase bus service
- Expand non-Medicaid service hours
- Offer transfers and improve city connections
- Increase medical transportation outside county and state
- Easy fare/rate for low income individuals for regional mobility
- Simplify public information
- Local area hospitals closing, causing longer trips for providers and patients
- More frequent trips
- Evening transportation service
- Transportation to/from Akron-Canton airport
- Bus stop shelters
- Day and seasonal passes

Active Transportation

Active transportation infrastructure including sidewalks, bicycle lanes, trails, and buggy lanes are essential to enabling community and economic development throughout the region. Active transportation networks provide multi-use accessibility to local businesses, attractions, and recreation opportunities. These unique networks also allow tourists a variety of enjoyable ways to travel outdoors throughout the region's beautiful and vibrant communities. The Tri-County Active Transportation Plan and other regional active transportation planning activities support OMEGA's objectives to increase the number of commuters walking and biking and to increase the number of miles of trails or designated bike facilities throughout the region.

Rail

Rail can play a major role in the economic development of the region. Large quantities of freight can be removed from the road and safely delivered to businesses along the rail line. Freight can also be shipped to intermodal facilities, such as Wellsville, and reduce the number of miles needed for over the road trucking. In the OMEGA RTP, most railroads are Class 2 or Class 3 regional and short line operators. Revenues generated by these railroads are lower than the Class 1 railroads (CSX and Norfolk Southern) and often maintenance activities are limited. To increase the efficiency of rail throughout the region, OMEGA will monitor funding opportunities to assist railroads, communities, and ODOT to replace substandard assets (such as bridges with insufficient vertical or horizontal clearances), rehabilitate abandoned lines for economic development, or develop new rail spurs needed for continued economic expansion.

Abandoned Mine Lands

Abandoned mine land in the OMEGA region poses as a threat to both economic development and the safety of the region. Sites located on this land require extremely expensive remediation before infrastructure can be built on the surface above old underground mines. Remediation of abandoned mine lands is also needed to transform vacant, unusable land into productive use leading to business development and job creation. OMEGA will assist communities with procuring funding assistance for the remediation so that site development costs are competitive with other regions. Dangerous highwalls and slips pose as unsafe to children and families exploring the rural countryside that makes the OMEGA region so beautiful and unique. OMEGA will continue to work and advocate for abandoned mine land remediation across the region.

Brownfield Remediation

During much of the 19th and 20th centuries, the regional economy was driven by coal mining, oil drilling, glass manufacturing, and steel mills. The abundance of red clay throughout the region also supported a thriving pottery industry. The subsequent rise of industrialization in the United States during the late 19th century created scores of industries that required the abundant resources of Appalachia to fuel growing factories and mills. The rich ore deposits in the area were shipped across the country to fuel the industry that would build a nation, but eventually leave Appalachia depleted and distressed. The lack of developable land throughout the region adds to the urgency of assessing and cleaning up brownfield properties. In the 2017 OMEGA Comprehensive Economic Development Strategy (CEDS), a lack of shovel-ready sites was highlighted as a significant barrier to economic growth. There is new momentum building on the back of the thriving energy industry throughout the region. OMEGA will continue to assist communities in pursuing brownfield remediation funding to rehabilitate and revitalize potential brownfield site and prepare them for redevelopment.

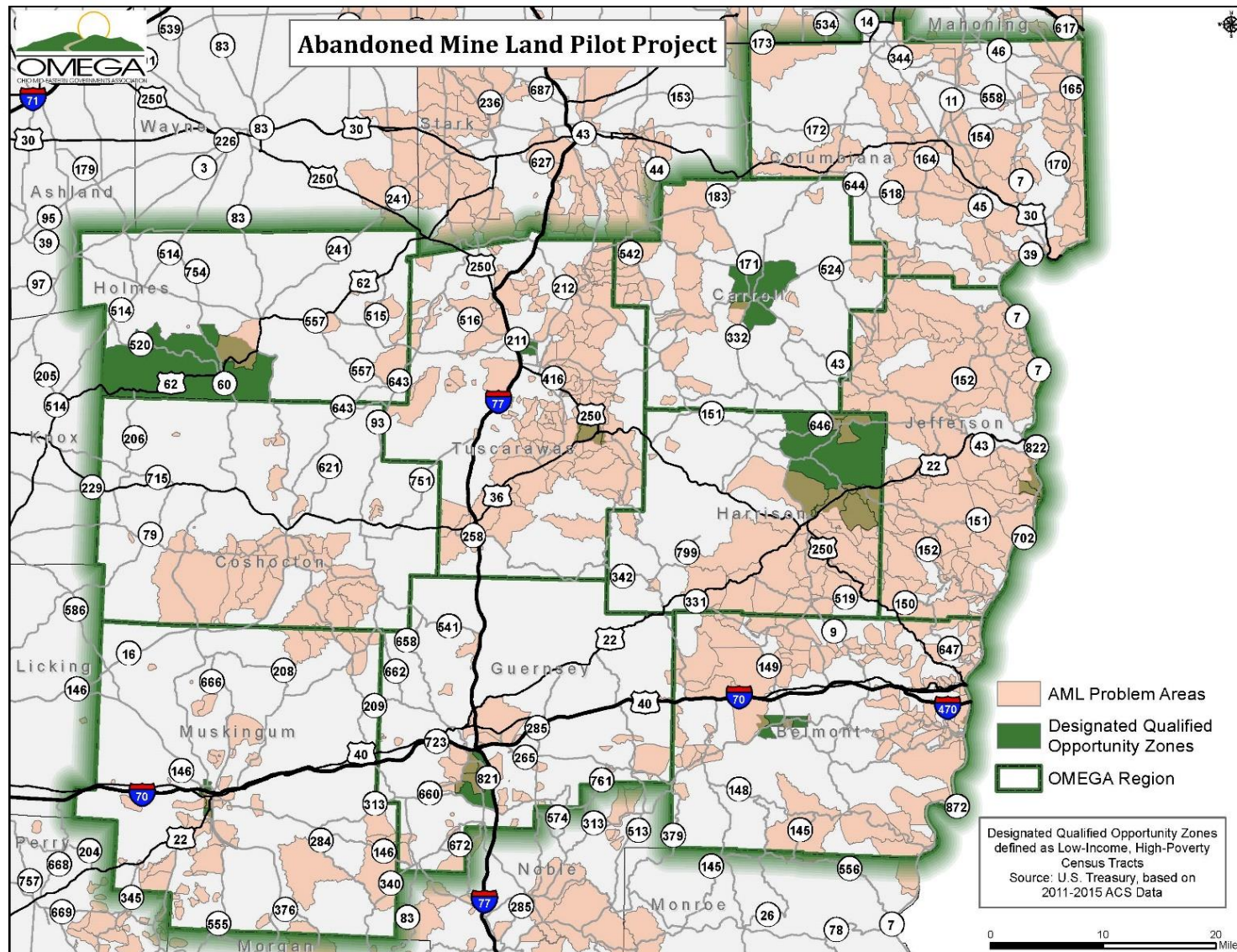


Figure 5-1: Abandoned Mine Land Problem Areas

Other Public Infrastructure

Access to safe drinking water, public wastewater systems, and reliable high-speed affordable broadband are needed to promote business development and expansion. Without these basic utilities, businesses are more likely to search elsewhere for developable sites, where these basic utilities are in place. As the rest of the country continues to develop broadband and public water access, the OMEGA region lags, putting our youth's education, health, and future in jeopardy of being behind. During times such as the COVID-19 pandemic in 2020, when schools were shut down and students were required to do work from home, many students in the region lacked access to reliable broadband directly impacting their ability to receive a quality education. Lack of access to reliable broadband also prevents many small businesses from competing in today's global economy and during the pandemic of 2020, prevented many workers from working from home.

OMEGA will continue to assist local communities in finding funding for public infrastructure projects in order to reach economic parity with the rest of the state and the nation. This supports OMEGA's objectives of increasing the number of people and businesses in census blocks served by broadband and the number of households and businesses improved with access to safe drinking water or public wastewater systems.

Business Assistance

OMEGA will continue to host the Revolving Loan Fund (RLF) to support private, for-profit small businesses throughout the region. Through the **OMEGA Revolving Loan Fund (RLF)** program, businesses may be eligible for a fixed rate, low-interest loan to assist in the startup, purchase, or expansion of a business. Some eligibility requirements are as follows:

- The RLF can finance up to \$300,000, if all criteria is met and funds are available
- The business must be private-for-profit
- The business must create and/or retain full-time equivalent (FTE) job opportunities
- Owners must contribute no less than 10% cash equity towards the total project cost
- Maximum bank participation of no less than 50% of the total project cost is required
- Applicant/Borrower must occupy 51% or more of the commercial facility
- Loan proceeds can be used for acquisition and/or improvement of business assets including land, building, machinery, equipment; and limited term working capital
- Construction projects must comply with the Davis-Bacon Act more commonly known as prevailing wage - (www.dol.gov/whd/govcontracts/dbra.htm)
- Projects must comply with the Americans with Disabilities Act (www.ada.gov/business.htm)
- The business must be located within the ten-county region served by OMEGA which includes Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum and Tuscarawas counties

OMEGA also administers the **State of Ohio Regional 166 loan** program which finances fixed assets only for businesses in the commercial, industrial, or distribution sectors. The Regional 166 loan program offers an attractive interest rate fixed at or below the current market rate and has many of the same requirements previously listed for the RLF program. The interest rate is determined upon approval of the OMEGA Loan Committee and is then recommended to the State Controlling Board for their approval. However, the State may change or adjust the rate as they deem necessary.

Please note the OMEGA loan programs operate on a first-come, first-serve basis. Unfortunately, resources are limited; therefore, OMEGA may not be able to assist with all loan requests due to lack of funds.

OMEGA will also support workforce enhancement projects to train prospective employees and to upskill existing employees with the needed skills of businesses within the region. The RLF, Regional 166, and workforce development programs support the OMEGA objectives to increase the number of businesses improved and the number of employees in manufacturing and other professions.

Community Development

OMEGA will continue to assist local communities with funding for their public infrastructure needs, including water, wastewater, broadband, stormwater and drainage, downtown and neighborhood revitalization, access roads, and economic development, including workforce development, facilitation of entrepreneurship and other activities leading to job retention and creation. These community and economic development activities will provide the framework necessary to facilitate higher Median Household Incomes especially in comparison to state and national incomes, lower poverty rates higher educational attainment levels, and lower transfer payments in the region.

5.4 Develop & Maintain Regional Resiliency

Resiliency is fundamental for the continued growth and success of the OMEGA region. OMEGA will work with communities to incorporate resiliency in economic, community, and transportation planning projects. To mitigate adverse impacts, OMEGA will help communities plan for and/or mitigate economic downturns, extreme weather events, and other external factors that may impact the region. This goal, and its associated objectives will be outlined in Section 6 – Resiliency.

6.0 Resiliency

Resiliency planning is fundamental to ensuring the region is prepared for extreme events, whether natural or man-made. Adapting current economic, community, and transportation planning methods to incorporate resiliency is a priority goal of OMEGA. We will work with members and partner agencies to ensure development and completion of projects that are resilient and/or sustainable.

Changes in climate and extreme weather events strain the region's infrastructure. With challenging topography throughout much of the region, extreme weather events affect this area differently than many other parts of the state. Landslides, flash flooding, and road washouts are hazards to transportation infrastructure, as well as to the business community and residents.

6.1 Extreme Weather Events / Climate Change

The transportation system throughout the region is essential to the economic prosperity and quality of life of communities. To fill this critical role, infrastructure must be secure and resilient to a myriad of hazards. Resilience is the ability to anticipate, prepare for, and adapt to changing conditions and withstand, mitigate, respond to, and recover rapidly from disruptions. The Fixing America's Surface Transportation (FAST) Act, enacted in December 2015, requires planning agencies to take resiliency into consideration during transportation planning processes.

The impacts of a changing climate and extreme weather events are one of the hazards that threaten our nation's transportation systems. Flooding and severe storm events endanger the long-term investments that federal, state, and local governments have made in transportation infrastructure. Changes in climate have intensified the magnitude, duration, and frequency of these events for many regions in the United States, a trend that is projected to continue. As a result, transportation planning agencies, including RTPOs, are assessing ways to protect, preserve, and improve their assets in the face of increasing climate change and extreme weather events.

To prepare the region, the OMEGA RTPO, in conjunction with our planning partners must conduct assessments to understand the vulnerability of regional transportation systems to the impacts of climate change and extreme weather. The transportation planning process provides a key opportunity for transportation agencies and local partners to proactively identify projects and strategies to address the vulnerabilities identified and to promote resilience at the systems level, thereby meeting the FAST Act resiliency requirements. These planning efforts support OMEGA's objective to have communities consider implementation of policies or plans that incorporate all users of the transportation network, such as Complete Streets. Planning for and implementing mitigation activities support OMEGA's objective to decrease the number of major roadways at risk of flooding.

6.2 Mines

Threats to the transportation system are not all above ground. A danger lurks below ground in many areas, due to the history of mineral mining throughout the region. Mine subsidence threatens many areas throughout the OMEGA region, owing to the history of predominantly coal mining in the area. There is a history of mines impacting the region's transportation network, and many more areas impact the ability of local leaders to attract businesses and other development:

- I-70 collapsed near Old Washington in March 1995
- ODOT grouted a section of I-70 just east of Zanesville in 2014-2015
- East Canton bypass of US 30 is projected to require over \$30 million in mine remediation.
- D.O. Hall Business Park and Guernsey Power Station both required mine remediation for large-scale developments to be completed

Mine remediation activities support OMEGA's objective to decrease the number of major roadways at risk of slipping. They also support increased safety measures in the region and create more attractive sites to business investors and developers. Without shovel-ready sites, the surplus of abandoned mine land in the region stifles economic development when potential businesses do not have access to dig-ready sites. When millions of dollars are required to grout and fill underground mine sites, many businesses are not able to or interested in investments that substantial. In order to be a marketable region, mine-remediated sites with access to public utilities are key.

6.3 Economic Resilience

Regional economic success is closely associated to the region's ability to prevent or mitigate, to withstand, and to recover from significant disturbances to its economy. Such major economic disruptions include, but are not limited to, the following:

- Downturns or other significant impacts to the economy that affects demand for locally produced goods and consumer spending
- Downturns in the petrochemical or other industries that make up a valuable piece of the region's economic activity
- Other external shocks such as a natural or man-made disaster, public health crises, exit of a major employer, or impacts of climate change

As outlined by the EDA, integrating resilience into the CEDS and other planning efforts should be undertaken as part of a two-pronged approach:

1. Planning for and implementing resilience through specific goals or actions to bolster the long-term economic durability of the region (steady state), and
2. Establishing information networks among the various stakeholders in the region to encourage active and regular communications between the public, private, education, and non-profit sectors to collaborate on existing and potential future challenges (responsive).

Steady State Approach

Steady state approaches to economic resilience focus on the long-term planning efforts designed to avoid or mitigate major disruptions to the economy. These approaches may include aligning regional plans with other planning efforts, such as hazard mitigation plans. Other efforts may include assisting communities to develop and implement safe development practices in business districts, industrial parks, and surrounding communities by locating structures outside of floodplains, preserving lands that act as natural buffers from storms, and protecting existing developments from the impacts of extreme weather.

Additionally, efforts to grow and diversify the region's economic and employment base will help ensure timely recovery to both economic and natural disasters. Potential strategies to achieve this are outlined below:

- Enhance infrastructure to support economic growth
- Facilitate the development of quality housing to support economic development
- Provide small businesses with accessible financing to support entrepreneurship
- Capitalize on existing recreational resources through tourism sector development and promotion
- Encourage the relationship between educational resources/institutions and local businesses' workforce needs
- Support the update of county hazard mitigation and disaster recovery plans
- Support expansion of industries less vulnerable to disaster

Responsive Approach

Responsive approaches to economic resiliency focus on short or intermediate planning efforts designed to initiate recovery from a major disruption. Examples of these efforts may include:

- Establishing a process for regular communication, monitoring, and updating of business community needs and issues (which can then be used after an incident).
- Establishing/using a capability to rapidly contact key local, regional, state, and federal officials to communicate business sector needs and coordinate impact assessment efforts; and
- Establishing/using coordination mechanisms and plans for short, intermediate, and long-term recovery needs (which may include pursuing emergency funding, when available).

To assist in preparing for these disruptions, OMEGA assists communities and businesses in the region with planning and access to resources such as our Revolving Loan Fund (RLF) program or Regional 166 Loan program for private, for-profit businesses) and federal and state grant programs for communities and non-profits. OMEGA provides communities with assistance in applying for funding from the U.S. Economic Development Administration (EDA), the Community Development Block Grant Economic Development and other programs, the Governor's Office of Appalachia (GOA), and the Appalachian Regional Commission (ARC) area development and POWER programs. The Brownfield Remediation and Assessment grant programs through the U.S. Environmental Protection Agency is another way that OMEGA assists communities within the region in redeveloping and returning previously contaminated sites and buildings to productive use. The Rural Industrial Park Loan program under the Ohio Developmental Services Agency is another program that OMEGA

assists with that provides funding for industrial park development. With the addition of the Abandoned Mine Land (AML) Pilot Program, OMEGA can also help communities apply for funding to remediate abandoned mine lands and restoring land to productive use and improve safety which will economically benefit the area. These programs support OMEGA's objective to increase business diversification.

OMEGA is also involved in several partnerships including:

- **JobsOHIO:** A private, non-profit corporation created in 2011 to lead Ohio's job creation efforts with a singular focus on attracting and retaining jobs, with an emphasis on strategic industry sectors in areas of statewide and regional strength.
- **OhioSoutheast (OhioSE)** Formerly known as the Appalachian Partnership for Economic Growth (APEG) and **TeamNEO**., OhioSE and TeamNEO are regional partners of JobsOhio that serve the counties in the OMEGA region.
- **Appalachian Growth Capital (AGC):** A Community Development Financial Institution (CDFI) that partners with local and regional banks as well as secondary lenders to support businesses in the region.
- **Small Business Association (SBA):** A U.S. government agency that provides support to entrepreneurs and small businesses by connecting them with lenders and funding as well as assisting them in planning, starting, and growing their small businesses.
- **Eastern Ohio Development Alliance (EODA):** A 16-county regional planning organization serving a population of approximately 805,000 residents and focused on economic development planning and marketing the region.
- **Ohio Economic Development Association (OEDA):** Created in 2005 by merging the efforts of the Ohio Development Association and the Ohio Economic Development Council, OEDA represents more than 300 economic development professionals in Ohio. OEDA advocates on behalf of its members on economic development issues important to growing Ohio's economy; it is a non-partisan organization that provides professional development training and activities.
- **Development Districts of Appalachia Association (DDAA):** Promotes Appalachia Ohio and 13 other states under the jurisdiction of the Appalachian Regional Council (ARC).
- **National Association of Development Organizations (NADO):** Provides advocacy, education, research and training for the nation's regional development organizations.
- **Ohio Rural Communities Assistance Program (Ohio RCAP):** A part of a national network of regional non-profit organizations that provide technical assistance to help resolve water and wastewater issues.
- **Ohio Conference of Community Development Inc. (OCCD):** A statewide association of community and economic development professionals dedicated to helping develop, implement and improve federal, state and local programs for community development.
- **Appalachian Ohio Geospatial Data Partnership (AOGDP):** An organization that adopts and promotes geospatial data standards in Ohio's Appalachian region.

7.0 Recommendations & Implementation

With multiple planning tools at its disposal, OMEGA is distinctively positioned to provide a pathway to enhance community and economic growth in the region. Two of the largest planning efforts undertaken by OMEGA are the Comprehensive Economic Development Strategy (CEDS) and the Long-Range Transportation Plan. By combining these two documents into a Regional Development Plan, OMEGA seeks to reduce the number of hours spent planning and increase the efficiencies by aligning goals across all program areas within the organization. These efficiencies will allow OMEGA to connect communities to resources and help the region achieve parity with the rest of the nation.

The recommendations in this section, and suggested implementation strategies, will guide OMEGA's program efforts through the upcoming decades. The CEDS and Transportation Plan, now one document, will seek to advance the goals and objectives set forth by the respective funding agencies, while tailoring how implementation will look within the OMEGA region.

CEDS

To properly implement the CEDS, OMEGA must work to establish a diverse economic base, provide adequate infrastructure to its residents and businesses, and procure the necessary funding to meet its goals. Viewing potential projects and developments from a holistic stance will amplify the magnitude of the effects on the region and pave the way for future related developments. Alignment with transportation planning objectives will allow regional planners the ability to develop sensible strategies to tackle complex challenges.

Transportation Plan

A robust, efficient, and safe transportation network is essential to the successful development and continued growth of a regional economy. Free movement of goods, services, residents, and commuters enables the region to respond to the needs of the global marketplace and support neighboring regions to allow for statewide prosperity. Alignment with economic development efforts will result in the most cost-effective, coherent development strategy, saving valuable resources for regional communities.

7.1 Regional Policy Recommendations

Broadband

In September 2019, OMEGA's Executive Board adopted a Broadband Policy to provide a pathway for enhanced broadband deployment throughout the region. Access to broadband is essential for creating economic opportunities and community development. The absence of broadband service places substantial constraints upon the economic growth, social, and cultural aspects of our region. Due to the detrimental impact this has had upon the region, the OMEGA Executive Committee has adopted the following Broadband Policy Priorities:

1. Improve the accuracy and veracity of broadband mapping by drilling down to the actual service locations.
2. Advance the region's economic development through Internet-enabled education, healthcare, transportation, and workforce development.
3. Leave no one behind by extending broadband to all households and businesses, delivering robust communication services.
4. Use fiber to connect local government facilities in Appalachia in order to increase efficiency of management and delivery of municipal services.

This Broadband Policy also outlined implementation strategies to guide future projects. This policy, in its entirety, as well as additional policy recommendations approved by the OMEGA Executive Board in December 2019 are available in **Appendix C**. The additional policy recommendations are meant to support Ohio's development of a funding mechanism to extend broadband to underserved areas and include the following:

1. **Create a state broadband fund that ensures sufficient resources are available** across the state for broadband deployment projects that directly connect 100% of unserved and underserved households and businesses in a designated service area.
 - a. **Use a portion of the state fund to award zero-match planning grants** to enable regional organizations to leverage state resources to develop successful applications for federal broadband funding.
 - b. **Establish a steering committee comprised of at least one regional organization** to review applications for funding under the proposed program to ensure that the projects are meeting qualifications.
2. **Create a diverse statewide task force of experts to develop recommendations on how to close the rural-urban divide on broadband access.** The task force should focus on possible funding solutions for delivering broadband to rural Ohio and review potential legislative actions that could reinforce those solutions.
3. **Seek a streamlined right-of-way approval process for broadband fiber installation** to encourage easier build out.

RTPO Capital Funding

OMEGA assists communities of all sizes in pursuing various funding opportunities to complete needed projects. Located in the Appalachian region of Ohio, many communities are economically distressed or are faced with legacy infrastructure that requires maintenance, even as the population declines and whittles down the local tax base. The lack of local financial capacity for transportation projects often results in projects being postponed or canceled, maintenance deferred, and communities remaining at risk due to obsolete or deteriorating infrastructure. OMEGA recommends a sustainable funding resource for Ohio's RTPOs, that will allow RTPOs to assist communities in utilizing existing funding mechanisms by providing all or part of the local match requirement. The addition of these funds will allow the OMEGA RTPO to have more influence on transportation projects programmed throughout the region and incorporated into the Statewide Transportation Improvement Program.

Multimodal Inclusivity

When designing, rehabilitating, or reconstructing infrastructure, inclusivity of all modes of transportation should be considered. Incorporation of alternative modes of transportation allow for people to reduce their dependence on privately owned automobiles. It also allows for the reduction of greenhouse gas emissions, reduced dependence on oil, and reduction of the wear on transportation assets. Projects proposed in the OMEGA RTPO should consider the comfort level of all users. These users may be pedestrians, bicyclists, transit riders, or horse and buggy operators. Additional consideration should also be given to senior citizens and persons with disabilities or limited mobility.

OMEGA recommends projects within the RTPO follow guidelines set forth by the Americans with Disabilities Act (ADA). OMEGA also recommends transportation projects consider all users during design, construction, or rehabilitation. Adoption of policies or guidelines, such as Complete Streets or Safe Routes to School, will enable communities to provide robust, sustainable transportation networks that work efficiently for all users.

Environmental Risk Mitigation

Environmental risks can pose a unique threat to infrastructure. Excessive rainfall events may produce flooding conditions or landslides along regionally significant routes. Flooding also may occur within developed areas, with high amounts of impervious surfaces. OMEGA recommends assessing alternative drainage improvements to mitigate damage by excessive rainfall. Alternative improvements include, but are not limited to, planter boxes, bioswales, permeable pavements (especially in parking lots), green streets and alleys, green parking, and land conservation.

OMEGA will also advocate for policy changes at the state and federal levels to allow for emergency repair funds to incorporate enhancements to damaged facilities to reduce the risk of repeated incidents.

Designation of Maritime Statistical Port

The designation of the Mid-Ohio River Valley Statistical Port is recommended by OMEGA to enhance the data collection by the US Army Corps of Engineers from the Ohio/Pennsylvania state line in Columbiana County to the border of Gallia and Meigs County in Ohio. This stretch of the river also corresponds to the West Virginia/Pennsylvania state line in Hancock County, West Virginia and extending south to the western border of Jackson County, West Virginia. This new statistical port will allow for detailed data collection of cargo that originates, terminates, and passes through the region between the current Ports of Pittsburgh and Huntington Tri-State. This data will be crucial in advocating for infrastructure improvements along this stretch of the river and can also be used as an economic development tool by businesses and communities in the area.

Business Diversification

A diversified economy is vital for a strong and resilient region. The adage “don’t put all of your eggs in one basket” applies to the economy now more than ever, especially in a rapidly evolving, globalized economy. A diverse economy will create prosperity by creating flexibility and spurring innovation. The health of the regional economy will not rely on a single industry but instead multiple industries, allowing the region to withstand the impact of economic downturns. Collaboration among different industry clusters could also spur additional innovation or allow new partnerships to form, strengthening the region.

OMEGA supports efforts undertaken by local and regional economic development professionals to create a diverse collection of industries ranging from petrochemicals to manufacturing, and from agriculture to retail in order to cultivate a stable, growing, and resilient economy.

7.2 Project Recommendations

OMEGA being a Local Development District, an Economic Development District, and a Regional Transportation Planning Organization is positioned well to solicit projects and assist member communities with funding applications for potential projects. OMEGA supports projects that meet one or more of the goals and objectives of the organization. To assist in the organization of projects, as they are submitted, OMEGA has classified them into four categories:

- Transportation
- Water
- Wastewater
- Other Infrastructure & Initiatives (including broadband, workforce development, and other eligible projects not otherwise specified, but aligned with the goals and strategies of this plan)

Established scoring criteria will be used to prioritize projects when necessary. OMEGA currently accepts pre-applications for Appalachian Regional Commission and the Governor's Office of Appalachia funding with established criteria. OMEGA is also developing criteria for Human Services Transportation/Rural Public Transit funding in accordance with the Regional Coordinated Human Services Transportation Plan. Should capital funding become available for the OMEGA RTPO, then OMEGA will work with the Transportation Advisory Committee to develop project selection and prioritization criteria. Otherwise, funding source guidance will be used to ensure applications for proposed projects are competitive.

Regional Corridors



OMEGA recommends the completion of the US 30 four-lane highway from East Canton to central Columbiana County. The completion of this corridor will mark the completion of the four-lane highway across the entire state of Ohio and links this corridor to existing four lane highway segments in

West Virginia and Indiana. This corridor will enable efficient travel, reducing the burden on Interstates 70 and 76/80/90 (Ohio Turnpike), while connecting mid-size populations centers that are often bypassed or hard to reach using current routes. This route will also connect the ethane cracker plant currently being constructed in Monaca, Pennsylvania to plastics manufacturers in Ohio for final product development, thereby allowing the value addition to remain in the state. This corridor will also establish a more direct link with the public intermodal port in Wellsville, allowing shippers and receivers to take full advantage of the maritime access afforded by the Ohio River.

The proposed improvements would also improve a spur connecting to Carrollton in Carroll County. This may be along SR 43, or another alignment, but would offer the county its first four-lane highway access. As a focal point in the shale oil and gas extraction industry, Carroll County can capitalize on improved connections to more urbanized areas for delivery of their resources and services for their residents.

In 2019, the US 30 RTIP project was awarded \$2 million in Transportation Review Advisory Council (TRAC) funding for preliminary engineering and detailed design to extend the current four lane highway from Trump Avenue in East Canton to SR 44 southeast of East Canton, allowing most traffic to avoid traveling through the village. Please see **Figure 7-1**.

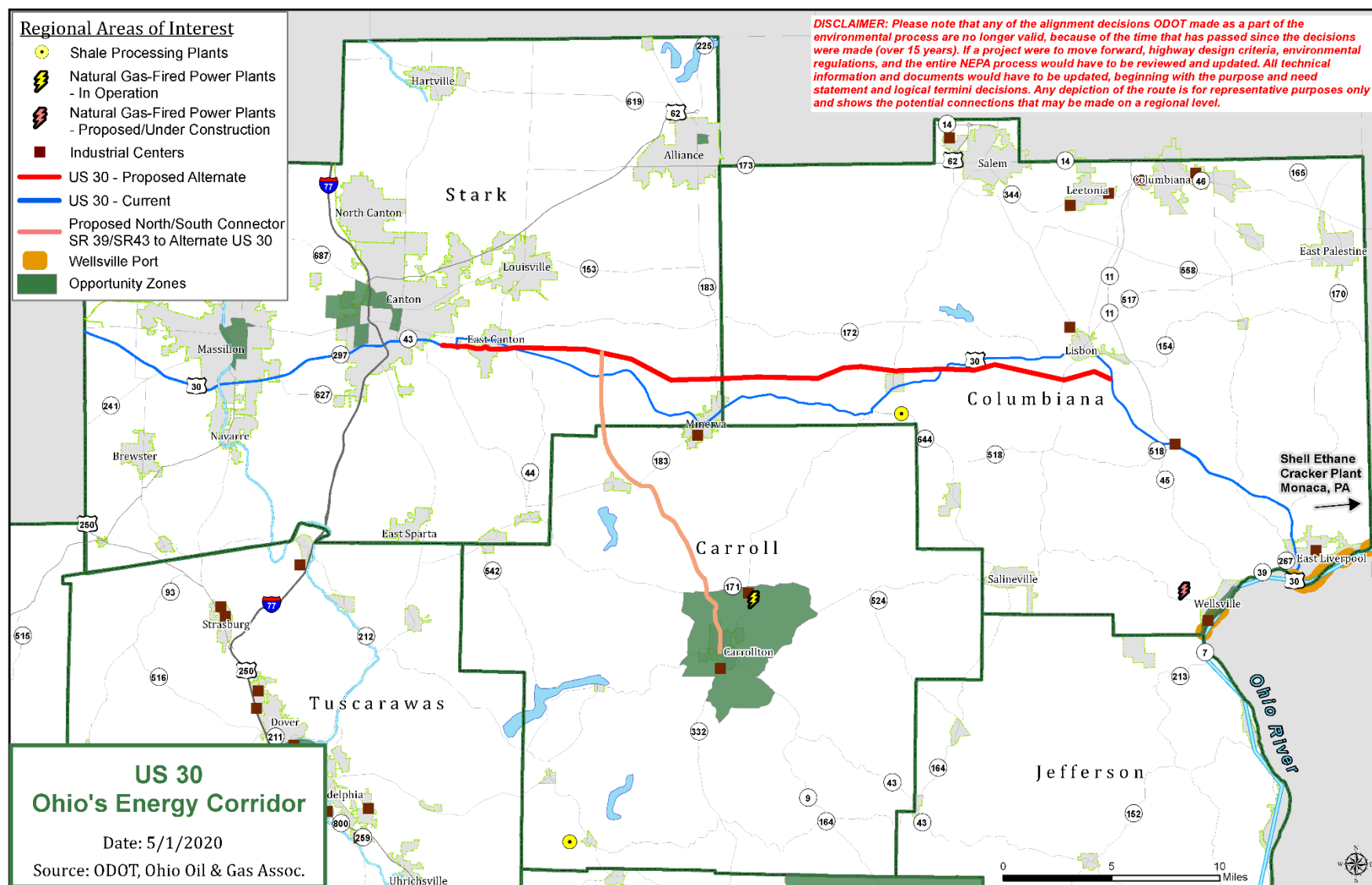


Figure 7-1: Proposed US 30 Corridor (for representational purposes only)

Columbus to Pittsburgh Corridor



OMEGA recommends the completion of a contiguous four-lane corridor through the middle of the RTPD, dubbed the Columbus to Pittsburgh Corridor. This corridor consists of several US and state routes, though potential future alignments for sections of the corridor may be considered as needed to complete the corridor.

This corridor would link two large population centers of over 2 million people each with an efficient corridor for freight and people. It would also serve as a relief valve for the I-70 corridor, which is constrained in areas near Wheeling, West Virginia, and southwestern Pennsylvania from expanding further to accommodate more traffic. I-70 is forecast to have a Level of Service of F in many locations, primarily between Zanesville and Cambridge, by 2045. The Columbus to Pittsburgh corridor would also connect the center of the Marcellus and Utica shale formations to potential end users of the extracted resources.

The corridor starts in the west at I-270 in northeastern Columbus. It is currently a four-lane highway through New Albany and Newark (SR 161/SR 16), transitioning to a two-lane highway near Dresden in Muskingum County. It continues as a two-lane highway until the south side of the City of Coshocton. Here, SR 16 ends and US 36 joins the route. The route is four lanes through eastern Coshocton County and southwestern Tuscarawas County, transitioning back to a two-lane highway again immediately east of Interstate 77. Passing through the villages of Port Washington and Gnadenhutten, this corridor returns to a four-lane configuration west of Uhrichsville and turns into US 250 here. North of Dennison, US 250 turns back into a two-lane highway, remaining so until intersecting with US 22 in Cadiz. Following US 22, it is four-lane from here to Pittsburgh, except for a three-mile two-lane portion near Hopedale, east of Cadiz.

Despite the corridor not being complete, the region's economic development professionals have aggressively marketed the corridor and have been successful in securing over \$5 billion in business investments and brought nearly 10,000 jobs to the area between 2012 and 2017. Over half (52%) of the investments and 80% of the job growth occurred along the portion of the corridor that is already complete. Companies seeking to move to eastern Ohio are often left with few options, as many require reliable and quick access to a four-lane highway for movement of goods and inbound shipments of resources or products. Without the completion of the corridor, southern Tuscarawas and Coshocton Counties, as well as northwestern Harrison County will not be able to compete for major job leads.

Completion of a four-lane corridor would open significant opportunities for additional economic development in the region. The first step in completing this corridor would be updating planning/feasibility studies to incorporate the new economic and community developments that have occurred since the previous studies were finalized. Once the study is complete, it is likely that construction of the corridor would occur in phases, with the Dresden to Coshocton segment and three-mile segment near Hopedale (Harrison County) being completed first.

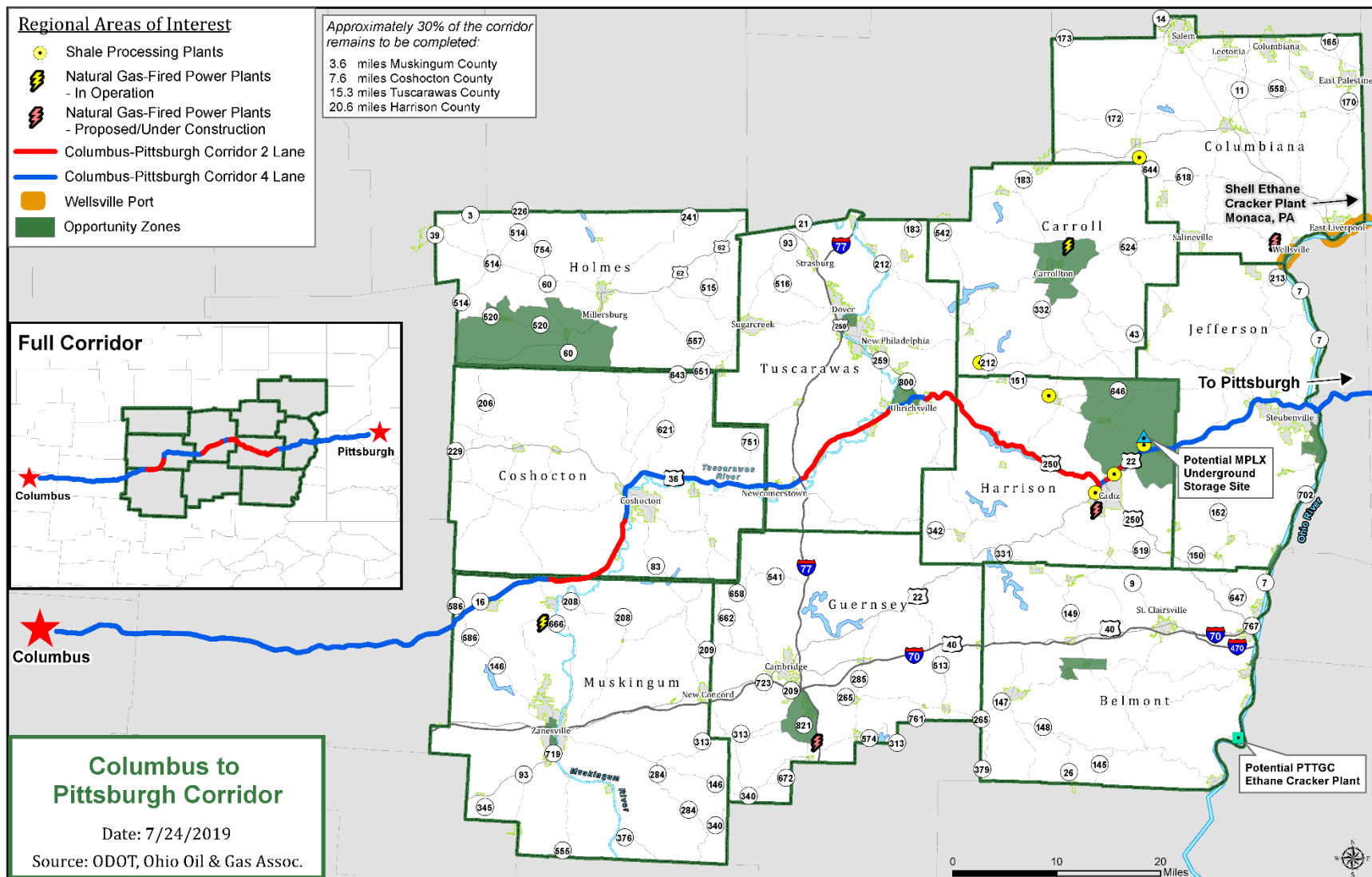


Figure 7-2: Columbus to Pittsburgh Corridor

Proposed Developments

OMEGA supports the construction of the National Road Business Park in Muskingum County, east of Zanesville, as shown in **Figure 4-12**. This project involves constructing an access road and extending water and wastewater farther into the park. These developments will provide large manufacturing, distribution, and/or warehousing end users with the infrastructure that they need to purchase the available land in the park. OMEGA is assisting the Zanesville-Muskingum County Port Authority in applying for funding from EDA for this project.

The D.O. Hall Industrial Park in Guernsey County has undeveloped available land, waiting for an end user. However, the industrial park is located atop of abandoned mine land, in need of substantial remediation before any sizable development can be done. OMEGA is working with the Cambridge – Guernsey County Community Improvement Corporation to apply for Abandoned Mine Land (AML) funding to remediate the property in order to attract businesses to the park.

The Carroll County Commerce Park is located on two state highways and holds multiple development, industrial, and business opportunities. There is excess capacity of water and sewer for the Carroll County Commerce Park located in a semi-rural setting, north of Carrollton, Ohio. The park currently contains Carroll County Transit and Ohio Department of Transportation will locate their county facility in 2020. All utilities are available on the property which is strategically located to capitalize on the growing energy, petrochemical, plastics and polymer industries.

The Columbiana County Port Authority has also identified the need to develop a 50-acre industrial park and is currently assessing potential locations. Once the site is selected, OMEGA will work with the Port Authority on procuring the resources needed to develop the park.

Overall, our regional partners have identified over \$246 million in needed projects. These projects are split into four categories: Transportation, Water, Wastewater, and Other Infrastructure & Initiatives. OMEGA will maintain an updated database with these submitted requests and work with our regional partners to identify and pursue appropriate funding sources.

Project Category	Total Cost
Transportation	\$117,490,500
Water	\$22,804,300
Wastewater	\$78,179,300
Other Infrastructure & Initiatives	\$27,654,200
Total Needed:	\$246,128,300

Table 7-1: Project Needs

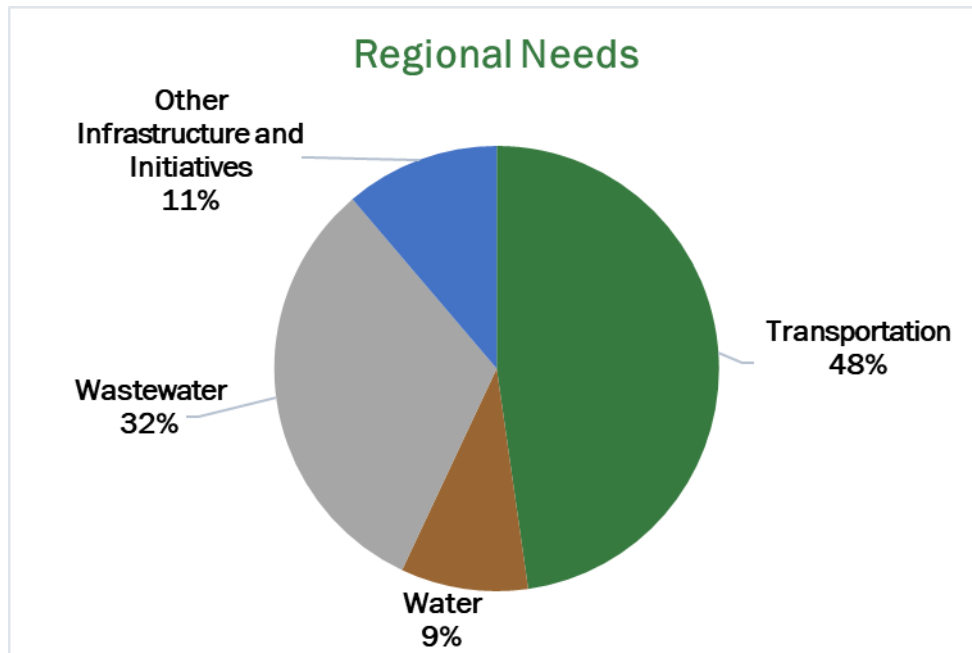


Figure 7-3: Project Needs

OMEGA will provide detailed project lists, by category, in Appendix E. These lists will be reviewed and updated quarterly. A status report of projects added or removed from the plan will be provided to the OMEGA Executive Board during regularly scheduled meetings.

- ✓ Projects will be added as they are submitted by member communities.
- ✓ Projects will be modified upon request of the community.
- ✓ Projects will be removed if the community asks to withdraw the project.
- ✓ Projects will be removed once funding has been obtained and the project is let.

Please note that the total project costs in this section, as well as the projects contained in **Appendix E** are not exhaustive and only contain the projects that have been submitted to OMEGA or that OMEGA staff is aware of due to planning activities.

7.3 Project Evaluation

Statewide and Regional Initiatives

As new state and regional initiatives are developed and implemented in the planning area, OMEGA will adapt existing guidelines and standard practices. A recent example of this was the creation and implementation of a Regional Job Training program by the Governor's Office of Appalachia in 2018. This program was aligned with the mission of OMEGA and is currently being administered successfully by OMEGA. Partners in the program will have until 2021 to complete workforce development activities.

Opportunity Zones

OMEGA views Opportunity Zones as another tool in the toolbox to be used with other development strategies, rather than as a singular tool. While Opportunity Zones are strong incentives for investment in the region, they work best in collaboration with other enticements such as tax abatements, sites being made shovel-ready, and other local incentives. OMEGA recently partnered with Ohio University and Buckeye Hills Regional Council on a grant application to EDA to provide targeted technical assistance to communities for development of the Opportunity Zones.

Additional Evaluation Criteria

Once OMEGA receives capital funding to commit to projects within the RTPD, OMEGA staff, in conjunction with the Transportation Advisory Committee will develop a simple criteria-based rating system to score and prioritize projects, similar in structure to the criteria used by the Ohio Public Works Commission.

OMEGA also recommends that adequate access management principles be followed to ensure the safety of new developments seeking to gain entry onto the existing transportation system.

OMEGA will scrutinize all projects submitted to the RTPD for proper analysis of Environmental Justice considerations. During the project review process, a project's location will be mapped to identify if the project would affect an Environmental Justice Focus Area. Projects not located within an Environmental Justice population would be exempt from further analysis and marked as "N/A." Projects that are located within an Environmental Justice population area will then be subject to further qualitative review by the control variables listed below to evaluate the impacts of projects that are in minority or low-income areas:

Consideration will be given to:

- Safety
- Congestion
- Aesthetics
- Natural Environment
- Local Economy
- Residents
- Accessibility

As outlined in Section 1.4 of this plan, OMEGA will annually review the status of each goal, objective, and related strategy. A progress report or “score card” will be presented to the OMEGA Executive Board in mid-September and to ODOT in late September along with the RTPD Work Plan Completion Report. This progress report will also be added to the larger update provided to the EDA semi-annually each October.

Access Ohio 2045 (AO45) Strategies and Tasks

OMEGA is a member of the Steering Committee for the development of Ohio’s statewide transportation plan. As a regional planning partner, OMEGA will support the state long-range transportation plan’s strategies and initiatives that are applicable to our region and mission, in order to benefit and effect positive change throughout the region. These strategies and tasks are outlined in **Table 7-1**. This table is an adaptation of the AO45 table, created by the statewide planning staff and their consultants. Initiatives that are in light gray are not applicable to the OMEGA region.






Theme	Strategy	Nickname	Initiatives
 Safe	A Ohio will champion initiatives leading to zero transportation deaths and injuries.	1 - Laws	Strengthen transportation safety laws – distracted driving, seat belts, work zone speed limits, and child passenger safety.
		2 - Partners	Enhance collaboration among state and local safety education, enforcement, engineering, and emergency response agencies to achieve zero deaths and injuries.
		3 - Initiatives	Proactively implement proven transportation safety policies, processes, programs, and initiatives.
	B Ohio will proactively address transportation safety, security, and environmental risks.	4 - Risk	Identify and mitigate transportation facilities at risk from extreme weather events.
		5 - Security	Identify and mitigate transportation security risks, including cybersecurity risks.
 Smart	C Ohio will leverage technology and data to improve transportation safety, efficiency, and reliability.	6 - Asset Management	Maintain transportation networks (including enabling technologies) in a "state of good repair."
		7 - Operations	Employ Transportation System Management and Operations (TSMO) strategies to address congestion and improve reliability.
	D Ohio will evolve its transportation system for a connected and autonomous future.	8 - Infrastructure	Enable partners to test and deploy advanced vehicle technologies through supporting infrastructure improvements.
		9 - Alternative Fuels	Accommodate adoption of alternative fuel vehicles.
 Connected	E Ohio will enhance critical elements of its transportation system to optimize safe, efficient, and reliable movement of people and goods.	10 - Broadband	Make highway right-of-way assets available to assist in closing gaps in broadband and cellular infrastructure.
		11 - Multi-modal	Advance ongoing planning and investments to Ohio's multi-modal transportation networks, with emphasis on connectivity among modes.
	F Ohio will develop transportation plans for major statewide and regional transportation corridors.	12 - Corridor Plans	Develop multi-modal corridor plans that consider local land use and economic development decisions.
 Collaborative	G Ohio will strengthen its transportation partnerships.	13 - Steering Committee	Continue to strengthen partnerships with other organizations at the state, regional, and local levels.
	H Ohio will expand the transparent use and sharing of transportation data and information.	14 - Data Sharing	Establish protocols to seamlessly and securely share transportation data among partners.
		15 - Highway Funding	Investigate and pursue long-term sustainable funding strategies to reduce reliance on motor fuel tax, such as vehicle miles traveled (VMT) fees.
	I Ohio will advance innovative and sustainable transportation funding options.	16 - Transit Funding	Investigate and pursue long-term sustainable transit funding strategies.
		17 - P3	Pursue public-private partnerships to jointly finance priority transportation projects.
 Community-Oriented	J Ohio will advance transportation investments that expand the state's economy and workforce.	18 - Access to Jobs	Continue to prioritize transportation system investments that grow the economy and improve access to jobs.
		19 - Economic Development	Identify and promote locations for economic development with good transportation access and compatible land uses.
		20 - Values, Health, Equity	Support multi-modal transportation investments that align with community values, public health, and equity.
	K Ohio will advance a transportation system that improves quality of life for all users and moves communities forward.	21 - Aging/Disabled	Promote accessibility and mobility for an aging population and persons with disabilities.
		22 - Environment	Continue to avoid, minimize, and mitigate environmental impacts from transportation projects and operations.
		23 - Local Transit	Increase opportunities for local investments in transit through ODOT's funding programs.
	L Ohio will increase access to transit and shared mobility services.	24 - Coordinated Services	Coordinate regional public transit and human service transportation.
		25 - Mobility as a Service	Advance Mobility as a Service (MaaS), including first/last mile connections.
	M Ohio will advance safe walking and bicycling as a convenient transportation choice for everyone.	26 - Bike Network	Complete designation of the U.S. and state bicycle network and promote connections to local networks.
		27 - Bike/Ped Plan	Complete the Statewide Bicycle and Pedestrian Plan, including adoption of a Complete Streets Policy.

Table 7-1: Access Ohio 2045 Themes
Regional Transportation & Development Plan

7.4 Fiscal Constraint

Appalachian Regional Commission (ARC) /Governor’s Office of Appalachia (GOA) Projects

OMEGA annually solicits pre-applications for projects seeking ARC or GOA funding. ARC and GOA funding is designed to be “gap” financing, or the last funding needed to complete a project. To qualify, OMEGA verifies the information on the pre-applications to determine that all other funding is or will be committed to the project when the complete application is submitted. The projects are scored against established rating criteria and presented to the OMEGA Executive Board for approval. This rating criteria is adjusted as criteria, goals, or objectives are changed. Once approved, OMEGA assists applicants to complete the full funding application for submission to the appropriate state or federal agency.

Projects with Federal, State, or Local Funding Sources

OMEGA assists with grant writing services for communities to pursue various federal, state, and local/private funding sources. As a part of this service, OMEGA will ensure adequate matching funds are in place for the funding opportunity in order to construct, operate, and maintain the proposed infrastructure, equipment, program, or other improvements.

Transportation Projects

Projects contained in this plan are not fiscally constrained, as many projects are in initial concepts, and have not had a detailed cost estimate completed. Once a project moves forward, costs are detailed, and funding is pursued, OMEGA will ensure that projects are properly balanced between federal, state, and/or local shares. If a project receives funding and is programmed by ODOT for completion, it will be removed from this plan and added to the current Regional Transportation Improvement Plan (RTIP).

Per Federal regulations, for a project to be included in the RTIP and therefore included in the Statewide Transportation Improvement Plan (STIP) reasonable fiscal constraint must be maintained. Fiscal constraint is maintained by keeping estimated transportation improvements within identified budgets. Since OMEGA does not currently receive sub-allocated funding, the ODOT STIP addresses fiscal constraint for these projects.

Appendix A – Public Survey Results

Appendix A – Public Survey Results

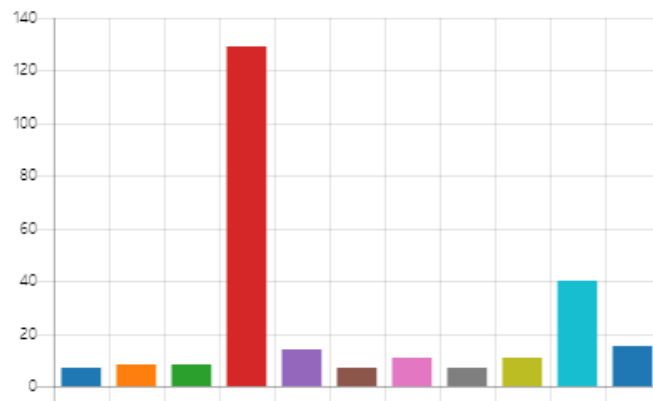
In July 2019, OMEGA released a public survey to initiate the planning process for the update of the Long-Range Transportation Plan and the Comprehensive Economic Development Strategy. This survey was available both online and as a paper copy if requested. The survey was publicized on local television stations, radio stations, newspapers, social media, and the OMEGA website. The survey was closed on November 30. There were a total of 257 responses.

Q1: In what county do you live?

1. In what county do you live?

[More Details](#)

Belmont	7
Carroll	8
Columbiana	8
Coshocton	129
Guernsey	14
Harrison	7
Holmes	11
Jefferson	7
Muskingum	11
Tuscarawas	40
Other	15

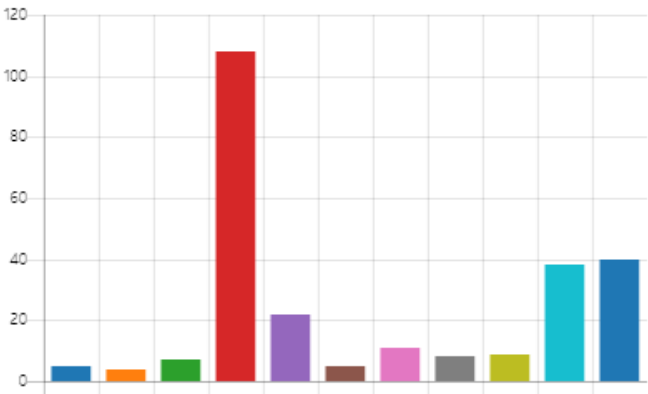


Q2: In what county do you work?

2. In what county do you work?

[More Details](#)

Belmont	5
Carroll	4
Columbiana	7
Coshocton	108
Guernsey	22
Harrison	5
Holmes	11
Jefferson	8
Muskingum	9
Tuscarawas	38
Other	40

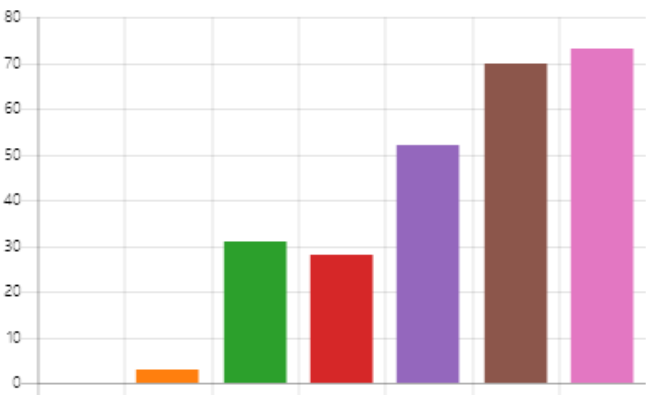


Q3: What is your age group?

3. What is your age group?

[More Details](#)

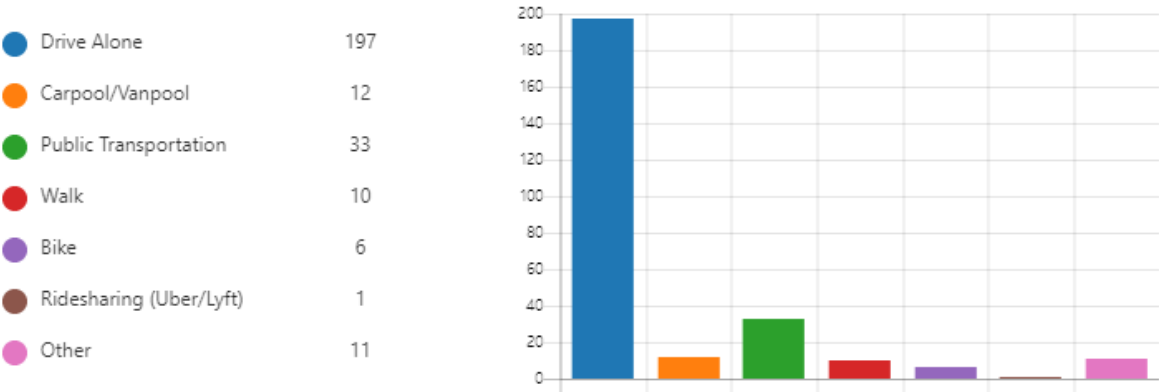
0-14	0
15-24	3
25-34	31
35-44	28
45-54	52
55-64	70
65+	73



Q4: How do you typically get to your primary destination (work, school, shopping, etc.)?

4. How do you typically get to your primary destination? (Work, school, shopping, etc.)

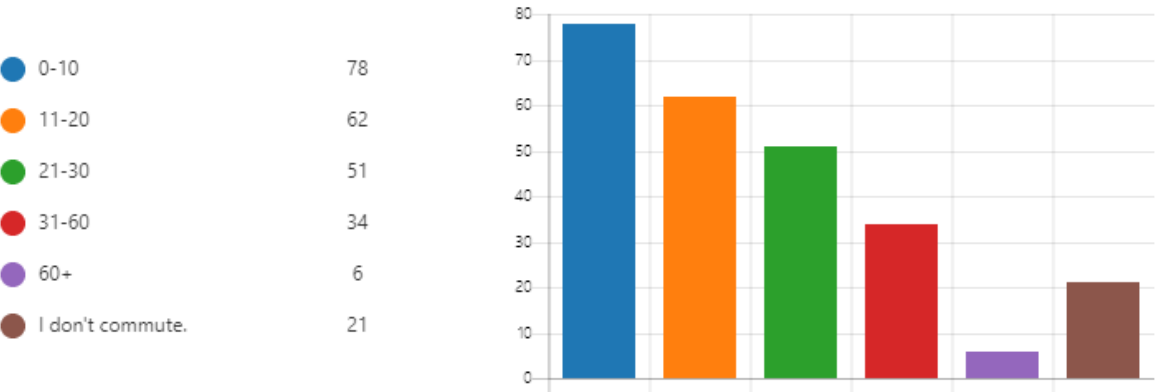
[More Details](#)



Q5: How long does your normal commute take (in minutes)?

5. How long does your normal commute take (in minutes)?

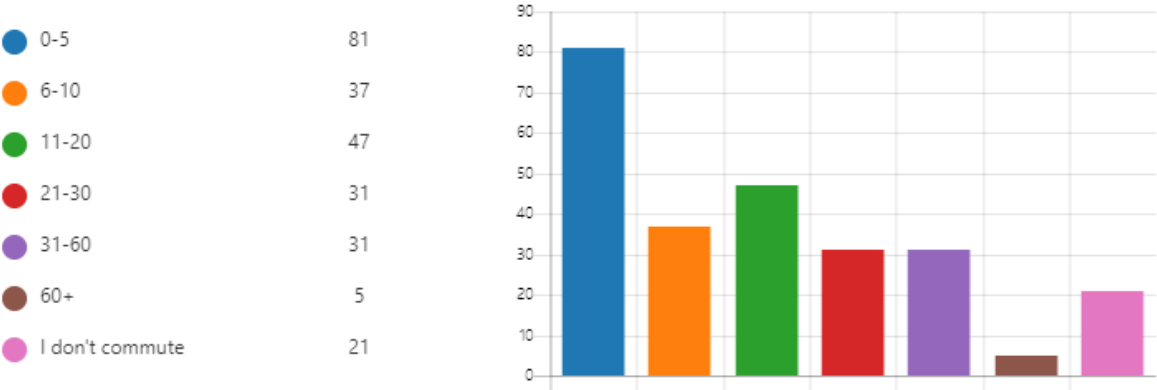
[More Details](#)



Q6: How many miles is your normal commute?

6. How many miles is your normal commute?

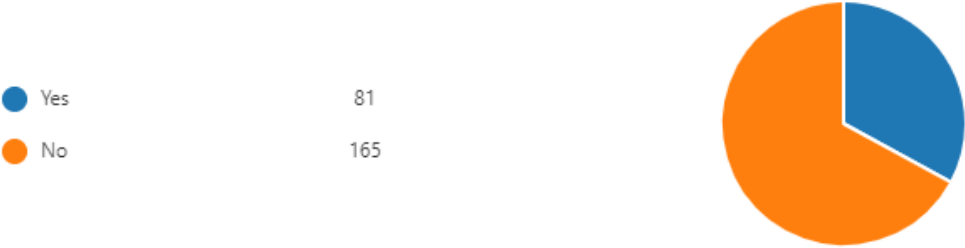
[More Details](#)



Q7: Have you used public transportation within our region within the past year?

7. Have you used public transportation within our region within the past year?

[More Details](#)

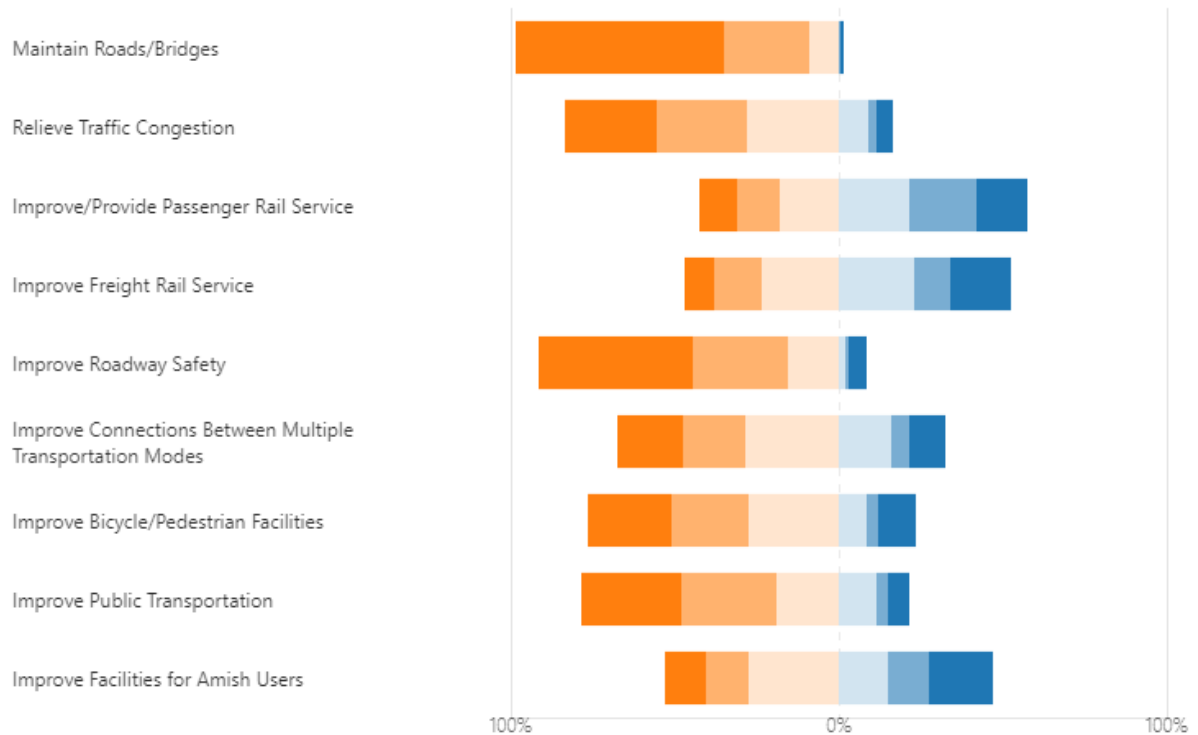


Q8: Transportation Priorities

8. Transportation Priorities

[More Details](#)

Extremely Important Very Important Important Less Important Not Important No Opinion

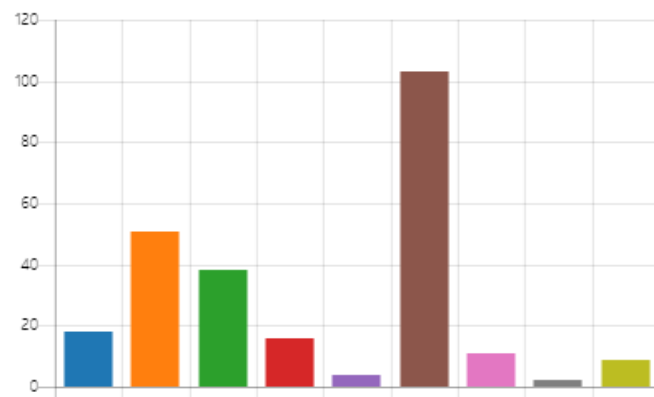


Q9: Of the topics listed, what is the most important to you?

9. Of the topics listed, what is the most important to you?

[More Details](#)

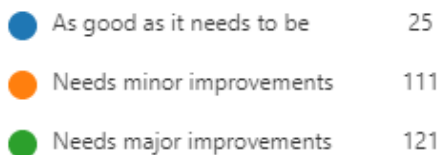
Relieve Traffic Congestion	18
Improve Roadway Safety	51
Improve Public Transportation	38
Improve Bicycle/Pedestrian Fa...	16
Improve Facilities for Amish U...	4
Maintain Roads/Bridges	103
Improve/Provide Passenger Ra...	11
Improve Freight Rail Service	2
Improve Connections Between...	9



Q10: In your opinion, Ohio's transportation system is...

10. In your opinion, Ohio's transportation system is...

[More Details](#)



Q11: In what areas are improvements needed?

11. In what areas are improvements needed?

[More Details](#)

158

Responses

Latest Responses

Survey ID #	Answer to Question 11
1	Rail service to small towns
2	infrastructure (cracking bridges, rough roads)
3	I feel that Guernsey County needs to make it easier/safer/more accessible for people who would like to bike and walk.
4	Safety and congestion mitigation. The network needs to be robust and multimodal.
5	I-70 and congestion
6	Every new construction or maintenance project is a chance to improve walking/biking. Currently, most projects perpetuate the poor designs of the past rather than modernize. These are missed opportunities and not the best use of our tax dollars.
7	Bike lanes or separate trails/paths so bicyclists can avoid the roads completely.
8	4-lane expansion on US 36
9	Funding to local governments to address road and bridge problems
10	The system must be made multimodal and less auto centric in urbanized areas
11	Intersection design, relieving traffic congestion, preventative maintenance
12	Greater emphasis on multi-modal transportation infrastructure, including bicycling, trails and rail.
13	In areas where economic development is taking place or planned to take place.
14	More funds needed for roadway improvements although the new gas tax will provide a very modest increase for repairs. Columbus to Pittsburgh corridor four lane needs completed.
15	The need for a truck lane on the interstate highway system is important because of the increased number of trucks on the highways.
16	Township Roads
17	Correct water runoff.

18	many of the major highways and some bridges are in disrepair. They need attention. Paving, storm water drainage, and wider intersections where oil and gas trucks travel need attention
19	major routes need major repairs
20	Maintenance of roadways in rural roads.
21	Better road maintenance and the state needs to better serve local communities by providing additional funds for state routes that go through the cities.
22	Asphalt repair and replacement
23	Annual Maintenance is way behind in trying to keep the road surfaces in even fair condition.
24	More visible road lines, better signage
25	Safety, roads, bridges, bike/walkways
26	infrastructure maintenance, road/highway development with pedestrian safety and future transit modes in mind, expanded public transit, public transit that links multi-counties and crosses state lines, hyperlinks - fast automated transit linking major cities within the state (and INCLUDING SMALLER TOWNS)
27	Improve safety and greatly improve pedestrian/bicycle infrastructure.
28	Ohio's rail freight and rail passenger system is a disgrace--the "big" railroads (CSXT and NS) seem focused on how to NOT serve and are doing no effective Marketing. Passenger service?? A forlorn joke. Even Michigan, yes, Michigan is well ahead of Ohio in promoting rail service.
29	Road conditions are deteriorating.
30	Funding seems to be an issue. Applicants for funding need more training.
31	more funding to repair village streets
32	Improved highway connectivity between a few cities, such as a secondary route from Steubenville to Columbus and Steubenville to Canton.
33	The County and Townships roads are in need of repair
34	Safety and facilities for bikes and pedestrians
35	potholes; congested in major cities, not enough airport traffic. not enough trails for hiking/biking/ walking to work. train service between more cities.
36	Traffic congestion, road conditions improved
37	Secondary roads in Licking need paved. Some are half paved, then muddy stone. Very unacceptable in this day and age!
38	I-70 between the Columbus, OH area and the Wheeling, WV area seems overly congested. The frequency and severity of accidents, causing long traffic delays, seems to be on the rise. Potential relief of some congestion on I-70 on this half of the State should be considered.
39	Repairs
40	Audit ODOT for wasted money. Regular maintenance on roads
41	Improved infrastructure (rehabilitated roads and bridges)
42	Remove statue in Somerset. Create a true round about at intersection of 22 and 13.
43	More width and signage, especially on state and county roads; more options for public transportation.
44	Traffic flow patterns.
45	Interchange between I-77 and Rt. 250 in New Philadelphia needs major redesign.
46	Always room for additional safety measures as well as repairing State Routes that need repaired specifically intersections that are used for heavy truck traffic
47	Many Bridges need replaced or renovated. More funding is needed to keep up with the cost of repairing and repaving.
48	Railroad service in Eastern Ohio to emerging petrochemical manufacturers and to develop passenger excursions. We need to get more of the load weight of semi-tractor trailers onto rail cars to reduce the cost of road repair. Bike and walking paths that link communities and promote recreational tourism.
49	to keep the maintenance up by cleaning ditches and chip and seal where it can.
50	Maintain roads

51	Need affordable transportation
52	Affordable Transportation options
53	need affordable public transportation
54	need affordable public transportation
55	Need affordable public transportation
56	need affordable public transportation
57	Prioritizing the Pittsburg to Columbus corridor. Improving timeliness of road and bridge repairs.
58	Determining where funds go.
59	Tuscarawas County desperately needs pedestrian/bicycle paths and improved public transportation.
60	Better funded service in all areas, new/more service in rural areas, intercity rail passenger service.
61	Bridge maintenance
62	For example, we have no simple rail. For what cities lose in busing a rail could line the sidewalk in some cases and transport people back and forth, and it could be cleaner than petrol. A lot of these house line congested roads like maple avenue in Zanesville and gas is just burning as traffic is stuck at a red light for almost no reason. Then poor people have the worse routes ever to get to their supplies. We need to remove a lot of downtown traffic lights and rural traffic lights to align with reality a little better and then continue to offer more modes then car routes because congestion really can be disgusting.
63	Traffic congestion intersections
64	Road slips
65	bridges and roads need repair. interstate highways need to be 3 lanes wide.
66	The roads and bridges are so bad with pot holes everywhere and bridges in need of major repairs plus not enough public transportation throughout the area plus we can have passenger trains buses and boats along the river even if it's across the area especially in areas where you have no bridge and have to drive many miles north or south just to go across the river
67	Better road upkeep.
68	Actually, fix roadways not just hinder traffic while pretending to do same, Additional roads are not necessary
69	Focus on the State Routes.
70	.
71	Bicycle paths, smoother roads
72	Crews are patching same holes every year, multiple times per year. Use a compound that will last, that can withstand all seasons.
73	Bring back the trains and put busses everywhere!
74	Efficiency gains may be made by completing networks and proactively learning where new growth is/will occur.
75	state route 16 upgrade
76	Inattentive driving--cell phone usage is out of control. I even typically see sheriff deputies on them while driving--not hands free--very poor examples to public
77	Temporary "patches" made to roads are a waste of time. They really do not improve the road for long. My biggest beef with Carroll county roads are the county roads that have little to no markings anymore. In the winter and in rain, it's very difficult to tell where the road is.
78	Safety
79	Increased funding for Rural Transit programs
80	road maintenance and bicycle facilities
81	I think more patrol officers are needed to catch reckless drivers, people using cellphones, speeders and people who drive like they are idiots.

82	Better facilities for bike/pedestrian traffic in rural areas. I'm not sure if spending tax dollars in these rural isolated areas to improve or provide facilities for bicyclist and pedestrians can be justified.
83	Enforce Speed Limits
84	Teaching Amish kids safety rules
85	Road Safety
86	4-lane in Carroll County. Small shuttle services within village of Carrollton with drop off spots.
87	More funding for counties and municipalities to maintain their roads and bridges. Potholes, patching, paving, and snow removal. Lack of sidewalks in business districts. More commute focused bike route options in addition to recreational.
88	Railways and highways into those areas of Eastern Ohio targeted by petrochemical energy producers and manufacturers.
89	Better roads all the way around.
90	Fix/maintain deteriorated roads and bridges before they need complete replacement.
91	Safety and resiliency
92	In less populated areas. The cities are ok
93	More resources to local governments for local streets
94	High truck traffic close to oil/gas facilities and roads cannot accommodate traffic
95	I can't name specifics but believe there are always ways to improve upon what we are doing otherwise we would be living in a perfect world.
96	Roads Bridge passenger rail
97	More public transportation, maps of available hiking/biking Trailways.
98	Connection between multiple transportation modes. More public transportation
99	Buggy lanes, tractor hauling Amish. Electric bikes, harder to pass. Amish road safety
100	Improve capacity on rural interstates and dependable funding for planning & paving projects
101	Creating a network for residents in rural communities so crossing county lines is efficient and cost effective.
102	rural funding
103	congestion and safety
104	More public transportation for those without personal vehicles.
105	improve Amish roadways; improve bikeways, public transport. Especially to airports
106	extra lanes for horse/bicycle traffic
107	Need more options for public transportation.
108	Funding needs to be in place where systems can plan instead of planning for 6 months, then chasing down grants. It would also be nice to see the different county systems set up transfers between each other if someone wants to change between (for example) CCCTA and TuscBus.
109	Rural road care
110	Accessibility and availability
111	"Separate lanes for passenger vehicles and semi-trucks and other work vehicles. More roads having lights for nighttime driving."
112	bridges and resurfacing county and townships
113	Buggy lanes; tractor hauling Amish; electric bikes (hard to pass); Amish road safety
114	Improve connections
115	Traffic Congestion
116	Improve Connections
117	Transportation vehicles and office
118	Congestion in bigger cities
119	For disabled, there is no transportation if you are under 60 (Coshocton County)
120	Amish need to use a blinking light or orange safety sign. We have a lot of Amish and a lot of them have no way to be seen at night, not to mention horse poop everywhere! Also paving the roads so we don't have to drive like we are drunk because we are trying to dodge potholes.

121	Sidewalks and public transportation
122	Public Transportation
123	Public transportation for rural areas, primarily for work
124	Safety during inclement weather and add more public transportation routes such as bus lines to more rural areas, like Zanesville, Coshocton, Newark, Cambridge, and New Philadelphia
125	storm drains need cleared
126	take people to dialysis @ 5:00am
127	main street storefronts
128	Main street in Coshocton the buildings and roads
129	need more done on the street get fix
130	Coshocton - Walnut Street
131	accept all needs for people
132	shuttles can always be updated.
133	potholes need fixed, more public transit
134	Potholes need fixed and more public transit
135	Bike/Walking paths - Designate walk area for Ridgewood students to school - Wall Street
136	Better lighting, wider roadways
137	local transport
138	maintain roads
139	roads
140	Roads
141	All Areas
142	Transportation gas voucher for long runs to those that drive themselves (instead of waiting for ride)
143	Roads
144	Remove potholes
145	Easier ability to receive transportation if/when needed for out of town, very rural residents
146	Handicap access
147	Streets in Coshocton
148	Streets that are littered with potholes aren't getting fixed when streets that are relatively fine, are getting fixed
149	Free local transportation
150	Gas voucher would work better than public transit
151	need more buses and take people to shop and to jobs
152	side roads
153	Having an escort/caregiver go with me on public transit
154	road work improvements
155	N/A
156	Pave potholes, better lighting at interchanges
157	Making available transportation more comfortable for the disabled and their accompanying counterparts
158	Public transportation should include trips to restaurants, shopping at out of town malls, trips for entertainment purposes, not just for medical appointments.

Q12: How much of an impact does economic growth have on the region’s transportation network?

12. How much of an impact does economic growth have on the region's transportation network?

[More Details](#)

Significant Impact	184
Some Impact	62
No Impact	4

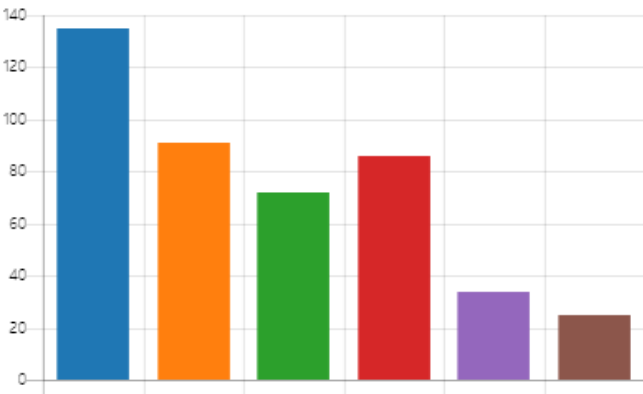


Q13: What improvements would make your commuting experience better?

13. What improvements would make your commuting experience better?

[More Details](#)

Making pavement smoother	135
Improving the visibility of pav...	91
Increasing shoulder width	72
Additional lighting at intersect...	86
Additional signage	34
Other	25



Q14: Have you noticed more unsafe driving behaviors due to distracted driving in the past three years?

14. Have you noticed more unsafe driving behaviors due to distracted driving in the past three years?

[More Details](#)

Yes	223
No	28



Q15: Have you noticed more unsafe driving behaviors due to impaired driving in the past three years?

15. Have you noticed more unsafe driving behaviors due to impaired driving in the past three years?

[More Details](#)



Q16: In your opinion, what is the most important transportation concern facing the region today?

16. In your opinion, what is the most important transportation concern facing the region today?

[More Details](#)

116

Responses

Latest Responses

Survey ID #	Responses to Question 16
1	Distracted driving
2	Lack of rail transport
3	infrastructure and distracted driving
4	maintainine infrastructure
5	Distracted drivers
6	maintaining the existing infrastructure and provide alternative options for people to travel
7	Roads not fixed well
8	Distracted driving
9	Fixing the bridges on county roads
10	Maximize economic benefits of recreational trail (towpath) as the potential to bring wealth to the region
11	Distracted driving. I assume at some point I will be hit on my bike. Drivers texting or posting or otherwise playing with their phones make this almost inevitable. I wear bright clothing and have flashing lights but have still had close calls. I don't know if laws/penalties like the ones that protect highway workers would help, but they seem like a reasonable first step.
12	The increasing large truck traffic competing with cars/trucks
13	Lack of funding
14	Distracted driving
15	Funding to appropriately maintain roads and bridges.
16	Multi-modal transportation options, including bicycling, walking and rail
17	Lack of state investment in improving areas where economic development and new business investment has taken place.

18	Poor paving and aging traffic signals.
19	Increase the attention span of drivers.
20	The ever-increasing oil and gas trucks on the highways. A lot of them running red lights and not observing all of the highway signs and rules
21	The township & county roads are in great need of improvements.
22	Public transportation
23	Paving, paving, paving
24	money to maintain roads and bridges
25	Help local communities in maintaining their streets and highways.
26	Road Maintenance.
27	Aging roads
28	Lack of alternatives transportation option. No ride hailing service, public transportation is a Joke. No strong taxi services. Don't even have adequate pedestrian facilities for people walking. In this region, you can still survive without your leg, but not without your personal vehicle.
29	The condition of our infrastructure.
30	Safe roads
31	Roads/bridges. No public transportation for those who need it. Roads are not safe to bike or walk or for Amish
32	Areas and times of service are too limited in the public transit systems and public transit is not gearing up for future transit, like automated vehicles or high-speed connector trains.
33	Not enough accommodations for pedestrian/bicyclist. Roads need more work done to them (lack of funds?)
34	Decline of aggressively marketed and effectively operated rail service.
35	Deteriorating road surfaces and bridges.
36	Drug users driving.
37	keeping people off of their phones while driving
38	Highway and bridge maintenance
39	Distracted drivers due to cell phone use
40	Let's assist with aiding the purchase and development of the Dennison to Dover rail line. This will create more opportunities for economic development through tourism and commerce.
41	lack of funding for infrastructure improvement.
42	Infrastructure needs updated.
43	Multiple road closures at the same time, creating more congestion. Add school busses to the mix and getting around Muskingum County is going to be an even bigger pain in the patoot
44	People looking at their phones while driving! Not paying attention to the road!
45	Preparing for transportation needs to support the local economy and better connectivity of the Pittsburgh area to Jefferson, Muskingum, and Franklin counties.
46	Repairing of existing roadways.
47	the need for a 4-lane highway in Harrison county
48	Road safety (potholes, etc.)
49	distracted and impaired driving.
50	Continue to upgrade roads, in particular with regard to oil and gas counties. Also, a better plan to alleviate congestion in communities with a major retail presence.
51	Distracted driving, there is not enough education to the motoring public of how dangerous distracted driving is. Awareness needs to be raised for this important issue, possibly the investment of signs along the Interstates and high-volume traffic State/U.S. Routes (such as the distracted driving corridor along I-90).
52	dangerous intersections.
53	Safety is #1. Bridge & road safety needs attention. Distracted driving is a problem. I would love to see more bike paths to make it easier & safer for people to bike.

54	Living in Holmes county E bike safety is a major concern. I am constantly coming up behind E bikes on a road with no bike lane and they are traveling so fast it is hard to pass, also there are so many bicycles on the road and it's hard to judge which are regular bikes and which are e bikes. Example: When they first came out, and I didn't know they existed, I was passing a buggy on a small country road. I saw in the far away distance a bike coming the other direction. I completely misjudged and by the time I had passed the buggy the bike was closer than I liked it. It was an e bike and I had thought it was a regular bike.
55	Lack of revenue to repair bridges, roads and highways
56	Roads are not keeping up with the economic development of specific areas.
57	The lack of attention being paid to Eastern Ohio's transportation needs today and in the future.
58	safe width of the roads and a lane for buggies, bike and walkers.
59	Poor road maintenance
60	Distracted driving. People looking at their cell phones/texting.
61	Access to transportation
62	access to transportation
63	Having access to transportation
64	having access to transportation
65	Having access to public transportation
66	The amount of traffic as compared to the improvements to the transportation system.
67	Fast access to metropolitan areas.
68	pedestrian/bicycle paths
69	cell phones
70	Distracted driving
71	Lack of funding.
72	Impaired driving
73	no sustainable way to move people on rail and bike which may be important to alleviate poverty, reduce congestion and pollution and put more money into other areas of the economy instead of continually investing in an un sustainable model that is centered around car
74	No transportation in most places
75	Traffic patterns and congestion
76	Condition of roads and bridges
77	keeping up with the maintenance of the roads. they get repaired but they don't last
78	Unsafe roads and distracted drivers
79	Distracted drivers.
80	terrorists (aka tourists)
81	Deteriorating infrastructure.
82	Our Amish population is increasing, and it is hard to pass them at times. Also, the shoulders are narrow, so bicycles have no room to get over for passing cars.
83	Get the Amish off the roads or at least make them have more laws like we do.
84	The lack of options for long distance travel hurts the economy. Not everyone can afford a car, and the congestion and parking dilemmas that occur when too many people drive also delay commerce.
85	cell phone usage
86	Ohio 16 upgrade to four lanes. Traffic on this highway is at an all-time high. Unable to pass due to congestion. Time for this upgrade to happen!
87	In all honesty, probably the idiots who don't care what the laws are.....they speed, they pass on double yellow lines, they blow through red lights, etc. You can't fix stupid. I just pray they don't kill someone with their stupidity.
88	road maintenance and drivers using electronic devices

89	Rural areas that have a lot of senior citizens need transit for transportation. Especially for out of town trips to doctors. It is a great service for seniors who no longer drive.
90	Congestion and the time it takes to resolve this complicated condition.
91	Need to enforce speed especially in New Bedford (COS). Speed is 35 and you see a lot going over that
92	Electric bikes
93	Bicycles, judging distance
94	4 lane and rail improvements.
95	Increase in freight/semi-truck traffic creating congestion
96	distracted driving
97	The rising cost of road repair due to heavy truck traffic. Much of the weight of semi-truck loads should be transferred to rail, thus decreasing the damage. More inter-modal facilities should be built so that goods and products could be delivered shorter distances by truck.
98	4 lane highway on SR 16 south of Coshocton
99	Our region is lacking the funds to maintain our infrastructure. Additional funding should come from the users.
100	Resilient infrastructure
101	Increased traffic
102	Gas and oil drivers disregarding safety rules already in place.
103	Truck traffic
104	As always FUNDING...
105	Roadways can't handle today's traffic.
106	lack of flow with signal lights
107	Public transportation
108	Price of gas. Amish need to know public safety rules. Bicycle riders need helmets. To be able to see 500 feet ahead of you. Bikes need helmets. E bikes harder to pass
109	Distracted drivers using cell phones while driving
110	Funding and education
111	Safety
112	resurfacing and bridges
113	Wider shoulders for Amish users
114	safer walking paths for Ridgewood students. Wall Street - West 15th to Middle and High School. Thank you!
115	My wife does not drive so having a ride to go shopping would be something she would like very much!
116	#1 Road lighting on rural county roads

Appendix B – Broadband Coverage

Connected Nation's mapping program derives the following broadband data through a combination of direct communication with service providers, FCC Form 477 broadband coverage and subscription data, verified public feedback, and independent research conducted by Connected Nation Ohio.

As part of the data collection and verification process, Connected Nation first attempts to request granular broadband coverage data directly from service providers. If the provider is unable or unwilling to provide granular service coverage data for the development of a detailed service area, then the FCC Form 477 data is used. The FCC Form 477 is much broader; providers are only required to submit service coverage data at the census block level. In other words, if one person in a census block has broadband coverage, the provider may report the entire census block as having coverage. This may be problematic in rural areas where census blocks can be very large. For example, in the OMEGA region, census block areas can range from 0.000002 square miles in more developed areas to approximately 6.5 square miles in more rural areas.

Please note, for the general representative nature of these maps, all square mileage calculated is approximate.

Disclaimer: Service availability is based upon best available data and may not reflect actual areas serviced. These maps are not a guarantee of internet service availability.

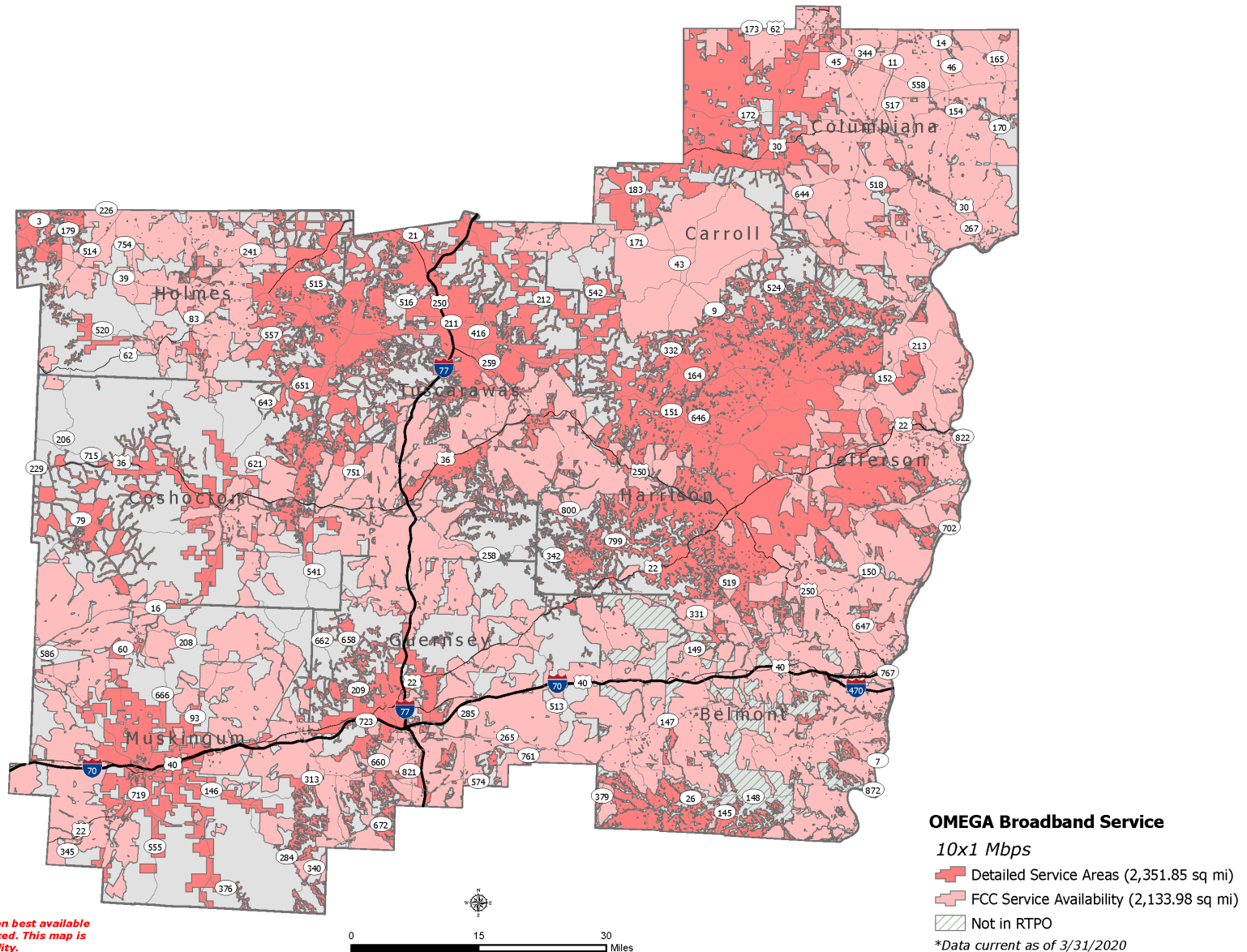
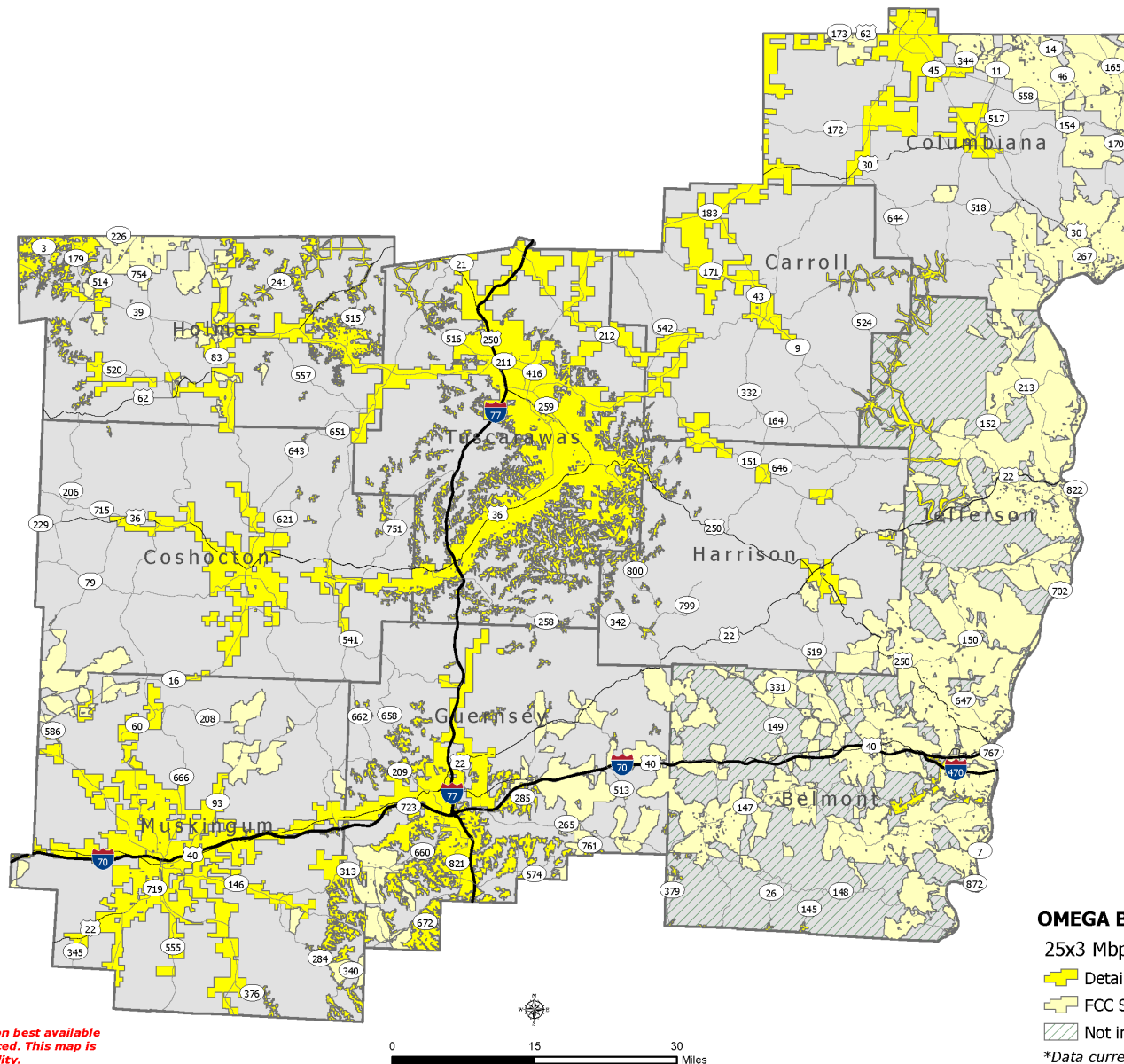


Figure B-1: Broadband Service Coverage – 10 x 1 Mbps

Figure B-1 shows broadband service coverage for the OMEGA region with speeds of 10 Mbps (Megabits per second) download and 1 Mbps upload. Detailed Service Areas (granular) and FCC Service Availability (non-granular) are color-coded separately. This data is provided by Connected Nation, current as of March 31, 2020.



Disclaimer: Service availability is based upon best available data and may not reflect actual areas serviced. This map is not a guarantee of internet service availability.

OMEGA Broadband Service

25x3 Mbps

Detailed Service Areas (904.40 sq mi)

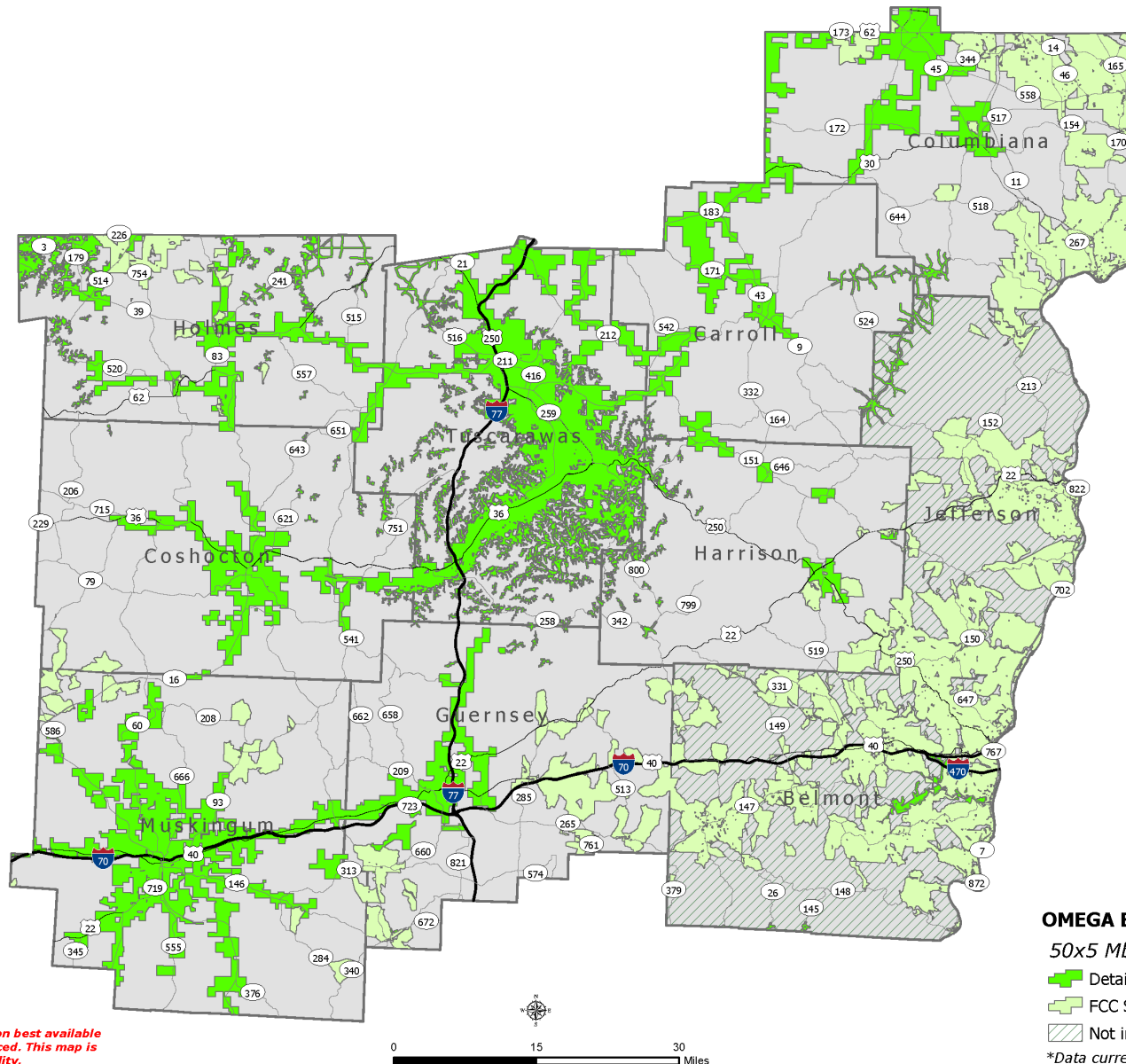
FCC Service Availability (785.11 sq mi)

Not in RTPO

**Data current as of 3/31/2020*

Figure B-2: Broadband Service Coverage – 25 x 3 Mbps

Figure B-2 shows broadband service coverage for the OMEGA region with speeds of 25 Mbps (Megabits per second) download and 3 Mbps upload. Detailed Service Areas (granular) and FCC Service Availability (non-granular) are color-coded separately. This data is provided by Connected Nation, current as of March 31, 2020.



Disclaimer: Service availability is based upon best available data and may not reflect actual areas serviced. This map is not a guarantee of internet service availability.

OMEGA Broadband Service

50x5 Mbps

■ Detailed Service Areas (783.70 sq mi)

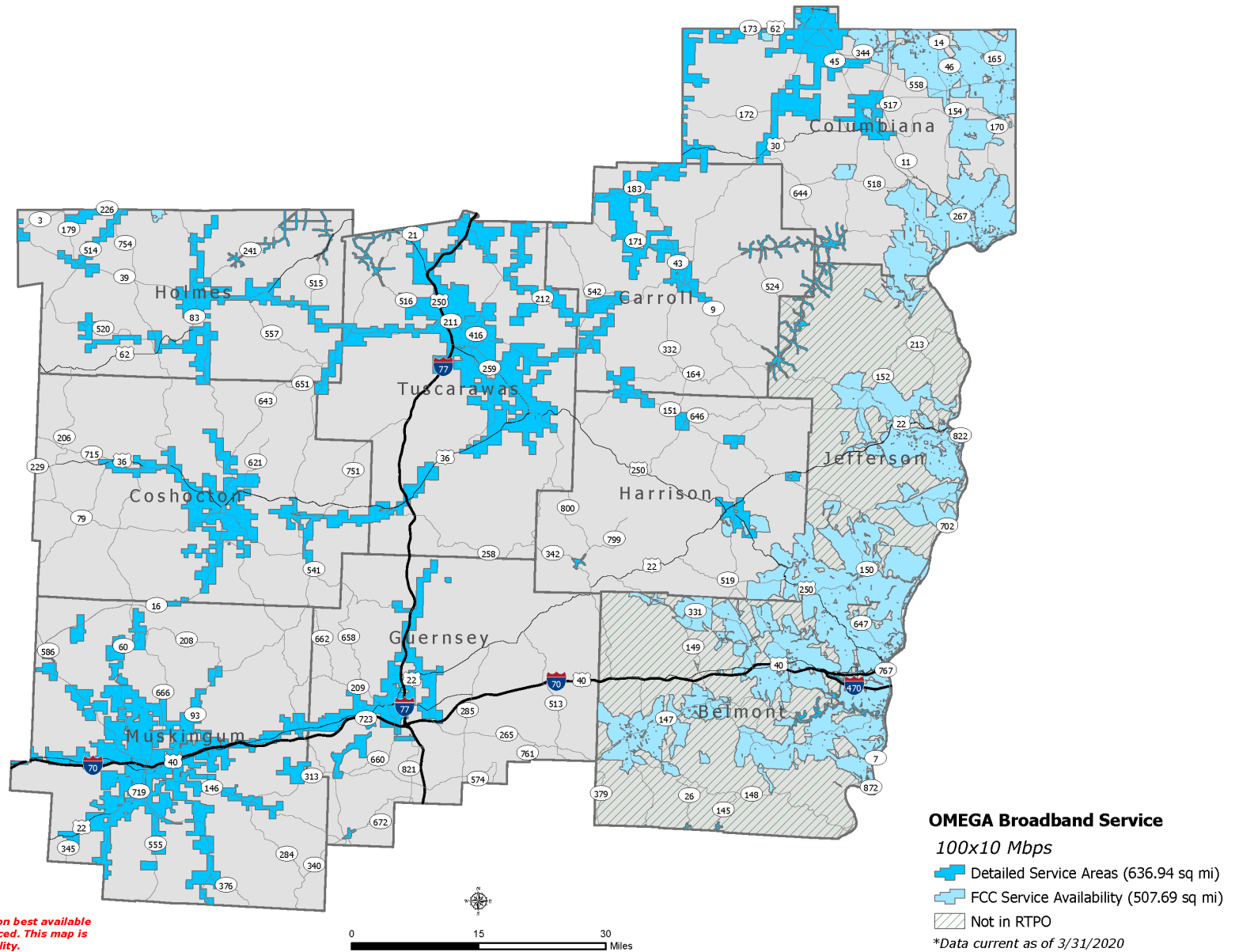
■ FCC Service Availability (675.24 sq mi)

▨ Not in RTPO

**Data current as of 3/31/2020*

Figure B-3: Broadband Service Coverage – 50 x 5 Mbps

Figure B-3 shows broadband service coverage for the OMEGA region with speeds of 50 Mbps (Megabits per second) download and 5 Mbps upload. Detailed Service Areas (granular) and FCC Service Availability (non-granular) are color-coded separately. This data is provided by Connected Nation, current as of March 31, 2020.



Disclaimer: Service availability is based upon best available data and may not reflect actual areas serviced. This map is not a guarantee of internet service availability.

Figure B-4: Broadband Service Coverage – 100 x 10 Mbps

Figure B-4 shows broadband service coverage for the OMEGA region with speeds of 100 Mbps (Megabits per second) download and 10 Mbps upload. Detailed Service Areas (granular) and FCC Service Availability (non-granular) are color-coded separately. This data is provided by Connected Nation, current as of March 31, 2020.

Appendix C – Broadband Policy



OMEGA is very grateful to our friends at Buckeye Hills Regional Council for sharing their Broadband Policy and allowing us to adopt a version for our region. By working together, the agencies that serve the Appalachian and Rural Communities of Ohio will positively effect change and provide a pathway for enhanced broadband deployment throughout rural Ohio.

The Ohio Mid-Eastern Governments Association (OMEGA), working collaboratively with our members in Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, and Tuscarawas Counties, is dedicated to growing strong, vibrant communities and improving the lives of 590,660 residents in rural eastern Appalachian Ohio.

BROADBAND POLICY PRIORITIES

The absence of broadband service places substantial constraints upon the economic growth, social, and cultural aspects of our region. Due to the detrimental impact this has had upon the region, the OMEGA Executive Committee has adopted the following Broadband Policy Priorities:

- 1. Improve the accuracy and veracity of broadband mapping by drilling down to the actual service locations.**
- 2. Advance the region's economic development through Internet-enabled education, healthcare, transportation, and workforce development.**
- 3. Leave no one behind by extending broadband to all households and businesses, delivering robust communication services.**
- 4. Use fiber to connect local government facilities in Appalachia in order to increase efficiency of management and delivery of municipal services.**



IMPLEMENTATION

Collaboration among rural Ohio advocates will propel expansion of broadband in our communities and across the rural expanse. Building broadband infrastructure takes years – we urgently need to get started.

Mapping

- Existing maps significantly overstate broadband availability in the “rural expanse”¹ by a factor of ten or more.
- Inaccurate mapping precludes funding for unserved areas due to “carve-outs” meant to avoid duplicative efforts and prevent so-called “over-building.”
- Current Connected Nation-Ohio efforts to refine the maps will purportedly resolve a portion of the mapping inaccuracies.
- Mapping the individual service locations through pairing satellite images with public records will quickly identify actual service locations.²
- Confronted with such data, broadband providers would be forced to verify or deny their ability to serve specific locations rather than providing coverage information based on general areas designated by census blocks or shape-files.

Securing Adequate Funding

- The rural expanse requires substantial and ongoing subsidies to incentivize carriers to extend broadband service because the low population densities do not generate sufficient revenue to create an acceptable business case.
- Rugged terrain and plentiful foliage cover reduce the range and effectiveness of both fixed and mobile wireless solutions.
- Multiple funding sources, both existing and proposed, can be combined to address the subsidy requirements. Existing funding programs from the Federal Communications Commission (FCC), United States Department of Agriculture (USDA), and/or Appalachian Regional Commission (ARC) could be combined with federal infrastructure and proposed state broadband funding.
- To competitively respond to funding opportunities, we must proactively engineer solutions and form deployment partnerships.

¹ “Rural expanse” defined as areas with twenty or fewer households per square mile.

² E.g. [methodology advanced by US Telecom](#) (estimated \$12 million for the entire nation)



- Share technical design best practices across representative study areas, which will generate proformas for project budgets and trigger conversations with policy makers regarding the magnitude of required subsidies.
- Utilizing technical design best practices, we will:
 - Educate funders;
 - Inform local officials and influencers; and
 - Recruit support from U.S. Representatives and Senators.
- FCC Connect America Fund is the largest existing source of funding.
 - The FCC Universal Service fund, spending more than \$7 billion per year, has for decades ensured that rural residents can affordably obtain telephone services. The FCC has logically shifted these funds to support broadband services under the Connect America Fund (CAF).
 - The current FCC subsidy formula does not reflect the relatively higher costs of servicing households in the rugged terrain of our sparsely populated rural areas.³
- Encourage the State of Ohio to help the unserved and improve competitiveness for Federal funds by:
 - Advocating for mapping at the individual service location level;
 - Creating a broadband plan that establishes priorities;
 - Extending electrical easements for fiber installations to lower costs and speed implementation;⁴ and
 - Providing upfront match for Federal grant applications and reverse auctions.

Economic Development

- High-quality broadband services deliver positive economic development impact throughout the region including:
 - Keeping farmers connected to markets and suppliers;
 - Providing remote monitoring and control, e.g. oil & gas industry;
 - Delivering crucial communications services to industrial parks and spec buildings, essential in attracting all types of enterprises; and
 - Improving education, workforce development, healthcare services, and transportation networks.

³ As evidenced by the failure of the FCC to attract any bidders for the opportunities in southern and eastern Ohio in the 2018 Auction 903. In contrast, areas of flat and largely open terrain were bid upon and awarded across the country.

⁴ As has been done in Indiana (2017), Alabama (2019), and other states.



Education – Internet access has become crucial for students in rural areas so they can:

- ✓ Engage in university, trade-focused, and advanced placement coursework which are increasingly delivered online.
- ✓ Complete assignments, many of which now all but require the availability of home-accessible broadband, the so-called “homework gap”; and
- ✓ Participate in “snow day” K-12 school sessions, an approach becoming increasingly common in more school districts.

Workforce Development – residential and small business broadband will support displaced and “upskilling” workers so they can:

- ✓ Engage in commercial training programs delivered at least partially online;
- ✓ Work from home in an ever-widening set of career options including customer support, technical assistance, software development, and consulting; and
- ✓ Search and apply for jobs online including the trend toward remote video conference interviews.

Healthcare – connecting our remote population to essential services from their homes will enable:

- ✓ Delivery of remote healthcare services, proven to reduce rates of hospitalizations;
- ✓ Participation in counseling sessions for mental health issues including addiction treatment;
- ✓ Communication with family and friends, lessening the social isolation so often encountered in rural settings, particularly by the elderly;
- ✓ Expand use of telemedicine in rural areas especially those areas impacted by hospital closures and lack of medical professionals; and
- ✓ Bridge healthcare gap between rural and urban areas.

Transportation – connecting people, especially senior citizens and the disabled, to work, education, non-emergency medical appointments, and other daily life activities:

- ✓ Broadband-based scheduling technologies increase ridership, improve efficiencies, and reduce costs;
- ✓ Provides more options for transportation to work;
- ✓ Allows home-bound residents to maintain connectivity with community; and
- ✓ Expands research/use of connected/autonomous vehicles in rural areas.



Building Robust Networks

- We need to build networks that meet the long-term capacity needs of our rural areas rather than just satisfying current minimum requirements.
 - Gaps in urban/rural availability and performance continue to widen.
 - Durable solutions will most cost-effectively utilize government subsidies.
- Add quality of service and prompt restoration times as part of the commitment from carriers receiving government funding.
 - Reports abound of service outages from events as common as rainfall with delays in repairs lasting weeks.
 - A large gap between advertised and actual response times for repairs reveals a lack of capacity due to over-subscription which results in a failure to meet current industry standards.
 - Thus, we will advocate for provisions in the funding programs regarding response times to outages and minimum end-to-end performance of the services.
- In all cases, we will target commercial entities such as carriers and electrical co-ops to build and operate the networks.
- OMEGA's roles will include planning, analysis, advocacy, and focusing on accountability for companies receiving government funding.



Policy Recommendations for Broadband

The Ohio Mid-Eastern Governments Association is a Council of Governments that serves ten counties in eastern Appalachian Ohio: Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, and Tuscarawas Counties. OMEGA's mission is to provide a pathway to enhance community and economic growth in the region. Access to broadband is essential for creating economic opportunities and community development.

Therefore, OMEGA offers the following policy recommendations for broadband in the state of Ohio:

1. **Create a state broadband fund that ensures sufficient resources are available** across the state for broadband deployment projects that directly connect 100% of unserved and underserved households and businesses in a designated service area.
 - a. **Use a portion of the state fund to award zero-match planning grants** to enable regional organizations to leverage state resources to develop successful applications for federal broadband funding.
 - b. **Establish a steering committee comprised of at least one regional organization** to review applications for funding under the proposed program to ensure that the projects are meeting qualifications.
2. **Create a diverse statewide task force of experts to develop recommendations on how to close the rural-urban divide on broadband access.** The task force should focus on possible funding solutions for delivering broadband to rural Ohio and review potential legislative actions that could reinforce those solutions.
3. **Seek a streamlined right-of-way approval process for broadband fiber installation** to encourage easier build out.

Appendix D – ODOT Aviation Focus Study Recommendations

Cambridge

Airport System Plan Compliance Recommendations Summary*

Associated City	Cambridge		
Airport Name	Cambridge Municipal (CDI)		
Ohio Airport System Classification Level	General Aviation Level 3		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	100.0%	No action	
PCI - Primary Runway	65.7 (Fair)	20 year pavement maintenance	\$1,421,000
PCI - All Other Pavements	75.8 (Satisfactory)	20 year pavement maintenance	\$816,000
Compliance Factors: Estimated Cost			\$2,237,000

**Project listing for planning purposes only; does not indicate FAA approval or supersede detailed engineering studies, airport master plan, or pavement maintenance plan*

GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

ARC (Airport Reference Code): expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

ATCT (Air Traffic Control Tower): service provided by ground-based controllers who direct a aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

ATC Comms (Communications): Capability to communicate while on the ground with a air traffic control, either by radio or by cell phone.

Automated Weather Reporting: disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a utomated surface observing system (ASOS).

Benchmarks: minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

Classification Levels: a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

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Cambridge

Airport System Plan Benchmark Recommendations Summary*

Associated City	Cambridge			
Airport Name	Cambridge Municipal (CDI)			
Ohio Airport System Classification Level	General Aviation Level 3			
RECOMMENDATIONS				
Level 3 Facility and Service Benchmarks				
Benchmark Item	GA Level 3 Objective **	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 3200	4,298	Maintain adequate runway length for critical aircraft	
Runway Lighting	MIRL	MIRL		
Airport Beacon	Yes	Yes		
Taxiway Type	Partial Parallel	None	Partial Parallel	\$2,847,700
ATCT	--			
ATC Comms	--	Yes		
IAP	NP	NP		
Terminal/Admin. Building	Yes	Yes		
Fuel	100LL	Jet-A, 100LL		
Weather Reporting	Automated	Yes		
Paved Aircraft Parking	Yes	Yes		
ALS	--	No		
Visual Approach Aids	PAPI	No	PAPI	\$100,000
Snow Removal	Yes	Yes		
Fencing	As Needed	None		
Level 3 Facility and Service Benchmarks: Estimated Cost				\$2,948,000

Red text = airport facility does not meet Ohio System Plan objective

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***These are minimum system recommendations – certain airports may need enhanced facilities due to their specific circumstances*

GLOSSARY

Compliance Factors: FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

Fencing: a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

Fuel: attended or self-service fueling facilities.

IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

Runway Lighting: includes three standard forms: high, medium, and low intensity runway lighting, expressed as HIRL, MIRL, and LIRL.

RPZ (Runway Protection Zone): a trapezoidal area located at ground level prior to the threshold or runway end, designed to enhance the protection of people and property on the ground. Dimensions are determined by the ARC.

RSA (Runway Safety Area): a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

Snow Removal: Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

Terminal Building: a building for airport users that typically houses any or all of the following: airport administration, pilot lounge, flight planning, restrooms, FBO offices, and conference room.

Visual Approach Aids: visual glide slope indicator (VGSi), a ground lighting system that defines a vertical approach path, indicating to pilots if their approach is too low or too high. Common VGSIs include the precision approach slope indicator (VASi) and precision approach path indicator (PAPI).

Carrollton

Airport System Plan Compliance Recommendations Summary*

Associated City	Carrollton		
Airport Name	Carroll County-Tolson (TSO)		
Ohio Airport System Classification Level	General Aviation Level 3		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	10.0%	Land Acquisition of remaining 90%	\$692,000
PCI - Primary Runway	79.1 (Satisfactory)	20 year pavement maintenance	\$1,690,000
PCI - All Other Pavements	75.8 (Satisfactory)	20 year pavement maintenance	\$794,000
Compliance Factors: Estimated Cost			\$3,176,000

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GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

ARC (Airport Reference Code): expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

ATCT (Air Traffic Control Tower): service provided by ground-based controllers who direct a aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

ATC Comms (Communications): Capability to communicate while on the ground with a air traffic control, either by radio or by cell phone.

Automated Weather Reporting: disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a utomated surface observing system (ASOS).

Benchmarks: minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

Classification Levels: a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

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Carrollton

Airport System Plan Benchmark Recommendations Summary*

Associated City	Carrollton			
Airport Name	Carroll County-Tolson (TSO)			
Ohio Airport System Classification Level	General Aviation Level 3			
RECOMMENDATIONS				
Level 3 Facility and Service Benchmarks				
Benchmark Item	GA Level 3 Objective**	Airport Facility	Recommendation	Estimated Cost
PrimaryRunway Length (ft)	≥ 3200	4,297	Maintain adequate runway length for critical aircraft	
Runway Lighting	MIRL	HIRL		
Airport Beacon	Yes	Yes		
Taxiway Type	Partial Parallel	Partial Parallel & Turn-arounds		
ATCT	--			
ATC Comms	--	Yes		
IAP	NP	NP		
Terminal/Admin. Building	Yes	No	Terminal Building	\$2,250,000
Fuel	100LL	Jet-A, 100LL		
Weather Reporting	Automated	No	Automated Weather Reporting	\$231,300
Paved Aircraft Parking	Yes	Yes		
ALS	--	No		
Visual Approach Aids	PAPI	Yes		
Snow Removal	Yes	Yes		
Fencing	As Needed	None		
Level 3 Facility and Service Benchmarks: Estimated Cost				\$2,481,000

Red text = airport facility does not meet Ohio System Plan objective

**Project listing for planning purposes only; does not indicate FAA approval or supersede detailed engineering studies, airport master plan, or pavement maintenance plan*

***These are minimum system recommendations – certain airports may need enhanced facilities due to their specific circumstances*

GLOSSARY

Compliance Factors: FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

Fencing: a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

Fuel: attended or self-service fueling facilities.

IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

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RSA (Runway Safety Area): a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

Snow Removal: Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

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Visual Approach Aids: visual glide slope indicator (VGSi), a ground lighting system that defines a vertical approach path, indicating to pilots if their approach is too low or too high. Common VGSIs include the precision approach slope indicator (VASi) and precision approach path indicator (PAPI).

East Liverpool

Airport System Plan Compliance Recommendations Summary*

Associated City	East Liverpool		
Airport Name	Columbiana County (02G)		
Ohio Airport System Classification Level	General Aviation Level 4		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	50.0%	Land Acquisition of remaining 50%	\$62,000
PCI - Primary Runway	95.4 (Good)	20 year pavement maintenance	\$593,000
PCI - All Other Pavements	71 (Satisfactory)	20 year pavement maintenance	\$1,293,000
Compliance Factors: Estimated Cost			\$1,948,000

*Project listing for planning purposes only; does not indicate FAA approval or supersede detailed engineering studies, airport master plan, or pavement maintenance plan

GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

ARC (Airport Reference Code): expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

ATCT (Air Traffic Control Tower): service provided by ground-based controllers who direct a aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

ATC Comms (Communications): Capability to communicate while on the ground with a air traffic control, either by radio or by cell phone.

Automated Weather Reporting: disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a automated surface observing system (ASOS).

Benchmarks: minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

Classification Levels: a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

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East Liverpool

Airport System Plan Benchmark Recommendations Summary*

Associated City	East Liverpool			
Airport Name	Columbiana County (02G)			
Ohio Airport System Classification Level	General Aviation Level 4			
RECOMMENDATIONS				
Level 4 Facility and Service Benchmarks				
Benchmark Item	GA Level 4 Objective **	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 1800	3,503	Maintain adequate runway length for critical aircraft	
Runway Lighting	LIRL	MIRL		
Airport Beacon	Yes	Yes		
Taxiway Type	Turnaround	Partial Parallel		
ATCT	--			
ATC Comms	--	Yes		
IAP	V			
Terminal/Admin. Building	--	No		
Fuel	--	100LL		
Weather Reporting	Windsock	Yes		
Paved Aircraft Parking	--	Yes		
ALS	--	No		
Visual Approach Aids	--	No		
Snow Removal	--	No		
Fencing	As Needed	None		
Level 4 Facility and Service Benchmarks: Estimated Cost				\$0

Red text = airport facility does not meet Ohio System Plan objective

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***These are minimum system recommendations – certain airports may need enhanced facilities due to their specific circumstances*

GLOSSARY

Compliance Factors: FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

Fencing: a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

Fuel: attended or self-service fueling facilities.

IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

Runway Lighting: includes three standard forms: high, medium, and low intensity runway lighting, expressed as HIRL, MIRL, and LIRL.

RPZ (Runway Protection Zone): a trapezoidal area located at ground level prior to the threshold or runway end, designed to enhance the protection of people and property on the ground. Dimensions are determined by the ARC.

RSA (Runway Safety Area): a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

Snow Removal: Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

Terminal Building: a building for airport users that typically houses any or all of the following: airport administration, pilot lounge, flight planning, restrooms, FBO offices, and conference room.

Visual Approach Aids: visual glide slope indicator (VGSi), a ground lighting system that defines a vertical approach path, indicating to pilots if their approach is too low or too high. Common VGSIs include the precision approach slope indicator (VASi) and precision approach path indicator (PAPI).

Cadiz

Airport System Plan Compliance Recommendations Summary*

Associated City	Cadiz		
Airport Name	Harrison County (8G6)		
Ohio Airport System Classification Level	General Aviation Level 3		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	57.0%	Land Acquisition of remaining 43%	\$79,000
PCI - Primary Runway	79.7 (Satisfactory)	20 year pavement maintenance	\$1,780,000
PCI - All Other Pavements	72.9 (Satisfactory)	20 year pavement maintenance	\$653,000
Compliance Factors: Estimated Cost			\$2,512,000

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GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

ARC (Airport Reference Code): expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

ATCT (Air Traffic Control Tower): service provided by ground-based controllers who direct a aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

ATC Comms (Communications): Capability to communicate while on the ground with a air traffic control, either by radio or by cell phone.

Automated Weather Reporting: disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a utomated surface observing system (ASOS).

Benchmarks: minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

Classification Levels: a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

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Cadiz

Airport System Plan Benchmark Recommendations Summary*

Associated City	Cadiz			
Airport Name	Harrison County (8G6)			
Ohio Airport System Classification Level	General Aviation Level 3			
RECOMMENDATIONS				
Level 3 Facility and Service Benchmarks				
Benchmark Item	GA Level 3 Objective**	Airport Facility	Recommendation	Estimated Cost
PrimaryRunway Length (ft)	≥ 3200	3,765	Maintain adequate runway length for critical aircraft	
RunwayLighting	MIRL	MIRL		
Airport Beacon	Yes	Yes		
TaxiwayType	Partial Parallel	Partial Parallel		
ATCT	--			
ATC Comms	--	Yes		
IAP	NP	NP		
Terminal/Admin. Building	Yes	Yes		
Fuel	100LL	100LL		
Weather Reporting	Automated	No	Automated Weather Reporting	\$231,300
Paved Aircraft Parking	Yes	Yes		
ALS	--	No		
Visual Approach Aids	PAPI	Yes		
Snow Removal	Yes	Yes		
Fencing	As Needed	None		
Level 3 Facility and Service Benchmarks: Estimated Cost				\$231,000

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GLOSSARY

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Fencing: a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

Fuel: attended or self-service fueling facilities.

IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

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RSA (Runway Safety Area): a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

Snow Removal: Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

Terminal Building: a building for airport users that typically houses any or all of the following: airport administration, pilot lounge, flight planning, restrooms, FBO offices, and conference room.

Visual Approach Aids: visual glide slope indicator (VGS), a ground lighting system that defines a vertical approach path, indicating to pilots if their approach is too low or too high. Common VGSs include the precision approach slope indicator (VASI) and precision approach path indicator (PAPI).

New Philadelphia

Airport System Plan Compliance Recommendations Summary*

Associated City	New Philadelphia		
Airport Name	Harry Clever Field (PHD)		
Ohio Airport System Classification Level	General Aviation Level 2		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
PrimaryRSA	Not in compliance	Relocate Existing Road and Declared Distances	\$443,000
PrimaryRPZ - Percent Controlled	2.5%	Land Acquisition of remaining 98%	\$546,000
PCI - PrimaryRunway	55.4 (Fair)	20 year pavement maintenance	\$1,984,000
PCI - All Other Pavements	72.7 (Satisfactory)	20 year pavement maintenance	\$1,128,000
Compliance Factors: Estimated Cost			\$4,101,000

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GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

ARC (Airport Reference Code): expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

ATCT (Air Traffic Control Tower): service provided by ground-based controllers who direct a aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

ATC Comms (Communications): Capability to communicate while on the ground with a air traffic control, either by radio or by cell phone.

Automated Weather Reporting: disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a utomated surface observing system (ASOS).

Benchmarks: minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

Classification Levels: a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

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New Philadelphia

Airport System Plan Benchmark Recommendations Summary*

Associated City	New Philadelphia			
Airport Name	Harry Clever Field (PHD)			
Ohio Airport System Classification Level	General Aviation Level 2			
RECOMMENDATIONS				
Level 2 Facility and Service Benchmarks				
Benchmark Item	GA Level 2 Objective **	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 4000	3,951	Primary Runway to 4,000'	\$323,400
Runway Lighting	MIRL	MIRL		
Airport Beacon	Yes	Yes		
Taxiway Type	Full Parallel	Full Parallel		
ATCT	--			
ATC Comms	Yes	Yes		
IAP	APV	NP	APV	\$62,500
Terminal/Admin. Building	Yes	Yes		
Fuel	Jet-A, 100LL	Jet-A, 100LL		
Weather Reporting	Automated	Yes		
Paved Aircraft Parking	Yes	Yes		
ALS	--	No		
Visual Approach Aids	PAPI	Yes		
Snow Removal	Yes	Yes		
Fencing	Airfield	Partial		
Level 2 Facility and Service Benchmarks: Estimated Cost				\$386,000

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GLOSSARY

Compliance Factors: FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

Fencing: a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

Fuel: attended or self-service fueling facilities.

IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

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RPZ (Runway Protection Zone): a trapezoidal area located at ground level prior to the threshold or runway end, designed to enhance the protection of people and property on the ground. Dimensions are determined by the ARC.

RSA (Runway Safety Area): a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

Snow Removal: Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

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Millersburg

Airport System Plan Compliance Recommendations Summary*

Associated City	Millersburg		
Airport Name	Holmes County (10G)		
Ohio Airport System Classification Level	General Aviation Level 2		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	50.0%	Land Acquisition of remaining 50%	
PCI - Primary Runway	100 (Good)	20 year pavement maintenance	\$414,000
PCI - All Other Pavements	70.1 (Satisfactory)	20 year pavement maintenance	\$972,000
Compliance Factors: Estimated Cost			\$1,386,000

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GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

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Millersburg

Airport System Plan Benchmark Recommendations Summary*

Associated City	Millersburg			
Airport Name	Holmes County (10G)			
Ohio Airport System Classification Level	General Aviation Level 2			
RECOMMENDATIONS				
Level 2 Facility and Service Benchmarks				
Benchmark Item	GA Level 2 Objective**	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 4000	3,498	Primary Runway to 4,000'	\$1,231,300
Runway Lighting	MIRL	MIRL		
Airport Beacon	Yes	Yes		
Taxiway Type	Full Parallel	Partial Parallel	Full Parallel	\$5,455,000
ATCT	--			
ATC Comms	Yes	Yes		
IAP	APV	NP	APV	\$62,500
Terminal/Admin. Building	Yes	Yes		
Fuel	Jet-A, 100LL	Jet-A, 100LL		
Weather Reporting	Automated	Yes		
Paved Aircraft Parking	Yes	Yes		
ALS	--	No		
Visual Approach Aids	PAPI	No	PAPI	\$100,000
Snow Removal	Yes	Yes		
Fencing	Airfield	Partial		
Level 2 Facility and Service Benchmarks: Estimated Cost				\$6,849,000

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GLOSSARY

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IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

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Coshocton

Airport System Plan Compliance Recommendations Summary*

Associated City	Coshocton		
Airport Name	Richard Downing (I40)		
Ohio Airport System Classification Level	General Aviation Level 1		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	50.0%	Land Acquisition of remaining 50%	\$92,000
PCI - Primary Runway	79.6 (Satisfactory)	20 year pavement maintenance	\$1,590,000
PCI - All Other Pavements	78.8 (Satisfactory)	20 year pavement maintenance	\$3,092,000
Compliance Factors: Estimated Cost			\$4,774,000

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GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

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Coshocton

Airport System Plan Benchmark Recommendations Summary*

Associated City	Coshocton			
Airport Name	Richard Downing (I40)			
Ohio Airport System Classification Level	General Aviation Level 1			
SCENARIO 1 RECOMMENDATIONS				
Level 1 Facility and Service Benchmarks				
Scenario 1: Upgrade from ARC B-II to C-II with Other Recommendations to Meet Level 1 Classification Benchmarks**				
Benchmark Item	GA Level 1 Objective***	Airport Facility	Recommendation	Estimated Cost
IAP	P or APV	NP	Install APV approach	\$62,500
Fencing	Perimeter	No	Install full perimeter fencing	\$792,500
ARC	C-II	B-II	B-II to C-II ARC Items (details below)	
ARC Detail	Widen Runway 4-22 25' (Final Width 100')			\$4,497,800
ARC Detail	RSA Improvements at Runway 22 End			\$270,500
ARC Detail	MALSR - Runway 22 End			\$1,427,500
ARC Detail	Non-Precision Runway Markings			\$162,800
ARC Detail	REIL - Runway 4 End			\$43,800
ARC Detail	Runway End Lights - Both Ends			\$67,500
ARC Detail	Relocate Partial Parallel Taxiway 300' from Runway Centerline			\$3,038,400
ARC Detail	Relocation of 4 FBO Buildings/Hangars out of OFA			\$3,237,300
Scenario 1: Estimated Cost - Full ARC Upgrade from B-II to C-II with Other Benchmark Recommendations				\$13,601,000

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***Scenario 1 incorporates recommended changes to ARC standards; Scenario 2 assumes airport will not change its current ARC*

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Compliance Factors: FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

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Runway Lighting: includes three standard forms: high, medium, and low intensity runway lighting, expressed as HIRL, MIRL, and LIRL.

RPZ (Runway Protection Zone): a trapezoidal area located at ground level prior to the threshold or runway end, designed to enhance the protection of people and property on the ground. Dimensions are determined by the ARC.

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Coshocton

Airport System Plan Benchmark Recommendations Summary*

Associated City	Coshocton			
Airport Name	Richard Downing (I40)			
Ohio Airport System Classification Level	General Aviation Level 1			
SCENARIO 2 RECOMMENDATIONS				
Level 1 Facility and Service Benchmarks				
Scenario 2: Recommended Individual Projects if Airport is to Remain at ARC B-II**				
Benchmark Item	GA Level 1 Objective**	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 5000	5,000	Maintain adequate runway length for critical aircraft	
Runway Lighting	HIRL	MIRL	HIRL	\$500,100
Airport Beacon	Yes	Yes		
Taxiway Type	Full Parallel	Full Parallel		
ATCT	Yes, if Part 139 certified			
ATC Comms	Yes	Yes		
IAP	P or APV	NP	APV	\$106,300
Terminal/Admin. Building	Yes	Yes		
Fuel	Jet-A, 100LL	Jet-A, 100LL		
Weather Reporting	Automated	Yes		
Paved Aircraft Parking	Yes	Yes		
ALS	MALSR	No	MALSR	\$1,427,500
Visual Approach Aids	PAPI	Yes		
Snow Removal	Yes	Yes		
Fencing	Perimeter	Partial	Full Perimeter	\$792,500
Level 1 Facility and Service Benchmarks: Estimated Cost				\$2,826,000

Red text = airport facility does not meet Ohio System Plan objective

**Project listing for planning purposes only; does not indicate FAA approval or supersede detailed engineering studies, airport master plan, or pavement maintenance plan*

***Scenario 1 incorporates recommended changes to ARC standards; Scenario 2 assumes airport will not change its current ARC*

****These are minimum system recommendations – certain airports may need enhanced facilities due to their specific circumstances*

Zanesville

Airport System Plan Compliance Recommendations Summary*

Associated City	Zanesville		
Airport Name	Zanesville Municipal (ZZV)		
Ohio Airport System Classification Level	General Aviation Level 1		
CRITICAL COMPLIANCE FACTORS			
Current airport conditions			
Compliance Item	Current Compliance	Action	Estimated Cost
Primary RSA	In compliance		
Primary RPZ - Percent Controlled	100.0%	No action	
PCI - Primary Runway	78 (Satisfactory)	20 year pavement maintenance	\$3,624,000
PCI - All Other Pavements	55.9 (Fair)	20 year pavement maintenance	\$9,283,000
Compliance Factors: Estimated Cost			\$12,907,000

*Project listing for planning purposes only; does not indicate FAA approval or supersede detailed engineering studies, airport master plan, or pavement maintenance plan

GLOSSARY

Aircraft Fuel: 100LL AvGas for piston engines and Jet-A for turbine engines. Fuel farm installation includes a tank, containment system, and distribution system.

Airport Beacon: a rotating beacon mounted on top of a tower or tall structure, installed to indicate an airport's location to a aircraft operating at night.

ALS (Approach Lighting System): allows pilots to visually align with a runway while on approach. An ALS extends outward from a runway end and consists of lightbars, strobe lights, or a combination. Common forms include the medium intensity approach lighting system with runway alignment indicator lights (MALSR) and the medium intensity approach lighting system with sequenced flashing lights (MALSF).

ARC (Airport Reference Code): expressed as a letter (A-E) for the design aircraft's approach speed, and Roman numeral (I-IV) for the aircraft's wingspan. The ARC determines design standards such as runway, Runway Safety Area (RSA), and Runway Protection Zone (RPZ) dimensions, and taxiway separation standards.

ATCT (Air Traffic Control Tower): service provided by ground-based controllers who direct a aircraft on the ground and through controlled airspace, and can provide advisory services to aircraft in non-controlled airspace. Primary purpose is to prevent collisions, organize and expedite the flow of traffic

ATC Comms (Communications): Capability to communicate while on the ground with a air traffic control, either by radio or by cell phone.

Automated Weather Reporting: disseminates weather information to pilots through an automated radio frequency. Systems include the automated weather observing system (AWOS) and a utomated surface observing system (ASOS).

Benchmarks: minimum recommended facility and service goals set for each airport in the Ohio system based on the system classification level.

Classification Levels: a set of airport groups in the Ohio system, as defined by *The Ohio Airports Focus Study*. Levels include one group for air carrier airports, two groups of general aviation airports primarily serving turbine aircraft (1 and 2), and two groups primarily serving piston aircraft (3 and 4).

CONTINUED ON THE NEXT PAGE

Zanesville

Airport System Plan Benchmark Recommendations Summary*

Associated City	Zanesville			
Airport Name	Zanesville Municipal (ZZV)			
Ohio Airport System Classification Level	General Aviation Level 1			
RECOMMENDATIONS				
Level 1 Facility and Service Benchmarks				
Benchmark Item	GA Level 1 Objective **	Airport Facility	Recommendation	Estimated Cost
Primary Runway Length (ft)	≥ 5000	5,000	Maintain adequate runway length for critical aircraft	
Runway Lighting	HIRL	HIRL		
Airport Beacon	Yes	Yes		
Taxiway Type	Full Parallel	Full Parallel		
ATCT	Yes, if Part 139 certified			
ATC Comms	Yes	Yes		
IAP	P or APV	P		
Terminal/Admin. Building	Yes	Yes		
Fuel	Jet-A, 100LL	Jet-A, 100LL		
Weather Reporting	Automated	Yes		
Paved Aircraft Parking	Yes	Yes		
ALS	MALSR	No	MALSR	\$1,484,600
Visual Approach Aids	PAPI	Yes		
Snow Removal	Yes	Yes		
Fencing	Perimeter	None	Full Perimeter	\$971,800
Level 1 Facility and Service Benchmarks: Estimated Cost				\$2,456,000

Red text = airport facility does not meet Ohio System Plan objective

*Project listing for planning purposes only; does not indicate FAA approval or supersede detailed engineering studies, airport master plan, or pavement maintenance plan

**These are minimum system recommendations – certain airports may need enhanced facilities due to their specific circumstances

GLOSSARY

Compliance Factors: FAA standards to which airports are held; often associated with grant assurances. System recommendations and costs were developed to meet current ARC, RSA, RPZ, and PCI standards

Fencing: a barrier encompassing full airport perimeter, partial airport perimeter, or air operations area (AOA) only.

Fuel: attended or self-service fueling facilities.

IAP (Instrument Approach Procedure): enhance airport safety and efficiency by allowing pilots to navigate to airports in conditions of low visibility. Benchmarks recommend three types of IAP: P – Precision (an instrument landing system), APV – approaches with vertical guidance, and NP – non-precision. V – Denotes a visual approach.

PCI (Pavement Condition Index): an expression of the condition of an airport pavement on a scale from 100 to 0. PCI ratings on this scale: Good (100-85), Satisfactory (85-70), Fair (70-55), Poor (55-40), Very Poor (40-25), Serious (25-10), and Failed (10-0).

Runway Lighting: includes three standard forms: high, medium, and low intensity runway lighting, expressed as HIRL, MIRL, and LIRL.

RPZ (Runway Protection Zone): a trapezoidal area located at ground level prior to the threshold or runway end, designed to enhance the protection of people and property on the ground. Dimensions are determined by the ARC.

RSA (Runway Safety Area): a surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. Dimensions are determined by the ARC.

Snow Removal: Airport-owned snow removal equipment used to clear the air operations area (AOA) of accumulation to maintain safe operating conditions. For airports that reported having contracted snow removal, this is sufficient to meet the goal.

Terminal Building: a building for airport users that typically houses any or all of the following: airport administration, pilot lounge, flight planning, restrooms, FBO offices, and conference room.

Visual Approach Aids: visual glide slope indicator (VGSi), a ground lighting system that defines a vertical approach path, indicating to pilots if their approach is too low or too high. Common VGSIs include the precision approach slope indicator (VASi) and precision approach path indicator (PAPI).

Appendix E1 – Proposed Projects - Transportation

APPENDIX E1: TRANSPORTATION

Project Title	Project Sponsor	County Served	Description	Total Project
The Great Stone Viaduct Bridge Restoration	Great Stone Viaduct Historical Education Society	Belmont	The Great Stone Viaduct Historical Education Society recently received a \$1.9 million TAP grant to restore the 149 year old railroad viaduct and build a bike trail along the viaduct and old Rail Road Right of Way in the Village of Bellaire. All funding is secured except for \$100,000 to cover additional engineering costs.	\$ 100,000
SR 43 @ SR 39	Carroll County	Carroll	Intersection Improvements	\$ 360,000
SR 171 @ CR 20	Carroll County	Carroll	Intersection Improvements	\$ 250,000
SR 164 @ CR 59	Carroll County	Carroll	Intersection Improvements	\$ 500,000
SR 164 @ CR 58	Carroll County	Carroll	Intersection Improvements	\$ 1,000,000
SR 164 @ SR 9	Carroll County	Carroll	Intersection Improvements	\$ 500,000
SR 9 @ SR 39 & SR 43	Carroll County	Carroll	Intersection Improvements	\$ 500,000
SR 164 @ TR 316	Carroll County	Carroll	Intersection Improvements	\$ 750,000
Ivory Rd. North	Harrison Twp. (CAR)	Carroll	Rehabilitation from oil/gas trucks on road without a RUMA	\$ 50,000
SR 7 @ TR 1131	Columbiana County	Columbiana	Intersection Improvements	\$ 500,000
SR 170 @ Columbia Drive	Columbiana County	Columbiana	Intersection Improvements	\$ 500,000
Three Rivers Energy Access Road	Coshocton County	Coshocton	Road improvements needed to accommodate an existing business.	\$ 1,085,500
Access Road	Coshocton County	Coshocton	Access road for a new development	TBD
South Coshocton Sidewalks	City of Coshocton, CCCTA, Coshocton County	Coshocton	Installation of sidewalks along Browns Lane (MR 30)	\$ 1,500,000
Airport Road (CR 202)	Coshocton County	Coshocton	Extension of Airport Road to CR 193 to provide additional emergency access	\$ 650,000
Glass Avenue Culvert Replacement	Village of Byesville	Guernsey	Replacement of a collapsed culvert that has forced closure of Glass Avenue. This closure hampers emergency responders, school buses, and residents as it provides access to SR 209 and SR 821. Approximately 80% of the Village's storm water flows through this culver.	\$428,800
I-70/SR 209 Interchange	City of Cambridge	Guernsey	Reconfigure I-70/SR 209/CR 15/TR 4351 interchange	\$ 2,750,000
SR 209 @ Woodlawn Avenue	City of Cambridge	Guernsey	Intersection Improvements	\$ 1,500,000
US 250 RR overpass	ODOT D11, Harrison County	Harrison	Replacement of substandard RR overpass and intersection improvements at US 250 & SR 151	\$ 14,397,801
US 22 @ SR 800	Harrison County	Harrison	Realignment of intersection to increase sight distance, reduce curve radii	\$ 1,500,000
SR 800 @ SR 799	Harrison County	Harrison	Turning radius improvements	\$ 200,000
SR 800 @ SR 342	Harrison County	Harrison	Intersection Improvements	\$ 500,000
SR 9 @ SR 151	Harrison County	Harrison	Intersection Improvements	\$ 1,000,000
Cadiz SRTS Sidewalk Project	Village of Cadiz	Harrison	Construction of new sidewalks on east side of SR 9 from end of village sidewalks to Liggett Ln.	\$ 521,864
Cadiz Road Improvements	Village of Cadiz	Harrison	Replacement of gravel roads (Scott Dr., Silva Dr., Jeffery Dr., and Stacy Dr.)	\$ 546,800
Mohican Greenway Corridor Project	Holmes County Engineer's Office	Holmes	Mohican Greenway project will provide, roadway, pedestrian, river access to the Mohican Valley in Ashland, Holmes, and Knox Counties along the Mohican River.	\$ 25,000,000
Berlin SRTS Sidewalk Project	Berlin Township (HOL)	Holmes	Construction of new sidewalks on north side of US 62/SR 39 to Rhine Rd.	\$ 373,778
Muskingum Avenue	City of Zanesville	Muskingum	Roadway Slip Repair and Hillside Stabilization	\$ 3,000,000
Liberty St Realignment and Railroad Crossing	Village of New Concord	Muskingum	Realigning and reconstructing Liberty Rd. will allow another means of ingress and egress into and out of the Village to I-70 should Rt. 83 be unusable or blocked for any reason. The Railroad crossing is unsafe and needs to be brought up to current safety standards.	\$ 2,000,000

APPENDIX E1: TRANSPORTATION

Project Title	Project Sponsor	County Served	Description	Total Project
Eastpointe Rail Spur Addition	Zanesville-Muskingum County Port Authority	Muskingum	The Eastpointe Business Park is an approximately 1,200-acre business park located 2.5 miles north of Interstate 70 Exit 157, just east of Zanesville, Ohio. The industrial park provides quick interstate access, a great proximity to U.S. markets, all utilities, and a rail transfer station. Dollar General and AVON Products have distribution centers at Eastpointe. Bimbo Bakery and Bilco Company have manufacturing facilities in the park. Halliburton Energy Services, an oil field service company, became the third Fortune 500 company to locate in the park. TRP Zanesville, a division of Hissong Kenworth has a temporary location in the park. The most recent business to break ground on a manufacturing facility in the park is AMG Vanadium, a spent catalyst recycling and metal reclamation service company. Currently, the park has three rail spurs that serve companies in Muskingum County. All of the spurs are in use and the demand for additional rail still exists.	\$ 750,000
National Road Business Park - Turn lane	Zanesville-Muskingum County Port Authority	Muskingum	The National Road Business Park was formally established in June 2018 through the joint efforts of the ZMCPA, Muskingum County and the City of Zanesville. All necessary environmental studies have been completed and bids for an access road will be accepted in 2020. The project will create sufficient capacity to support any distribution, manufacturing or warehousing facilities that would choose to purchase land in the National Road Business Park. As this park develops, a left turn lane on US 40 will be required, approximately 0.5 miles west of the I-70 interchange.	\$ 1,714,545
Pine Street Safety Project	City of Zanesville	Muskingum	Local Road Safety Project	\$ 4,536,000
Barnhill Road Improvements	Village of Barnhill	Tuscarawas	Reconstruction of Barnhill Road	\$ 733,000
Downtown Improvement Project	City of Dover	Tuscarawas	Per the City's Master Plan, the project includes installation of curbs sidewalks, protected bike lanes, planters, landscaping, and paving. Also includes electrical and water infrastructure. Wooster Avenue from Front Street north to Fourth Street, East 3rd Street from Poplar Street to Broad Street, the Public Square, and the Community Park. This project will provide better access to downtown businesses, safe bicycle lanes, safe pedestrian travel, access to the Riverfront Park and Trail, and will promote tourism and downtown businesses. Project can be constructed in phases.	\$ 19,000,000
Gnadenhutten Street & Sidewalk Improvements	Village of Gnadenhutten	Tuscarawas	Resurfacing: Walnut St. (Corp to Corp), East Main St. (Walnut St. to Larson Rd.), Tuscarawas Ave. (Walnut St. to Park), and Wolfe's Crossing Extension (Larson to Zimmerman) and Sidewalks: East Main St. (Elm St. to Linden Ave.) and Walnut St. (south of school)	\$ 1,598,500
Newcomerstown Industrial Park Access	Village of Newcomerstown	Tuscarawas	Create a direct access route to the Newcomerstown Industrial Park from US 36	\$ 7,000,000
Wilkshire Hills "Escape Route"	Tuscarawas County	Tuscarawas	Create an additional route into Wilkshire Hills area near Bolivar to alleviate congestion	\$ 13,000,000
CR 62 Bridge	Tuscarawas County	Tuscarawas	Bridge Replacement over Tuscarawas River	\$ 6,500,000
Lawrence Twp Industrial Park Access	Lawrence Township (TUS)	Tuscarawas	Create a direct access route to the Lawrence Twp Industrial Park from SR 212	\$ 1,000,000
I-77 Exit 81	Tuscarawas County	Tuscarawas	Interchange Improvements	\$ 10,000,000
I-77 Exit 83	Tuscarawas County	Tuscarawas	Interchange Improvements	\$ 10,000,000
SR 93 @ CR 75	Tuscarawas County	Tuscarawas	Intersection Improvements	\$ 1,000,000
TOTAL				\$ 138,796,588

Appendix E2 – Proposed Projects – Water

APPENDIX E2: WATER PROJECTS

Project Title	Project Sponsor	County Served	Description	Total Project Cost
Water Line Replacement	Village of Bethesda	Belmont	Water lines have reached the end of their useful life and need to be replaced.	\$ 580,980
Village of Minerva Water Tower Painting (Interior/Exterior)	Village of Minerva	Carroll	To remove interior/exterior coating and to re-coat the existing 500,000 gallon water tower within the Village of Minerva.	\$ 98,000
Water Line Replacement	Village of Malvern	Carroll	Water lines have reached the end of their useful life and need to be replaced.	\$ 471,500
Waterline Replacement	Village of East Palestine	Columbiana	The proposed project will replace aging and deteriorating waterline throughout varies areas of the Village of East Palestine.	\$ 5,100,000
Waterline Replacement	Village of New Waterford	Columbiana	The proposed 3B waterline replacement project will eliminate aging and failing waterline.	\$ 1,120,000
Elevated Water Tank	Village of Washingtonville	Columbiana	Exiting water tank has reached the end of its useful life.	\$ 1,158,000
Coshocton - Warsaw - River View Schools Regional Waterline	City of Coshocton	Coshocton	Regional water line will provide water safe and an adequate supply of drinking water to the Village of Warsaw and the River View Schools complex. The underground water supply for Warsaw is in danger from rising contaminants and the existing WTP is in need of replacement.	\$ 4,430,000
Steubenville Avenue Water Line	City of Cambridge	Guernsey	Water line has reached the end of its useful life and needs to be replaced prior to road improvements.	TBD
Water Storage Tank Replacement and Booster Pump Station	Village of Hopedale	Harrison	Replacement of two aging water tanks with one 220,000 gallon elevated water tank and a new booster station with generator and automatic transfer switch, chlorinator with day tanks, mixer, auto dialer, and valve vault.	\$ 2,275,760
Rabbit Road Waterline Extension	Village of Hopedale	Harrison	Approximately 3,200 linear feet of 6-inch and 8-inch HDPE water line to be installed by horizontal directional drill method.	\$ 546,500
Water Plant Improvements	Village of Glenmont	Holmes	Water treatment plant needs to be replaced.	\$ 430,300
Water System Improvements	Village of Nashville	Holmes	Construction of a new water treatment plant with two new service wells and a 100,000 gallon water storage tank to replace aging infrastructure.	\$ 1,548,000
Waterline Replacement	Cherry Ridge Waterworks	Holmes	The proposed project will replace a failing waterline serving approximately 35 residences.	\$ 600,000
West End Water Project	City of Steubenville	Jefferson	New water storage tank in City's west end to provide redundancy for hospital and other critical users, schools, and future development. Project includes booster station and new water main to supply water to the tank.	\$ 5,040,000
Nebo Drive Water Line, Phase 2	City of Toronto	Jefferson	Extend water and sewer service to an existing home with a malfunctioning septic system and will add 24 future residential water and sewer connections to city through a new subdivision. Project will also allow the closure of Titanium Way as a public street to enable TIMET to maintain and expand operations at its existing site safely and efficiently.	\$ 2,065,000
Friendship Dr. Water Line Replacement	Village of New Concord	Muskingum	The proposed line to be replaced was originally installed in the 1930's and is of cast iron which breaks quite often. The project area also has been cited in OEPA reports as having a higher than normal lead level. Please note this line serves the John Glenn High School, Miller Elementary School and one-half of the village.	\$ 613,330
Water Storage Tank Replacement	Village of Dresden	Muskingum	Replacement of an existing leaking and deteriorated 200,000 gallon, ground-level, steel water tank with a new glass-lined, bolted steel water storage tank. The existing tank was constructed in 1970's.	\$ 407,360
Water Line and Booster Station Replacement	Village of Philo	Muskingum		\$ 515,000
Pioneer Water Storage Tank Replacement	City of Zanesville	Muskingum	The City of Zanesville needs to replace the existing Pioneer Reservoir with two new, one million gallon above grade water storage tanks. The existing tank has provided service to the city since 1878 and has survived beyond its useful life.	\$ 4,306,000

Water Treatment Plant Rehabilitation	Village of Gnadenhutten	Tuscarawas	Rehabilitation of water treatment plant.	\$ 1,500,000
Tuscarawas County - Emergency Water Supply Connection	Tuscarawas County	Tuscarawas	With the upgrade of the Wilkshire Hills WTP, Tuscarawas County will be supplying water to the Village of Bolivar. Prior to this project, the Village of Bolivar served as an emergency supply for the County. We will no longer have this emergency source. The County would like to connect to the City of Canton's 42" water transmission line which is located near the village of Bolivar with a master meter for use in emergencies only. The Wilkshire Hills Water System serves most of northeast Tuscarawas County, and the project will benefit 2,500 County customers as well as the approximately 470 customers in the Village of Bolivar. It also provides greater resiliency to the County in order to provide emergency connections from the county to the Villages of Magnolia and East Sparta.	\$ 1,400,000
Water Meter Installation	Village of Bolivar	Tuscarawas	The proposed project will install water meters throughout the Village of Bolivar to improvement management and operations of the water system.	\$ 932,054
TOTAL				\$ 35,137,784

Appendix E3 – Proposed Projects – Wastewater

APPENDIX E3: WASTEWATER PROJECTS

Project Title	Project Sponsor	County Served	Description	Total Project Cost
Leesville North Fork Marina WWTP and Collection System Upgrades	Muskingum Watershed Conservancy District	Carroll	Packaged wastewater treatment plant (flow equalizations, extended aeration, fixed media clarifiers, slow sand filters, and UV disinfection) to replace aging septic-based system and sanitary sewers for cabins, central public restroom/shower building, marina, and service building. Project also includes replacement of existing vault style public restroom with new ADA accessible four family flush type toilet/shower building.	\$ 867,000
Leesville South Fork Campground and Marina WWTP and Collection System Upgrades	Muskingum Watershed Conservancy District	Carroll	Packaged wastewater treatment plant (flow equalizations, extended aeration, fixed media clarifiers, slow sand filters, and UV disinfection) to replace aging septic-based system and sanitary sewers for cabins, marina building, launch ramp restroom, and service building. Project also includes replacement of existing flush/holding tank with a new flush style restroom.	\$ 840,000
Hanoverton Sanitary Sewer System	Columbiana County	Columbiana	The proposed project will eliminate failing on-site septic systems in the Village of Hanoverton. Wastewater will be transported by force main to the existing Kensington WWTP which will be expanded for treatment. Specific components include: 33,000 LF of 8” sanitary sewer; 126 manholes, one pump station with generator, 3,300 LF of 4” force-main, and 3,200 LF of 6” service laterals. This project will satisfy Ohio EPA Final Findings and Orders.	\$ 6,061,800
Columbiana County Sanitary Sewer Pump Station	Columbiana County	Columbiana	The purpose of this project is to install a sanitary sewer pump station, force-main and oil-water separator. We will connect the Engineering office building and the County Maintenance Garage to the sanitary sewer system operated by the Village of Lisbon. We will then eliminate the septic tanks currently used by our facilities. This project is also a response to Ohio EPA NOV.	\$ 233,146
Dresden Ave / Calcutta CIPP Sanitary Sewer Trunk Line Rehab Project III	Columbiana County	Columbiana	The purpose of this project is to install 7,150 line-ft of slip-lining in the sanitary sewer main trunk line along Dresden Avenue with cured-in-place pipe (CIPP) servicing the Calcutta residential and business area. This sewer line rehabilitation will eliminate inflow and infiltration (I&I) in wet seasons and prevent raw sewage from entering the groundwater in dry seasons. Eliminating (I & I) will essentially increase the hydraulic capacity of the East Liverpool WWTP and collection lines. This project is phase three of a 5-year plan to reduce inflow and infiltration from the sanitary sewer systems and also eliminate treating clear ground water at the waste water treatment plants.	\$ 651,900
Glenmoor / LaCroft Sanitary Sewer System	Columbiana County	Columbiana	The purpose of this project is to install a sanitary sewer main and gravity collection system along SR-267 through the LaCroft area and connecting the main line to the sanitary sewer system at the East Liverpool City Limits. The sewage from LaCroft will be conveyed to the East Liverpool Wastewater Treatment Plant (WWTP) for treatment. This project should satisfy the Ohio EPA Director’s Final Findings and Orders.	\$ 4,000,000
SCADA Upgrades at WWTP's and major Pump Stations	Columbiana County	Columbiana	The purpose of this project is to install Supervisory Control and Data Acquisition (SCADA) at the Elkton WWTP, Guilford Lake WWTP and at our critical pump stations in our water and sewer district. This project will allow monitoring and remote control of processes at the treatment plants and our main pump stations reducing call-outs and overtime to employees and also reducing employees / operators closely working together during pandemics and social distancing mandates.	\$ 590,000
Calcutta Pump Station Rehab / Upgrade	Columbiana County	Columbiana	The purpose of this project is to rehabilitate/upgrade a critical pump station that is at the end of its useful life by installing a new wet-well and valve-box including industry-standard submersible pumps, which will eliminate the need for our employees to enter a dangerous "confined-space" on a much too regular basis to unclog and prime the existing pumps that are located at the bottom of a deep “dry-well”. This pump station serves the majority of the Calcutta residential users as well as the Calcutta Business District.	\$ 385,000

APPENDIX E3: WASTEWATER PROJECTS

Project Title	Project Sponsor	County Served	Description	Total Project Cost
Cross Roads Sanitary Sewer Pump Station Emergency Generator	Columbiana County	Columbiana	The purpose of this project is to install an emergency generator for emergency, backup electricity at the existing Cross Roads Sanitary Sewer Pump Station. The pump station currently does not have a source of back-up electricity during power outages.	\$ 49,950
Elkton WWTP Flow Equalization Tank Upgrade	Columbiana County	Columbiana	The purpose of this project is to install flow equalization tanks and aeration blowers at the Elkton WWTP to allow metering of septic loads and sewage into the headworks of the treatment plant. Current conditions result in a “slug load” of septage entering the plant. This upgrade will enable a more efficient biological process of our treatment plant.	\$ 415,000
Turkana Sanitary Sewer Pump Station Emergency Generator	Columbiana County	Columbiana	The purpose of this project is to install a 40kW emergency generator and an automatic transfer switch for emergency, backup electricity at the existing Turkana Sanitary Sewer Pump Station. The pump station currently does not have a source of back-up electricity during power outages.	\$ 40,242
Calcutta Woods Sanitary Sewer Pump Station Emergency Generator	Columbiana County	Columbiana	The purpose of this project is to install an emergency generator and an automatic transfer switch for emergency, backup electricity at the existing Calcutta Woods Sanitary Sewer Pump Station. The pump station currently does not have a source of back-up electricity during power outages.	\$ 35,300
McCoy Avenue Pump Station Upgrade / Replacement	Columbiana County	Columbiana	The purpose of this project is to upgrade/replace the existing pump station located at McCoy Ave in Calcutta that is at the end of its useful life by installing a new wet-well and valve-box. The project also includes new submersible pumps and control panel. The current wet-well is old, corroded and collapsing.	\$ 95,000
Carpenter Run Sanitary Sewer Replacement	City of East Liverpool	Columbiana		\$ 5,000,000
Wastewater Treatment Plant Improvements, Phase 1	City of East Liverpool	Columbiana		\$ 5,000,000
Combined Sewer Separation	Village of Wellsville	Columbiana		\$ 4,500,000
Freeport Sanitary Sewer System	Harrison County	Harrison	The project will eliminate failing on-site septic systems and satisfy Ohio EPA violations for raw sewage discharging from storm sewers within the Village of Freeport.	\$ 8,626,000
Wastewater Treatment Plant and Collection System Improvements	Village of Cadiz	Harrison	New wastewater treatment plant to replace outdated failing system and collection system improvements to reduce wet weather infiltration and inflow.	\$ 16,425,500
Wastewater Treatment Plant Improvements	Village of Harrisville	Harrison	Automatic bar screen and replacement of UV System.	\$ 461,500
Clendening Marina WWTP and Collection System Improvements	Muskingum Watershed Conservancy District	Harrison	Packaged wastewater treatment plant (flow equalizations, extended aeration, fixed media clarifiers, slow sand filters, and UV disinfection) to replace aging septic-based system and sanitary collector sewers for cabins, motel, four RV sites, marina, and service building.	\$ 851,500
Winesburg Area Wastewater Facilities	Holmes County Sewer District - Holmes County Commissioners	Holmes	This project will provide sanitary sewer to 30 residences and 18 businesses in the Winesburg area and will include a treatment plant upgrade.	\$ 4,500,000
Smithfield Area Sewer System	Jefferson County	Jefferson	The proposed project will consist of improvements to the existing wastewater treatment plant located in Smithfield.	\$ 5,475,000
Reeds Mill Pump Station & Belvedere Sewer Replacement	Jefferson County	Jefferson		\$ 2,088,200
Ridgeland Subdivision STP Replacement	Jefferson County	Jefferson		\$ 1,415,700
WWTP Tertiary Treatment Unit Replacement	Village of New Concord	Muskingum	The tertiary filters are old and can no longer remove suspended solids at the mandated OEPA level resulting in OEPA permit violations.	\$ 652,600

APPENDIX E3: WASTEWATER PROJECTS

Project Title	Project Sponsor	County Served	Description	Total Project Cost
Headworks Improvements	Twin City Water and Sewer District	Tuscarawas	New structure and screen channel	\$ 600,000
Wilkshire Hills WWTP Upgrade - Phase 2	Tuscarawas County	Tuscarawas	This project includes a new emergency standby generator, replacement of existing chlorine gas disinfection system with UV disinfection, a septage receiving station for handling disposal of septage from the County's variable grade sewer system in Midvale/Barnhill, and replacement of sludge storage tanks that are beyond end of life.	\$ 1,800,000
Wastewater Collection and Treatment System	Village of Roswell	Tuscarawas	This project will eliminate failing on-lot systems.	\$ 5,000,000
Wastewater Treatment Plant Improvements	Village of Gnadenhutten	Tuscarawas	Phase 1 includes improvements to the headworks, mechanical fine screen, grit chamber, aeration tank, anoxic tank, and other miscellaneous improvements. Phase 2 will include membrane replacement.	\$ 1,904,000
TOTAL				\$ 78,564,338

Appendix E4 – Proposed Projects – Other Infrastructure & Initiatives

Appendix E4: Other Projects

Project Title	Project Sponsor	County Served	Project Type	Description	Total Project
Belmont County: Fostering Entrepreneurial Growth & Sustainability for a Diversified Future	Community Improvement Corporation of Belmont County	Belmont	Entrepreneurship	Provide technical assistance and resources for small businesses and entrepreneurs to include additional training and advising capabilities as well as a revolving loan fund.	\$ 150,000
Powhatan Point Revitalization Community Development Plan	Powhatan Point Revitalization Association	Belmont	Other	Community Redevelopment Plan for Powhatan Point, detailed on the website (www.ppraweb.com), reflecting multiple development projects supporting resort/manufacturing/housing/medical/infrastructure efforts including: (a) the redevelopment of the current abandoned downtown and surrounding area into a regional resort/recreational community; (b) new manufacturing workforce transition to modular construction from coal/power/factory industry; (c) area medical and assisted living center; (d) infrastructure upgrades of Route 7 routing and waste water treatment facility and pipelines; and (d) the soliciting/negotiation with investor/subcontracting/management interests. Note: COVID-19 has added greater impact on a burdened community already subjected to lost industry effects. The proposed Project will validate on-going revitalization efforts through design/subcontract/management/cost analysis by credible third party expertise, to assure investor interests.	\$ 995,000
FFA Camp Muskingum Dining Hall Upkeep and Modernization	Ohio FFA Camps Inc.	Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, Tuscarawas	Building	As the only FFA camp in Ohio, FFA Camp Muskingum traditionally serves over 12,000 customers from January through November while providing educational enrichment and helping individuals from across the country (a majority being from Appalachian Ohio) develop employment skills. With many buildings that were constructed in 1939, modernization has been a meaningful initiative in retaining clients and generating new income; air conditioning in the Dining Hall is an expected commodity, greatly increases the value of Camp's accommodations and helps maintain required relevancy to fulfill its mission in the 21st century. Funds that had been secured for this project have been reallocated to payroll due to the loss of revenue caused by the COVID-19 Pandemic.	\$ 150,000
Digital Works OMEGA	Connected Nation	Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, Tuscarawas	Workforce Development	Digital Works is an established job creation program that trains, places, and mentors candidates in high-demand technology-based jobs. The jobs are remote, economic-base jobs in which all the work is performed within the community (from home or co-working center) for employers outside the community. Connected Nation has established relationships with over 70 employers with significant and immediate placement needs which are not being met through traditional recruiting, hiring, and training channels. Training is employer-designed and lasts 4 weeks with job offers following within 2 to 4 weeks thereafter. The proposed project is scoped to offer 10 virtual classes with virtual placement support services for all class graduates in the OMEGA region. Maximum participants per class is 15. With between 10 and 15 participants per class and a placement rate of 80+%, we'd estimate creating 80-120 jobs in the region.	\$ 300,000
CDL Training Pad	Belmont College	Belmont, Harrison	Workforce Development	CDL Training Pad to meet local, regional, and state demand.	\$ 96,612
Restroom and Septic System	Fox Township	Carroll	Building	Due to Covid-19 we feel the need to have an indoor restroom with hand wash area at our Township Garage Facility. We currently have an outdoor Porta-Jon. Project would consist of building an addition off of our current building and installing a septic system.	\$ 45,000
Road Maintenance Equipment and Storage Building	East Township	Carroll	Building	Purchase a new dirt/gravel drag for road maintenance, replacement parts, and improvements to road maintenance and equipment storage building.	\$ 40,000

Appendix E4: Other Projects

Project Title	Project Sponsor	County Served	Project Type	Description	Total Project
Columbiana County Vehicle Storage Garage	Columbiana County	Columbiana	Building	The purpose of this project is to replace an existing open-walled, dirt floor parking area for our County snowplow trucks and equipment. This new garage will be heated and allow our trucks to be parked and stored in a heated, closed environment that will keep expensive trucks and equipment from rusting so quickly and prematurely.	\$ 1,884,500
Salem Small Business Revolving Loan Fund	Sustainable Opportunity Development Center, Inc.	Columbiana	Entrepreneurship	Small business revolving loan fund to supply a much needed funding resource to the many small businesses of Salem especially those that have been impacted by COVID-19. Since many small businesses in Salem have no commercial lending relationship. this program will fill a much needed void for many businesses to survive the current crisis. By creating a revolving loan fund we are able to not only assist now, but with future growth and prosperity in the Salem Community.	\$ 250,000
Broadband Extension for Economic Development and Educational Purposes	Port Authority for Columbiana County	Columbiana	Broadband	The Port Authority in conjunction in partnership with ACCESS Council, propose to extend broadband by use of fiber and/or WI-FI for businesses, telecommuting, and distance learning.	TBD
Columbiana County Industrial Park	Port Authority for Columbiana County	Columbiana	Industrial Park	Purchase 50-acre site for development of a new industrial park.	\$ 800,000
Reservoir Dam Improvements	Village of Wellsville	Columbiana	Dam	Improvements to the Reservoir Dam (former water supply for the Village) are needed to comply with ODNR orders.	\$ 2,500,000
Maker Space/Incubator	Coshocton County Port Authority	Coshocton	Entrepreneurship	To promote entrepreneurship and a more diversified economy, the Coshocton County Port Authority would like to develop a maker space/ business incubator.	\$ 1,231,300
Coshocton County Expansion	Muskingum Valley Health Centers	Coshocton, Guernsey, Muskingum	Healthcare	The Muskingum Valley Health Centers (MVHC) is a Federally Qualified Health Center serving patients in 4 rural southeastern Ohio Counties. MVHC recently acquired a second location in Coshocton County to meet the increasing demands of low-income, rural families for health care. The facility needs to expand to meet existing and projected growth. MVHC is requesting \$250,000 to begin the design of the expansion.	\$ 3,000,000
Health and Wellness Complex Infrastructure	Muskingum University	Coshocton, Guernsey, Muskingum	Workforce Development	The Muskingum University Health and Wellness Complex (HWC) is slated to open in fall 2022. The purpose of this project is to pave campus roads around the west residential area and new Health & Wellness Complex for fire access as well as water, storm, sanitary, and gas line work around the construction site. The HWC will feature a state-of-the-art Health and Wellness Diagnostic Hub with technology for training and for research and development in health and wellness. It is envisioned as a center for learning, workforce development, innovative research and development, and diagnosis and treatment services for students and area residents – in collaboration with healthcare providers, business and industry, and technology entrepreneurs.	\$ 1,541,000
Career Pathways Coordination/Specialist	OVESC	Guernsey	Workforce Development	Career Pathways Coordinator to help students explore short term industry recognized credentials and "bootcamp" style training for expedited entry into the workplace, as well as job shadowing, career mentoring, internships, facility tours, and job placement.	\$ 90,000

Appendix E4: Other Projects

Project Title	Project Sponsor	County Served	Project Type	Description	Total Project
Safe Haven Space	Muskingum University	Guernsey, Muskingum	Safety	The purpose of the Safe Haven Space project at Muskingum University is to purchase two large generators, one for the Health & Wellness Complex to allow lights and heating/cooling during a sustained power interruption that would allow this building to be a 'safe haven' space for the campus and extended community. The second generator would be to provide energy to Patton Dining Hall to allow continued functionality of the kitchen during a sustained power outage to serve the University and possibly greater area community depending on the size and impact of a potential catastrophic event. The total square feet the generators would provide energy to is approximately 90,000.	\$ 1,150,000
Dam Repair	Muskingum University	Guernsey, Muskingum	Flood & Drainage	The purpose of the Muskingum University Dam Repair project is to prevent a future disaster related to a 100-year rain or flood event. The dam, located on University Lake, on the campus in New Concord, Ohio is labeled as a level 1 high hazard dam by the Ohio DNR due to the potential for loss of live in a failure. It is one of the smallest in Ohio that meets that dam requirement for high hazard.	\$ 1,100,000
Storm Sewer Lift Station Improvements	Village of Stratton	Jefferson	Flood & Drainage	Rehabilitation of storm water lift station to include a trash rack, steel platform, pre-engineered pump station, and 250 linear feet of 12-inch pump discharge using horizontal directional drilling under SR 7.	\$ 469,300
National Road Business Park Development	Zanesville-Muskingum County Port Authority	Muskingum	Industrial Park	The National Road Business Park was formally established in June 2018 through the joint efforts of the ZMCPA, Muskingum County and the City of Zanesville. All necessary environmental studies have been completed and bids for an access road will be accepted in 2020. The project will create sufficient capacity to support any distribution, manufacturing or warehousing facilities that would choose to purchase land in the National Road Business Park. The Weber Street lift station and force main will need to be upgraded for this new development.	\$ 3,526,751
Tuscarawas Regional Advanced Manufacturing/IIOT Center of Excellence/Innovation Center	Tuscarawas County Economic Development Corporation	Tuscarawas	Innovation Center	The Innovation Center will create a collaborative environment bringing together industry, higher education, and government in partnership to develop new tools, techniques, and technologies to address the Industrial Internet of things (IIOT). It will support equipment procured by the Multi-County Advanced Manufacturing Corridor and focus on advanced manufacturing challenges through applied research and technical training, especially in the areas of robotics, computer numerical controlled machining and programmable logic controllers.	\$ 2,550,000
Tuscarawas County Museums Relaunch Marketing Campaign	Dennison Railroad Depot Museum	Tuscarawas	Tourism	Launch strategic marketing campaign to create awareness and increase attendance to museums in the county once the quarantines are lifted. The campaign will have a united overall theme, as well as individual highlights of two National Historic Landmarks (Historic Zoar Village and the Dennison Railroad Depot Museum), Ohio's only Revolutionary Fort Site (Fort Laurens Museum) the largest collection of steam engines east of the Mississippi (Age of Steam Roundhouse Museum), the site of Ohio's first village, schoolhouse, church and code of laws (Historic Schoenbrunn Village), museums of important Ohio innovations (J.E. Reeves Victorian Home and the Uhrichsville Clay Museum) and many more.	\$ 20,000
Tuscarawas County Tourism Marketing and Social Media Recovery Plan	Tuscarawas County Convention and Visitors Bureau	Tuscarawas	Tourism	To provide marketing support with the purchase of print, digital and other opportunities for the county's historical sites, museums, lodging facilities, and other small businesses. Our marketing plan will help to jump start the economy and will aid in efforts to get people back to work, increase the local tax base and will increase awareness of Tuscarawas County's historic and cultural assets.	\$ 25,000

Appendix E4: Other Projects

Project Title	Project Sponsor	County Served	Project Type	Description	Total Project
City of Dover 20 MW Steam Turbine Generation Natural Gas Fired High Pressure 200,000 LB per Hour 900 LB pressure 900 degree Superheated Steam Boiler Electric Capacity Project	City of Dover	Tuscarawas	Municipal Public Power Electric Generation Utility Capacity Transmission project	Generating Electricity for Capacity and Transmission Peaking and Cost reduction for Municipal Public Power Community at the Municipal Public Power Plant at the City of Dover. To Keep Public Power Rate Payers Rates Down into the Future for rising Cost from the ever rising Cost of the For Profit Independent Power Producer and Transmission Providers and RTO.	\$ 10,000,000
TOTAL					\$ 31,914,463

Appendix F – Public Involvement & Comments

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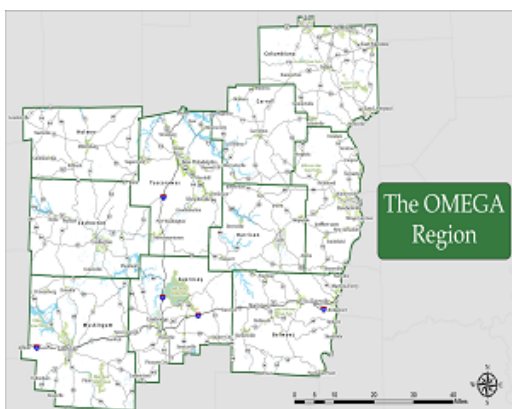


**PUBLIC MEETING – Tuscarawas County
October 1, 2019**

[illegible]

OMEGA Lays Out Plans, Ask for Public Input

by Mary McClintock | Oct 2, 2019 | [Breaking](#), [Homepage](#), [News](#)



Nick McWilliams reporting – A Regional Transportation Planning Organization laid out their short and long-term plans for improved roadways and infrastructure in their district.

OMEGA handles a district consisting of eight counties, including Tuscarawas and surrounding areas, and helps secure funding and collaborations through various programs.

Transportation Director Kevin Buettner says that in order to provide better commutes and growth for areas, OMEGA looks at a host of different factors in the hopes of improving daily life for residents and commuters.

"Your commute times will be less. Initially, during construction, it may get a little bit worse because it might go down to one lane, but the end goal is to make it a faster commute. A safer commute, we want to make it a safe for not just the motorists, but people who walk and bike [too.]"

Working to improve roads and infrastructure can also have a domino effect on trucking and other commerce, according to Buettner.

Under the program, Tuscarawas County would see around \$53.2 million worth of funds for improvements, including large-scale projects along U.S. 250 and I-77.

Public comments are welcome by contacting either Buettner or Geographic Information System Coordinator and Transportation Planner Megan Carmel.

"We do have a public survey that we're asking [for response.] Public meetings are usually hard to get people to come to but if people have time, we're just trying to get everyone to take our survey, it takes a little less than five minutes to take. Very broad questions. It's anonymous."

The survey is available at www.omegadistrict.org/survey along with more details about future plans.

The long-term planning period is expected to last until May of next year.

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Select OMEGA meetings canceled; rescheduled as webinars

Posted Apr 21, 2020 at 7:38 AM

Updated Apr 21, 2020 at 12:23 PM

Due to current state health concerns and efforts to be consistent with Gov. Mike DeWine's directives, the Ohio Mid-Eastern Governments Association has made the decision to cancel all face-to-face Long Range Regional Transportation Plan Public Meetings.

In order to provide the general public with an opportunity to share insights and opinions regarding the long range plan, the public meetings will be held in a web-based format. These meetings serve to inform residents of OMEGA's eight RTPO counties of projects pertaining to road construction, safety and general transportation.

The counties include all OMEGA member counties with the exception of Belmont and Jefferson.

"While the decision to reformat the long range plan public meetings is disappointing, the safety and well-being of our member counties is of the utmost importance to OMEGA," said officials in a press release.



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THE DAILY & Sunday
JEFFERSONIAN

support local.

Webinars are scheduled for 2 and 6 p.m. on Monday, May 4 via Facebook Live. Visit the OMEGA Facebook page to access the meetings. Presentations and all accompanying information will also be available on YouTube.

Contact Communications Manager Kennedy Webb, 740-622-6980 or kwebb@omegadistrict.org, for more information.



Public Meeting

Guernsey County

REGIONAL TRANSPORTATION PLANS

October 9, 2019

AGENDA

1. Introductions
2. OMEGA Overview
3. Regional Transportation Improvement Plan Overview
4. Long Range Transportation Plan Overview
5. Comments

OMEGA: Who Are We?

- Local Development District
- Council of Governments
- Ten County Governments

Belmont*

Carroll

Columbiana

Coshocton

Guernsey

Harrison

Holmes

Jefferson*

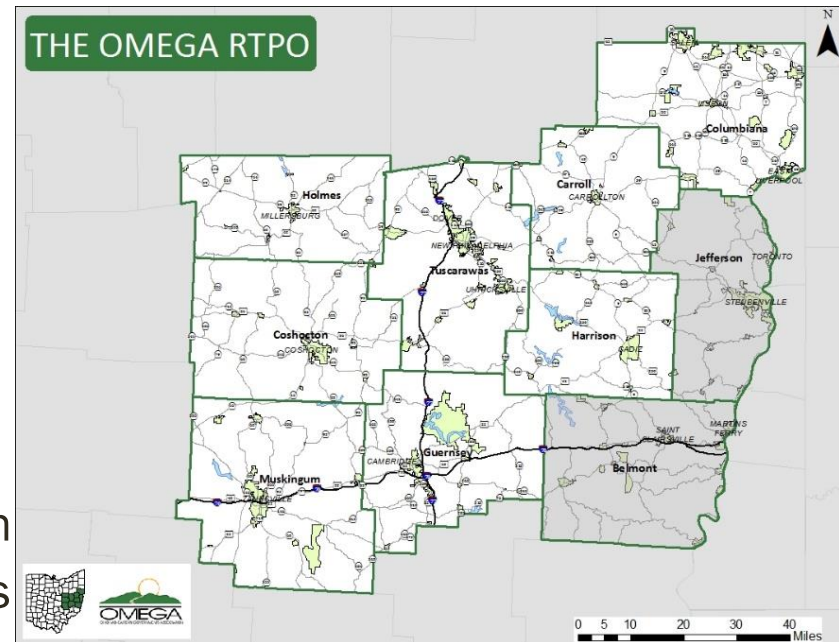
Muskingum

Tuscarawas

- Twelve City Governments

Cambridge, Coshocton, Dover, East Liverpool, Martins Ferry, New Philadelphia, St. Clairsville, Salem, Steubenville, Toronto, Uhrichsville, and Zanesville

*Not Included in RTPo



OMEGA's Services



- **Mission:** *Provide a pathway to enhance community and economic growth in our region.*
- Provide Planning Assistance to Local Governments
- Provide Funding Administrative Services
- Administer ARC/GOA Program
- Administer Revolving Loan Fund Program
- Administer Comprehensive Economic Development Strategy
- Promote Collaboration
- Serve as District Liaison for the District 14 Natural Resource Advisory Council (Clean Ohio)
- **REGIONAL TRANSPORTATION PLANNING ORGANIZATION**

Connecting Communities to Resources

RTPO SERVICES

- Short Range Planning
 - Active Transportation Plans / School Travel Plans
 - Regional Safety Planning
 - Participation in Statewide Planning
- Regional Transportation Planning
 - GIS Database for Local Agencies
 - Regional Transportation Plan
 - Regional Coordinated Human Services/Public Transit Plan
 - US 30 Corridor
 - Columbus to Pittsburgh Corridor
- Technical Services
 - Road Safety Audits, Curve Speed Studies, Crash Analysis
 - Grant Writing, Traffic Counts, Workshops

Current RTP0 Goals

- Maintain and Improve Existing Transportation Systems
- Address Safety and Congestion
- Improve Quality of Life
- Facilitate Economic and Community Development



What is the RTIP/STIP?

What is the STIP?

The Statewide Transportation Improvement Program, or STIP, is Ohio's four-year transportation planning document that serves two main purposes. First, it presents the transportation program for Ohio which includes both federally and state funded projects scheduled within the four-year period. Second, it serves as the reference document required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for use in approving federal funds for transportation projects in Ohio.

- ❖ Ohio Department of Transportation, Office of Program Management
- ❖ Metropolitan Planning Organizations (MPOs)
- ❖ **Rural Transportation Planning Organizations (RTPOs)**
- ❖ Local officials

Source:

<http://www.dot.state.oh.us/Divisions/Planning/STIP/Pages/default.aspx>

Rural Consultation

- Covers State Fiscal Years 2021-2024
- ODOT-programmed project maps on OMEGA website
 - <https://omegadistrict.org/programs/transportation/rtip>
- Opportunity to comment on ODOT-programmed projects
- Include Locally-Initiated Transportation Projects

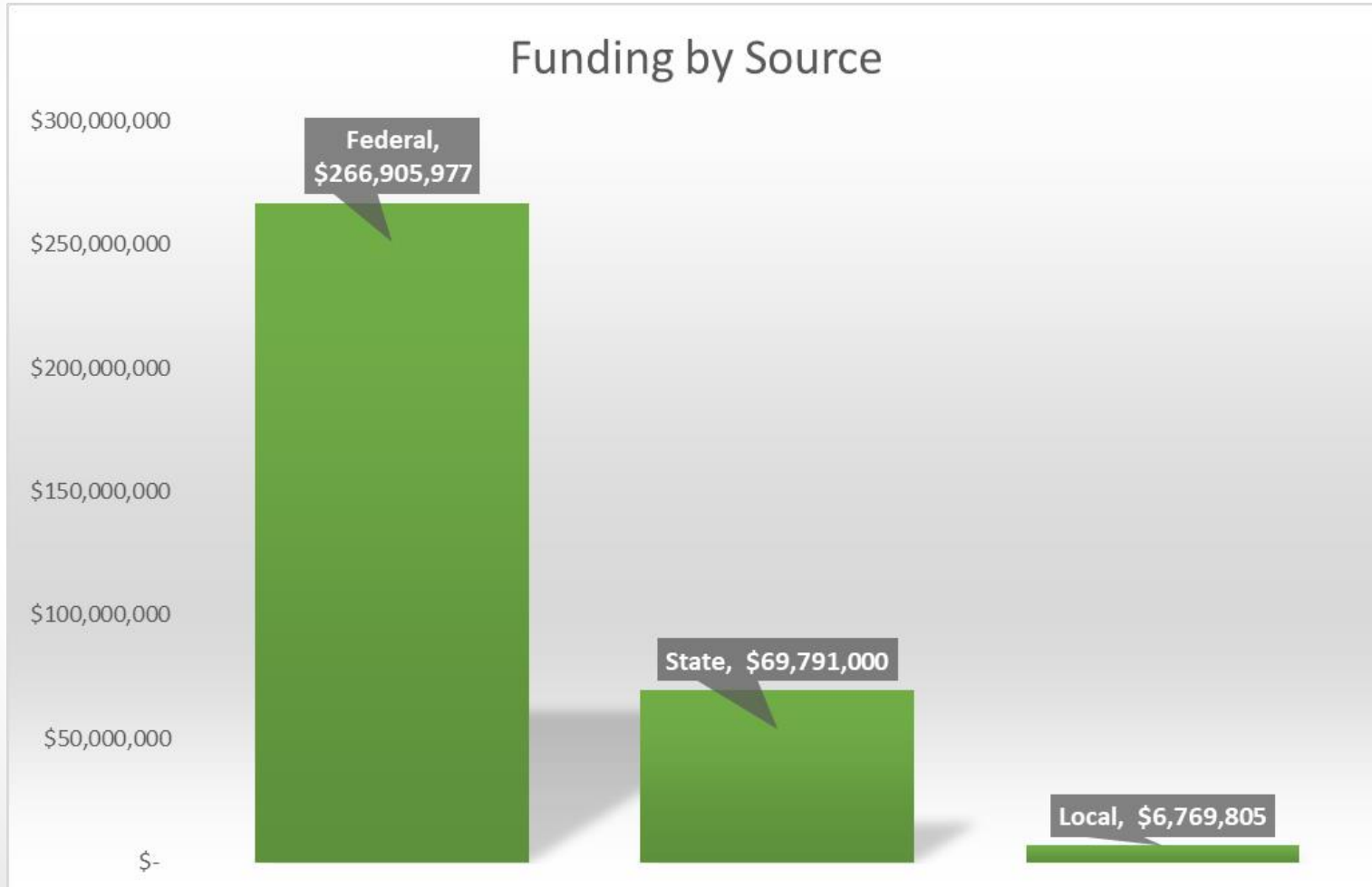
RTIP Process



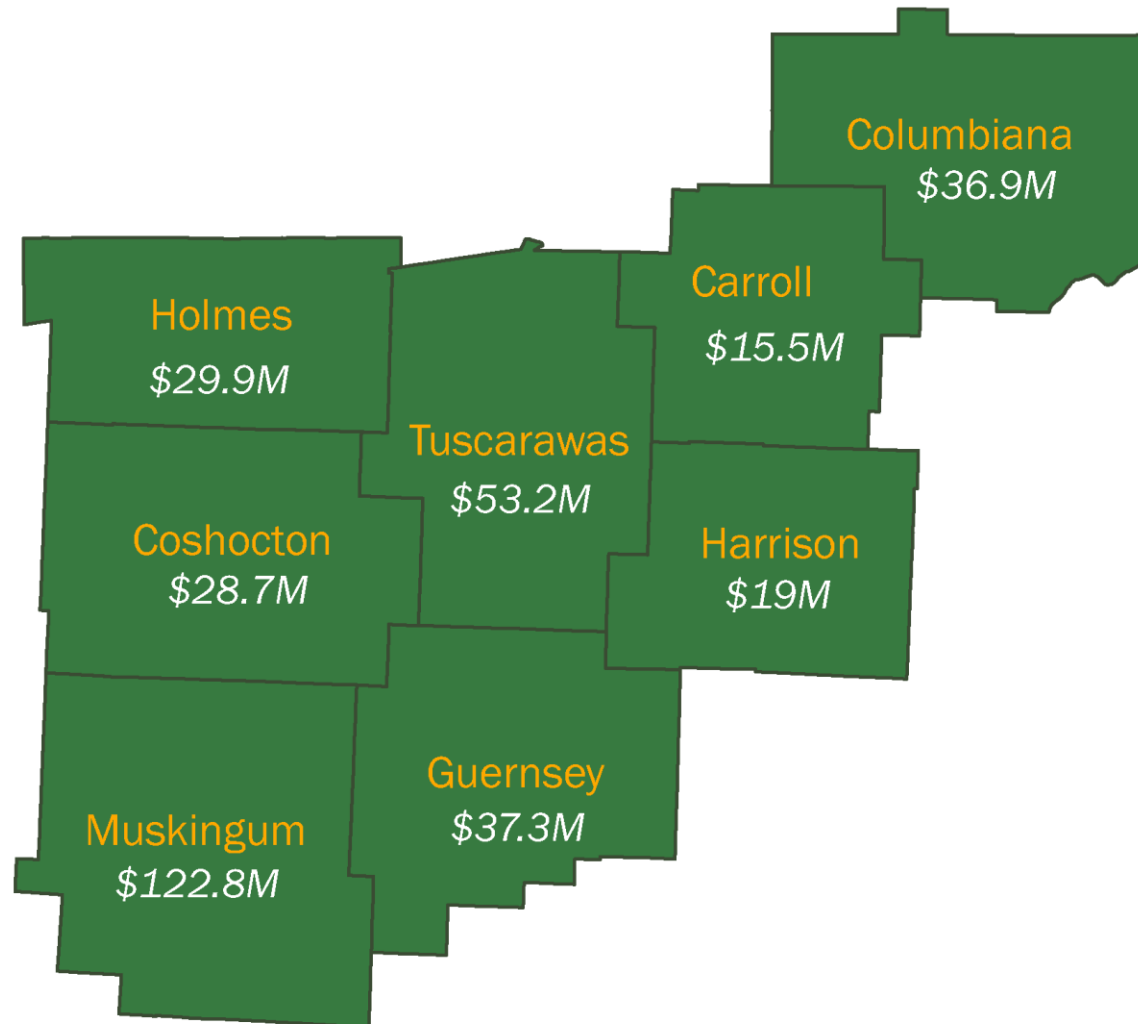
RTIP Development Timeline

- ❖ February 7, 2020 – Draft RTIP due to ODOT
- ❖ March 6, 2020 – Draft STIP available for comment by ODOT
- ❖ March 27, 2020 – Revised draft RTIP due to ODOT
- ❖ March 30-April 10, 2020 –Public Involvement Period
- ❖ April 30, 2020 – Final RTIP due to ODOT

Investment in OMEGA Region

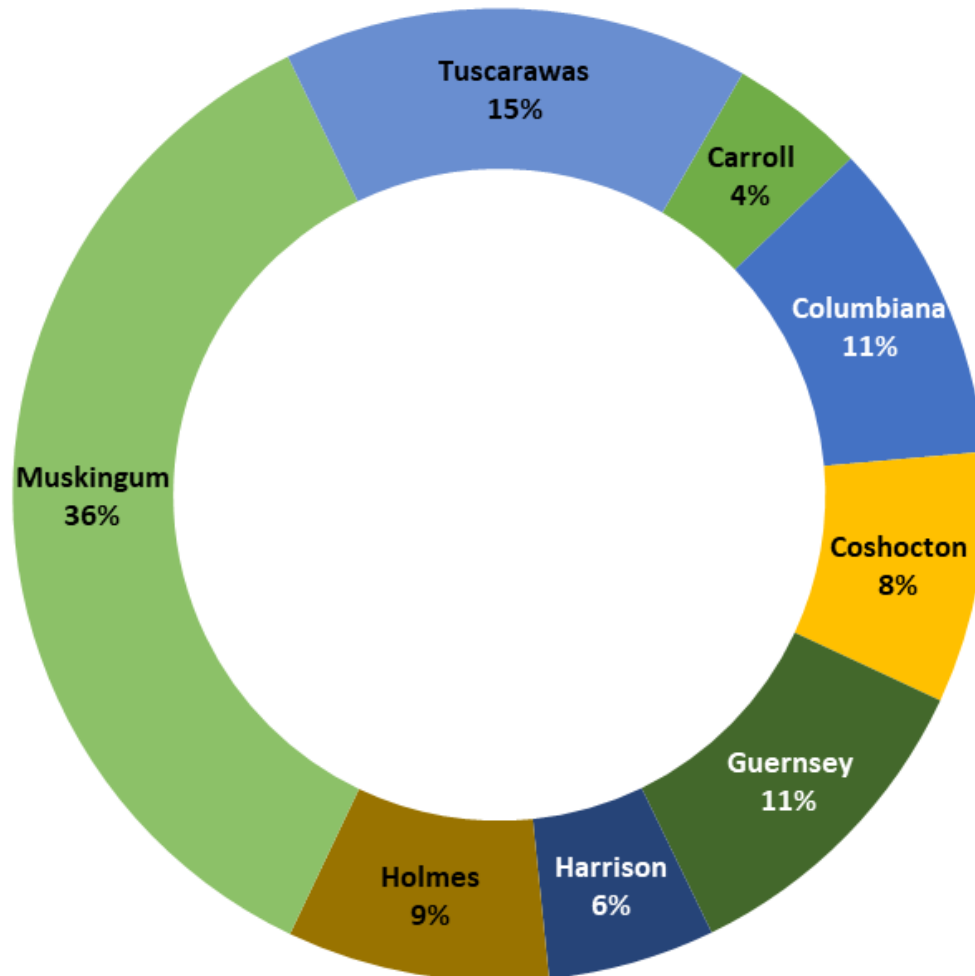


Breakdown by County



Investment in OMEGA Region

Allocation of Funds by County

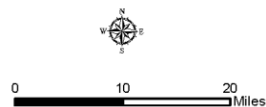
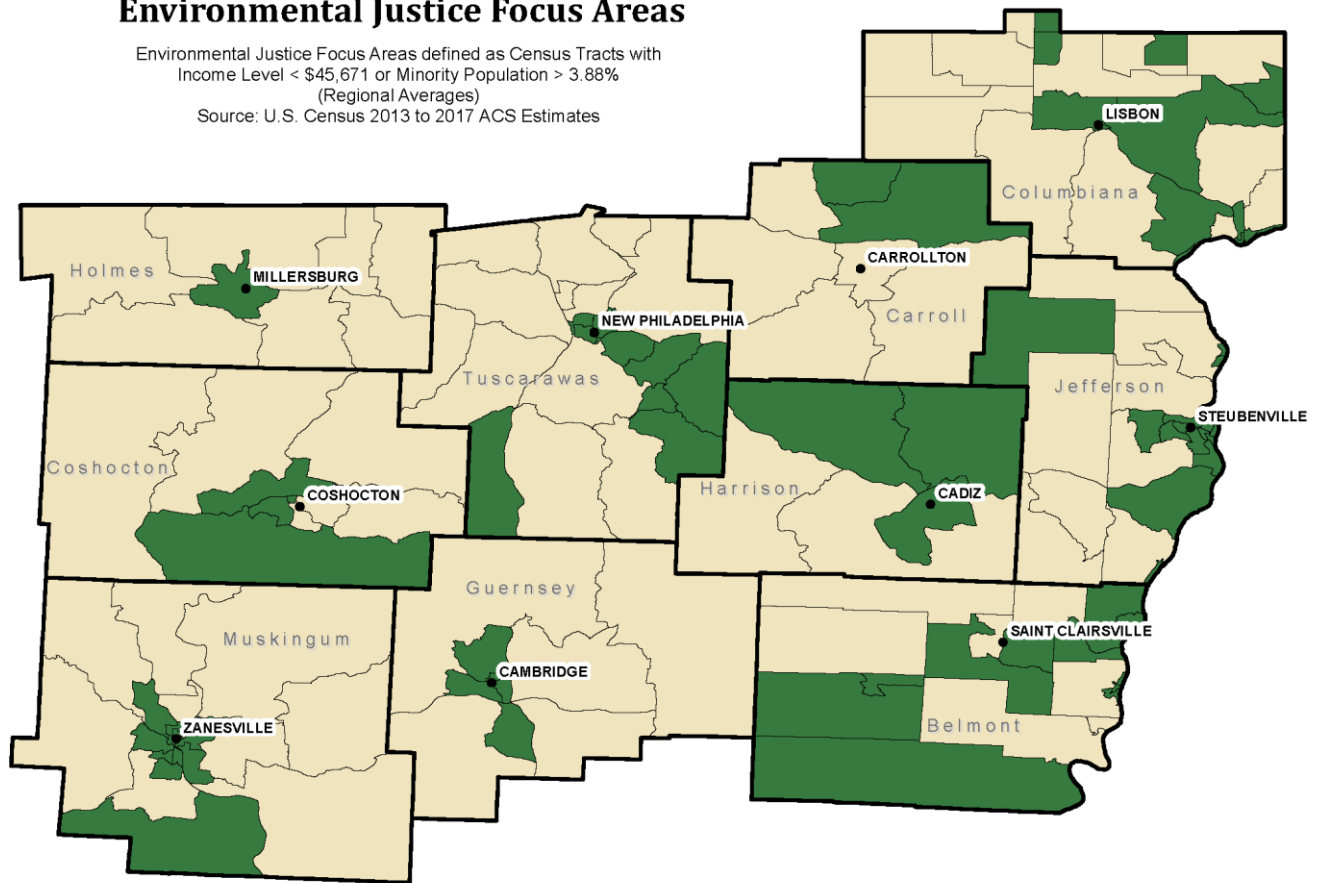


Environmental Justice

Environmental Justice Focus Areas

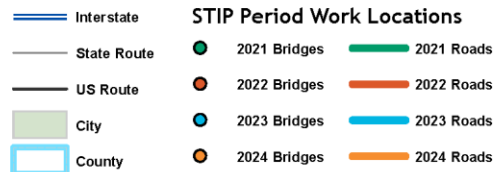
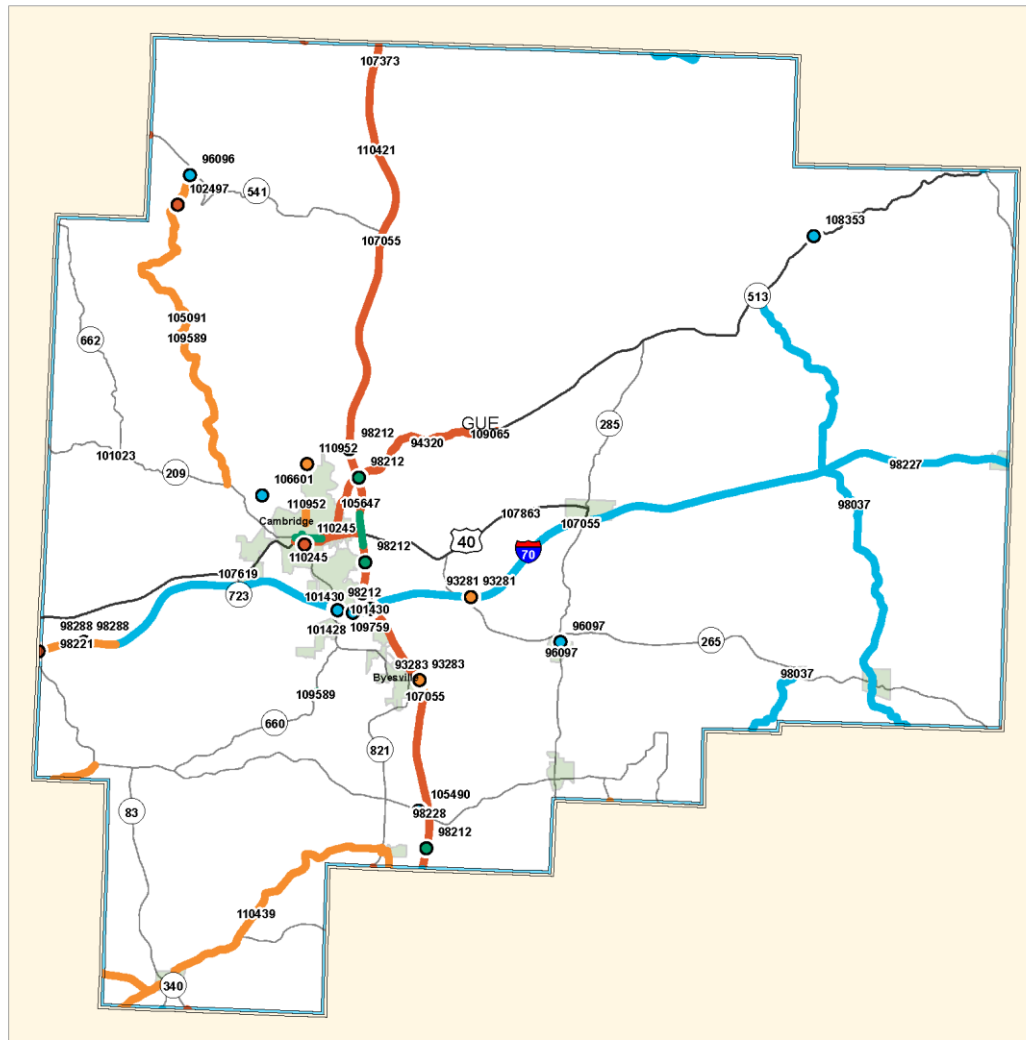
Environmental Justice Focus Areas defined as Census Tracts with
Income Level < \$45,671 or Minority Population > 3.88%
(Regional Averages)

Source: U.S. Census 2013 to 2017 ACS Estimates

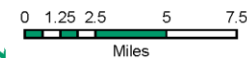


- EJ Focus Area
- Non-EJ Census Tract
- County Boundary

2021 - 2024 Construction Projects GUERNSEY County



Date: 8/5/2019

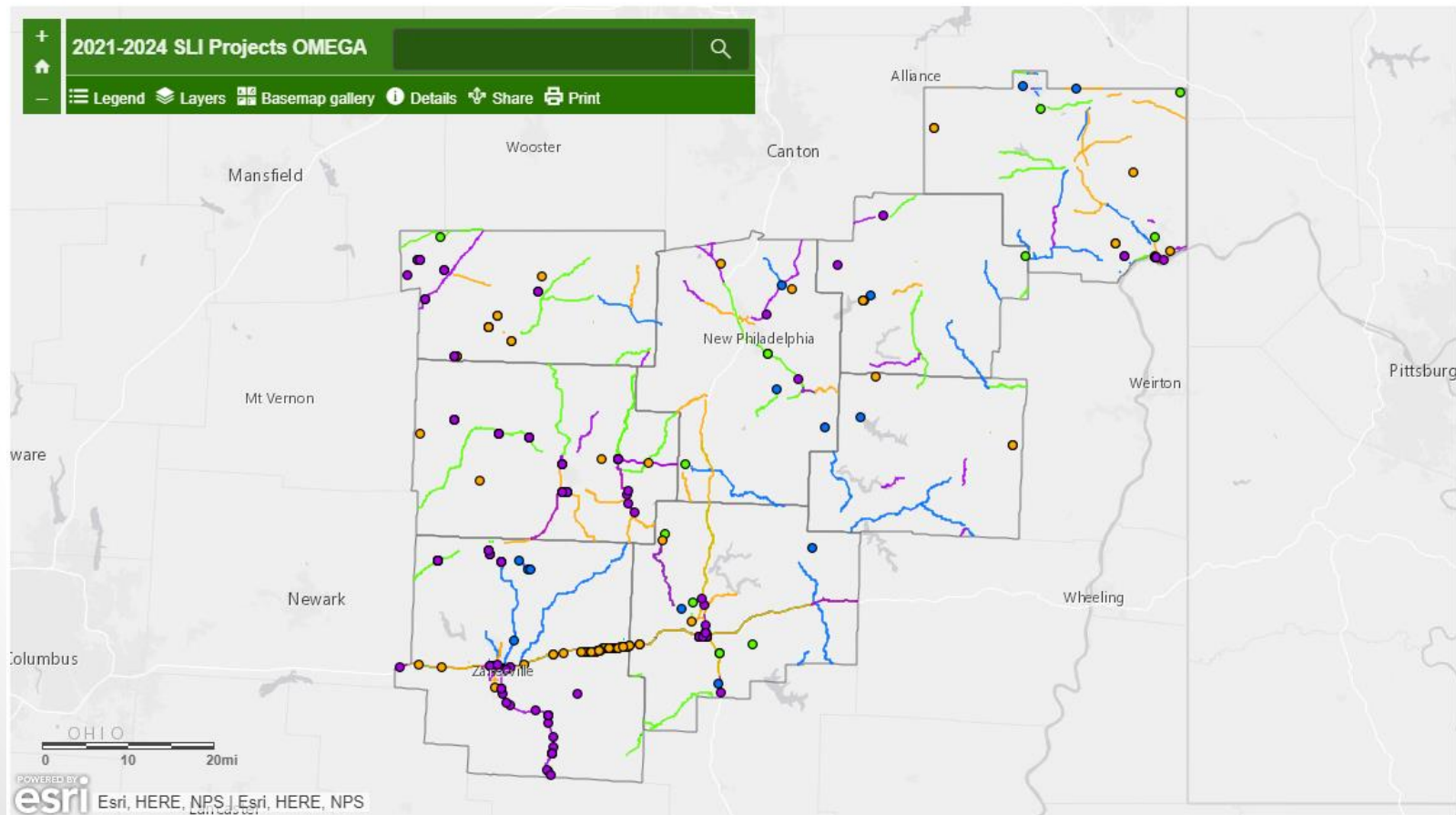


OHIO DEPARTMENT OF
TRANSPORTATION
Division of Planning
Office of Program
Management

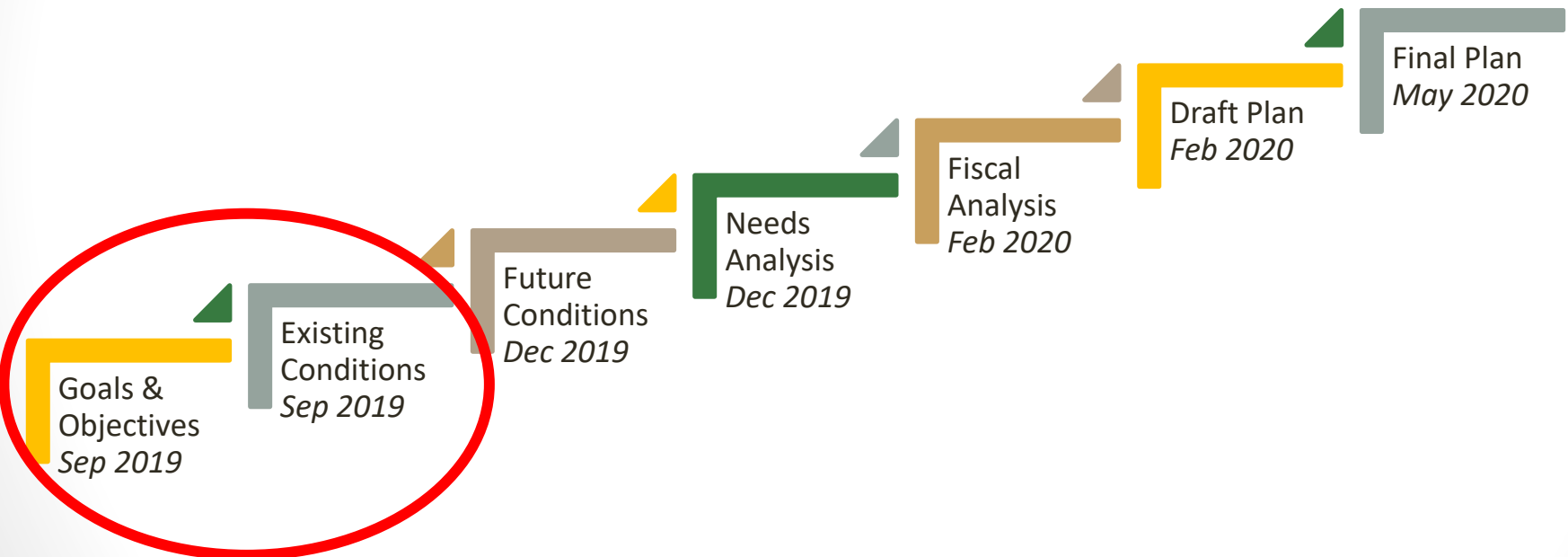
State Line Items

- <http://omegadistrict.org/state-line-items/>

State Line Item Projects



Long-Range Transportation Plan Update



Goals & Objectives

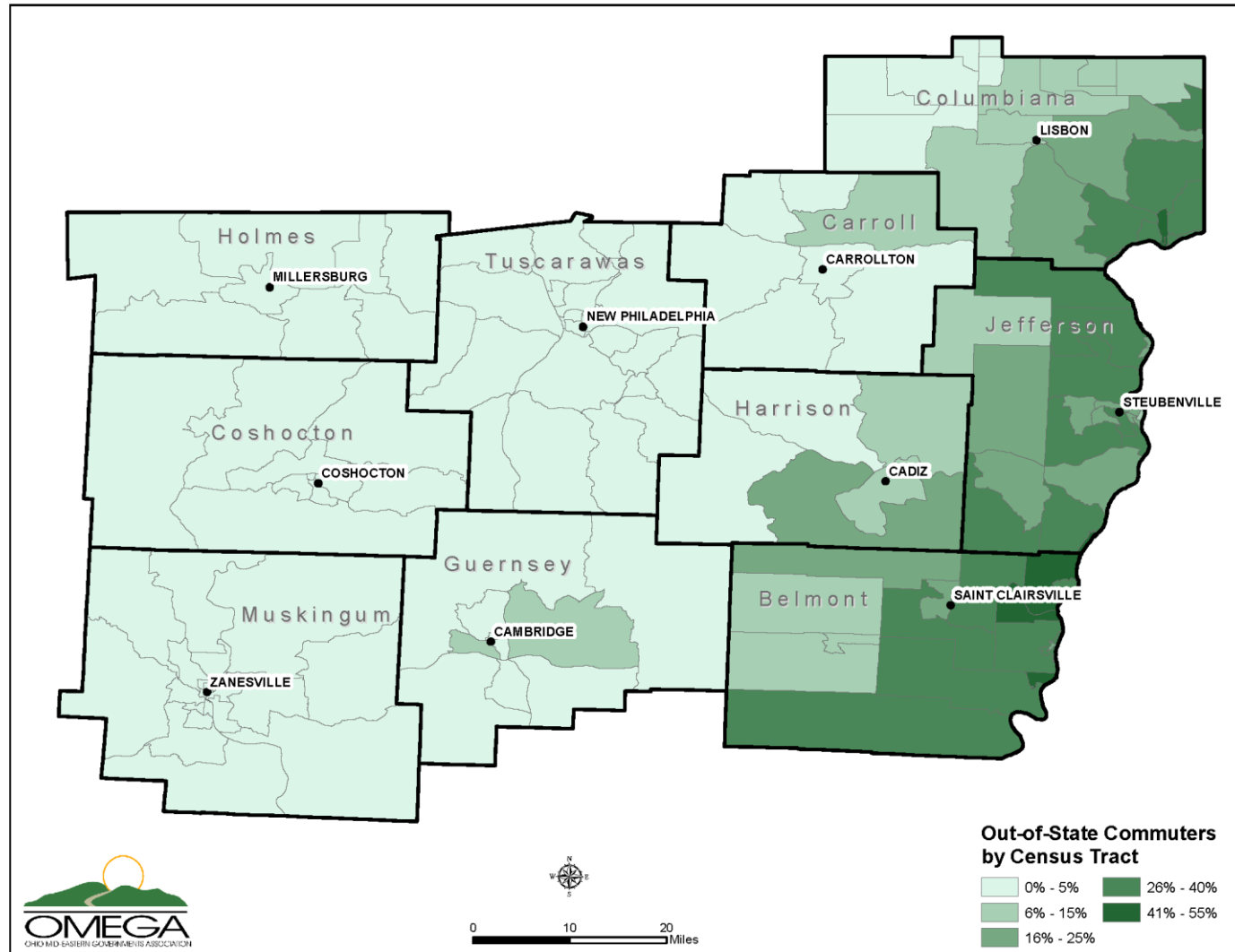
2015 Goals

- Maintain & Improve Existing Transportation Systems
- Address Safety & Congestion
- Improve Quality of Life
- Facilitate Economic & Community Development

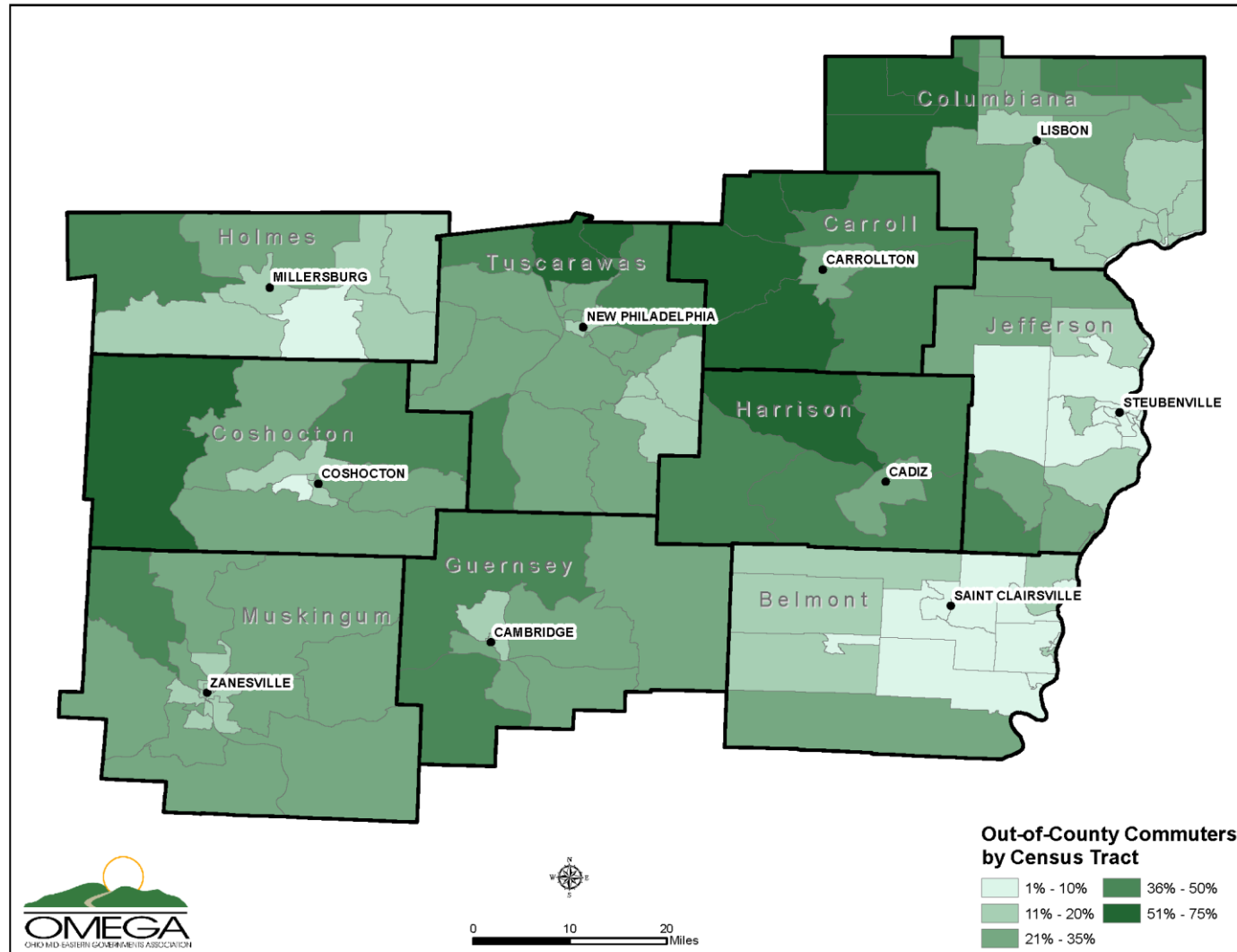
Proposed 2020 Goals

- Preservation of Regional Assets
- Increase Safety of Regional Infrastructure
- Facilitate Economic & Community Development
- Develop / Maintain Regional Resiliency
 - (Weather & Economic)

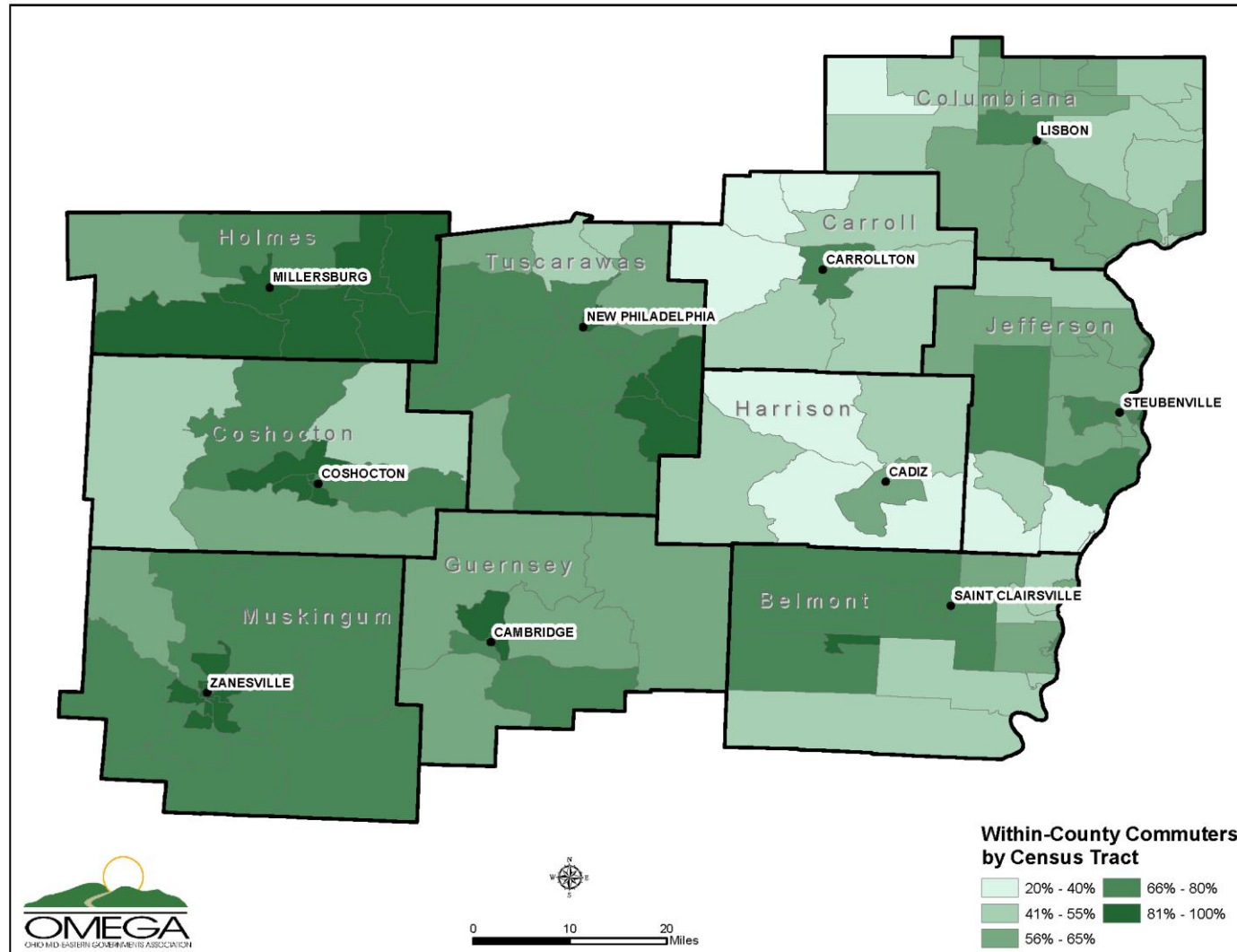
Existing Conditions



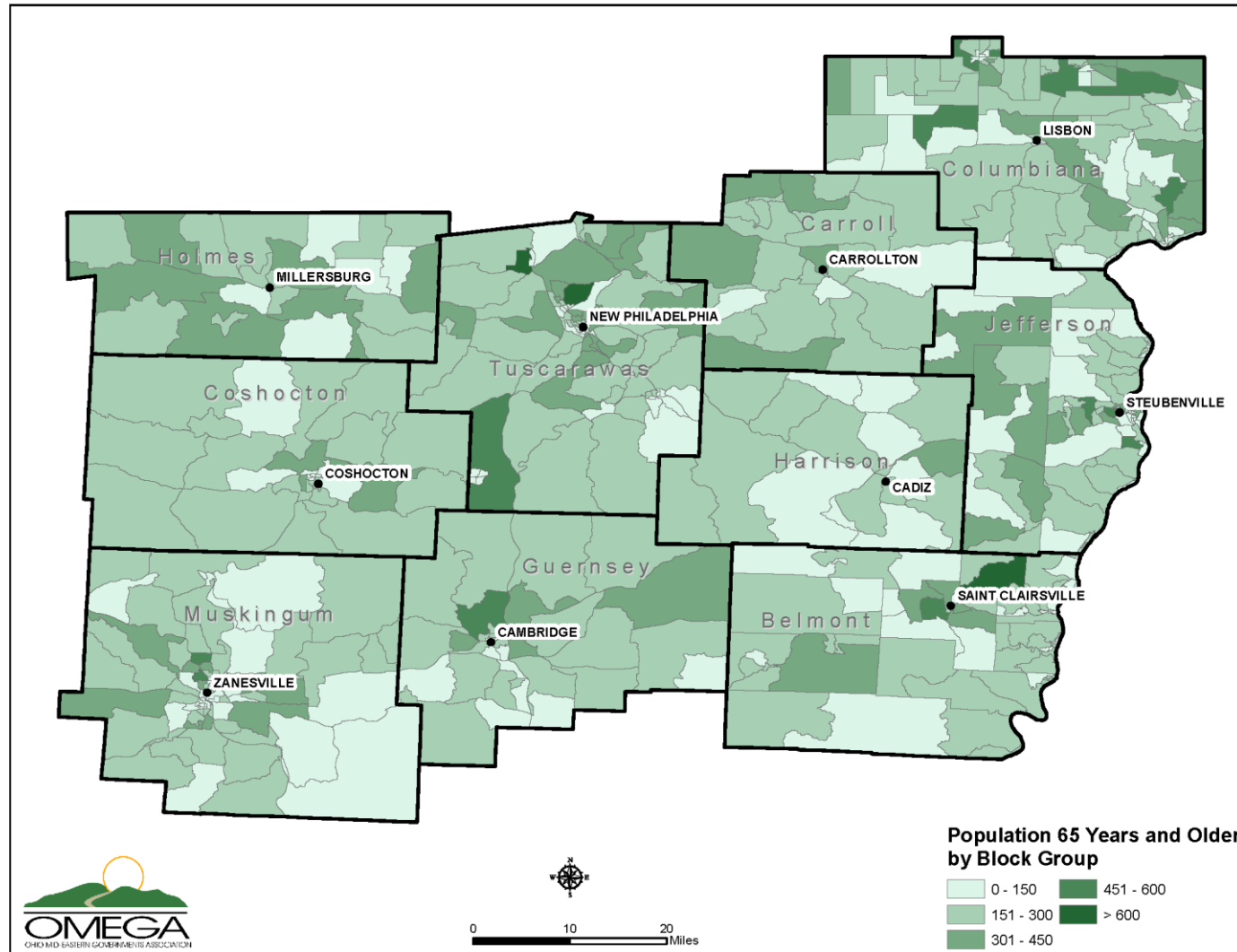
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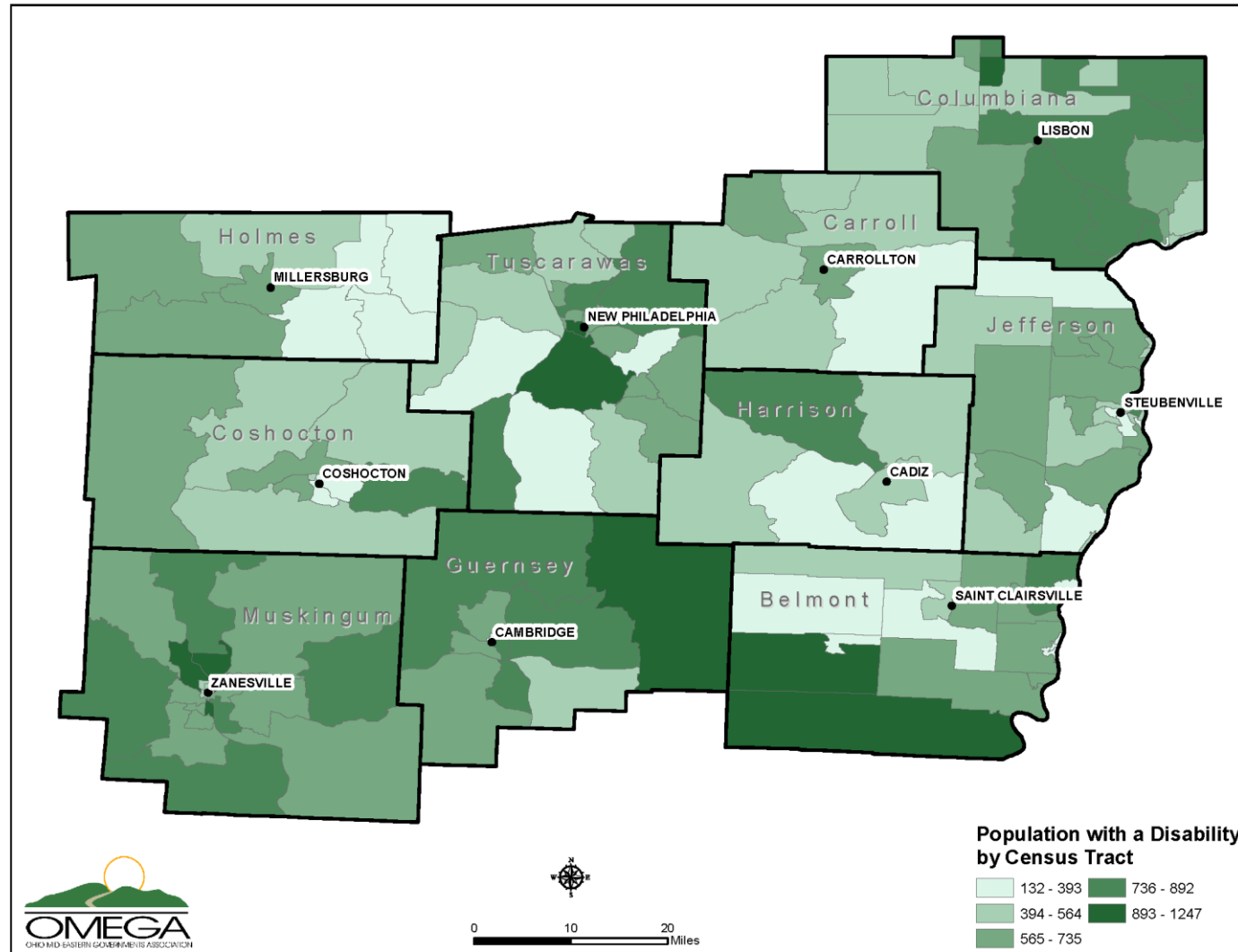
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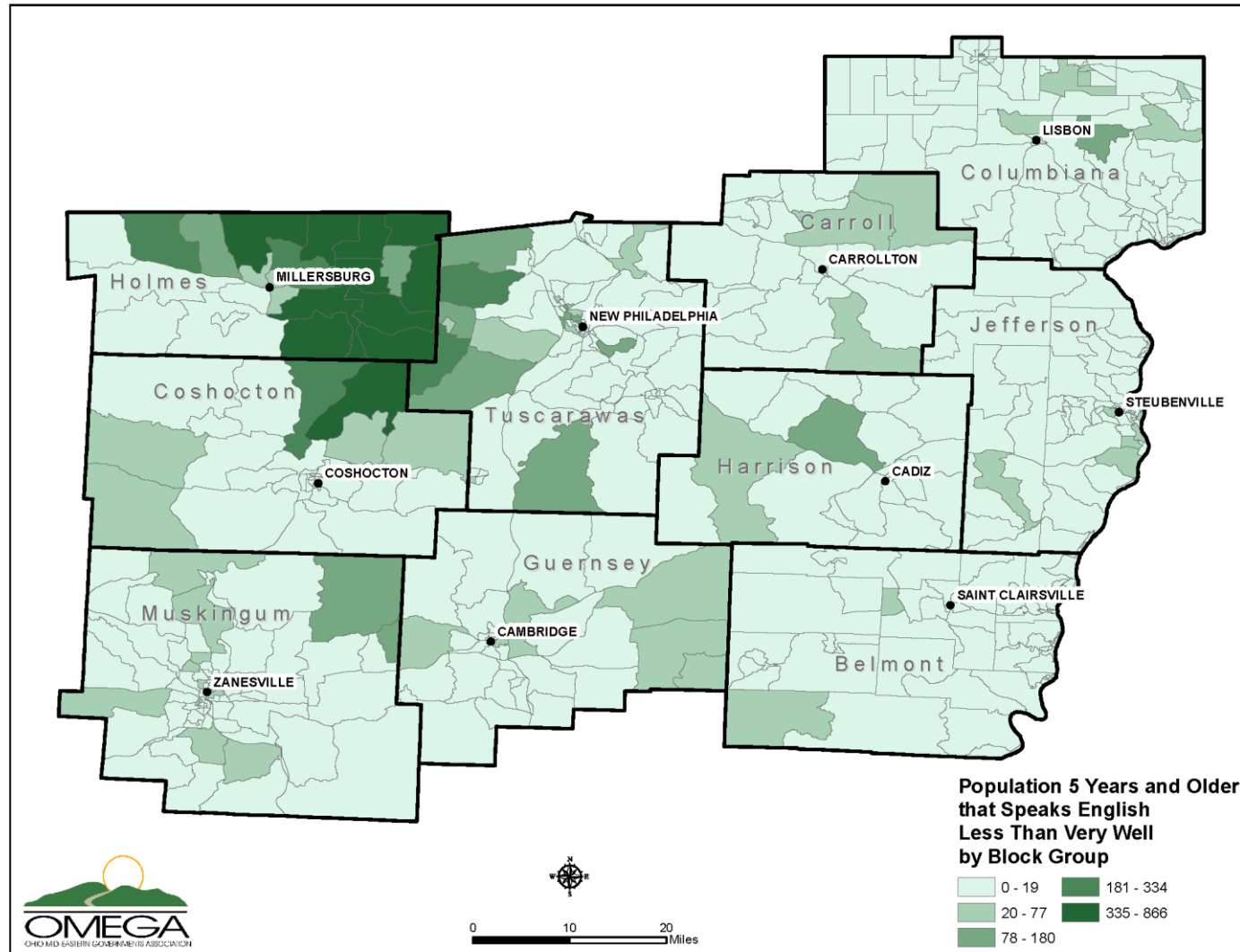
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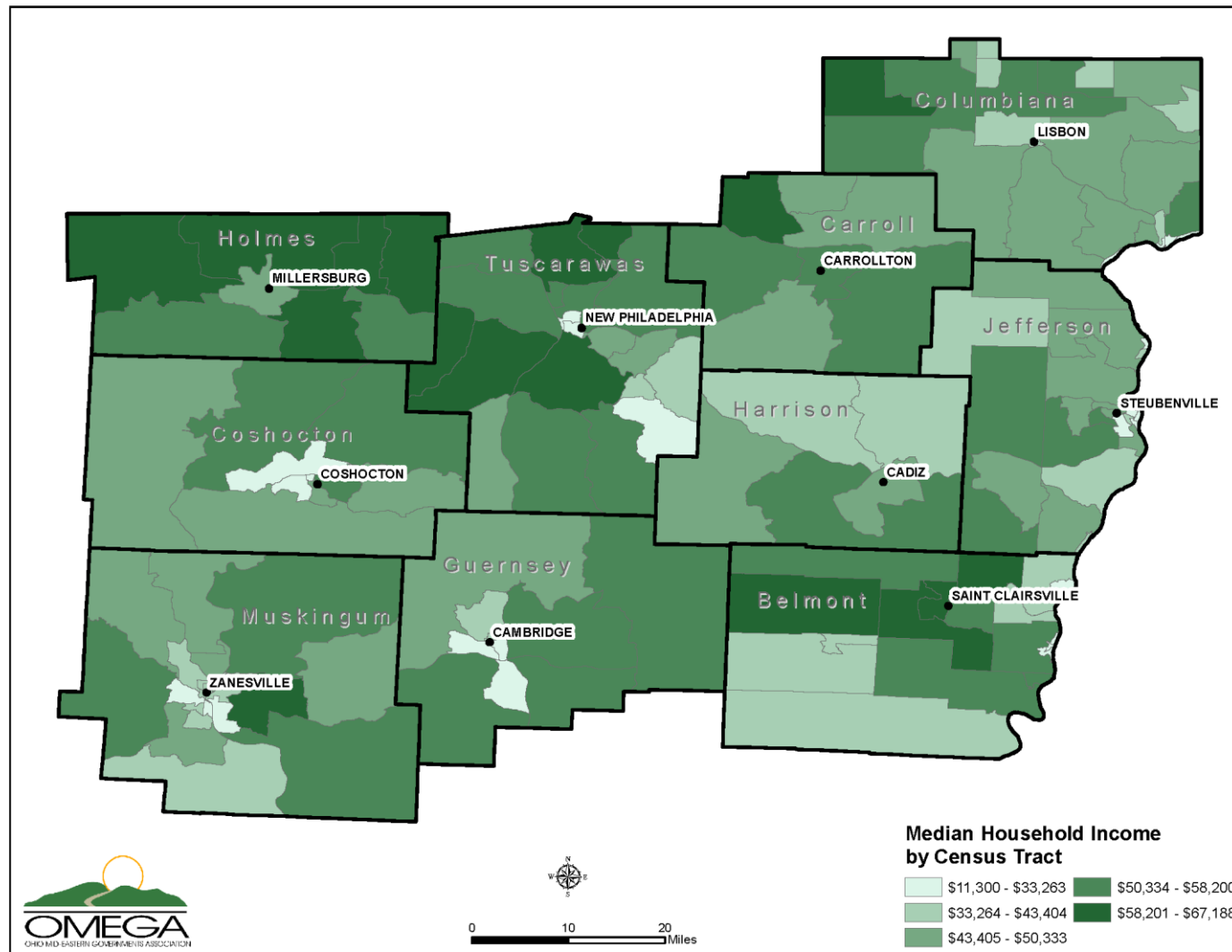
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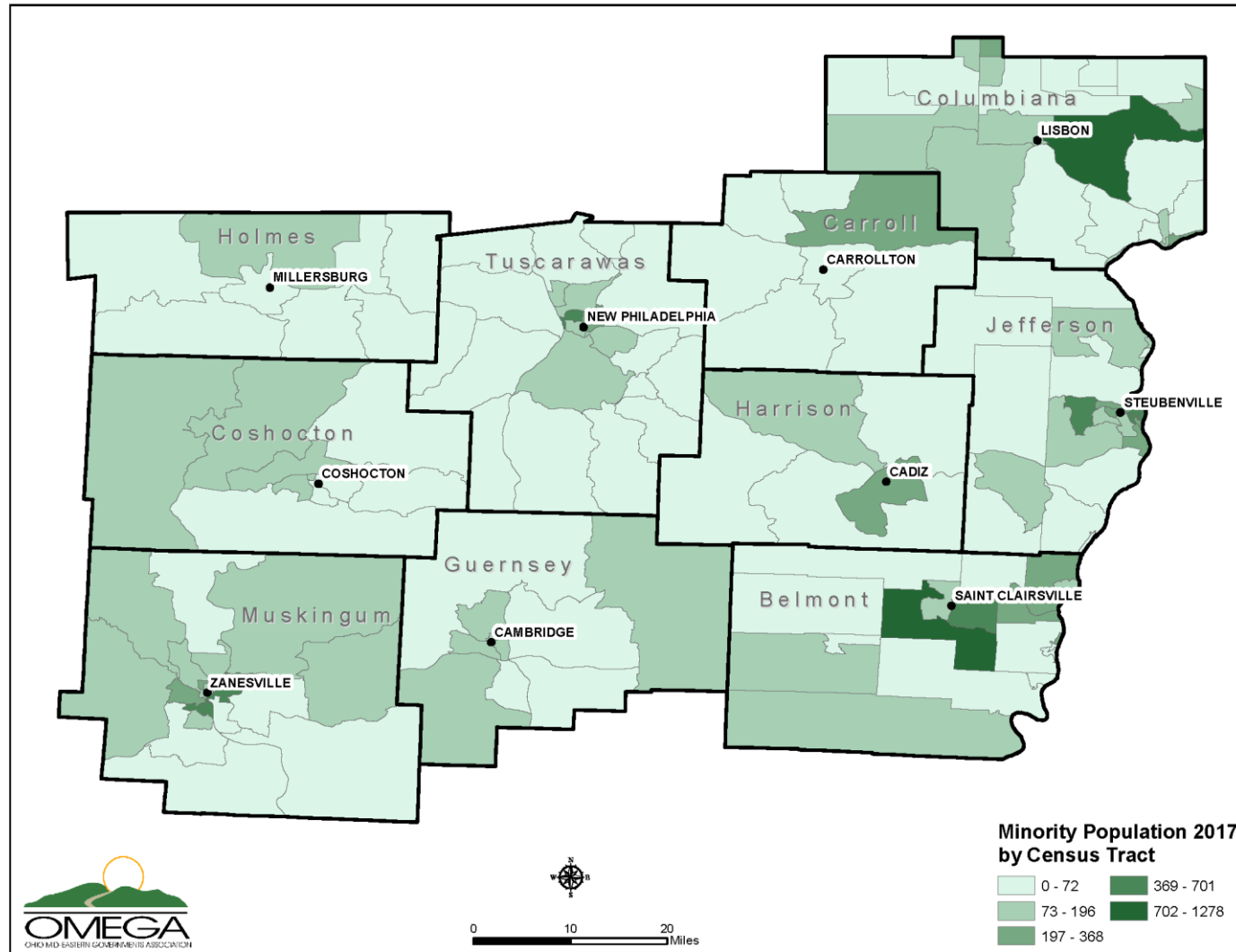
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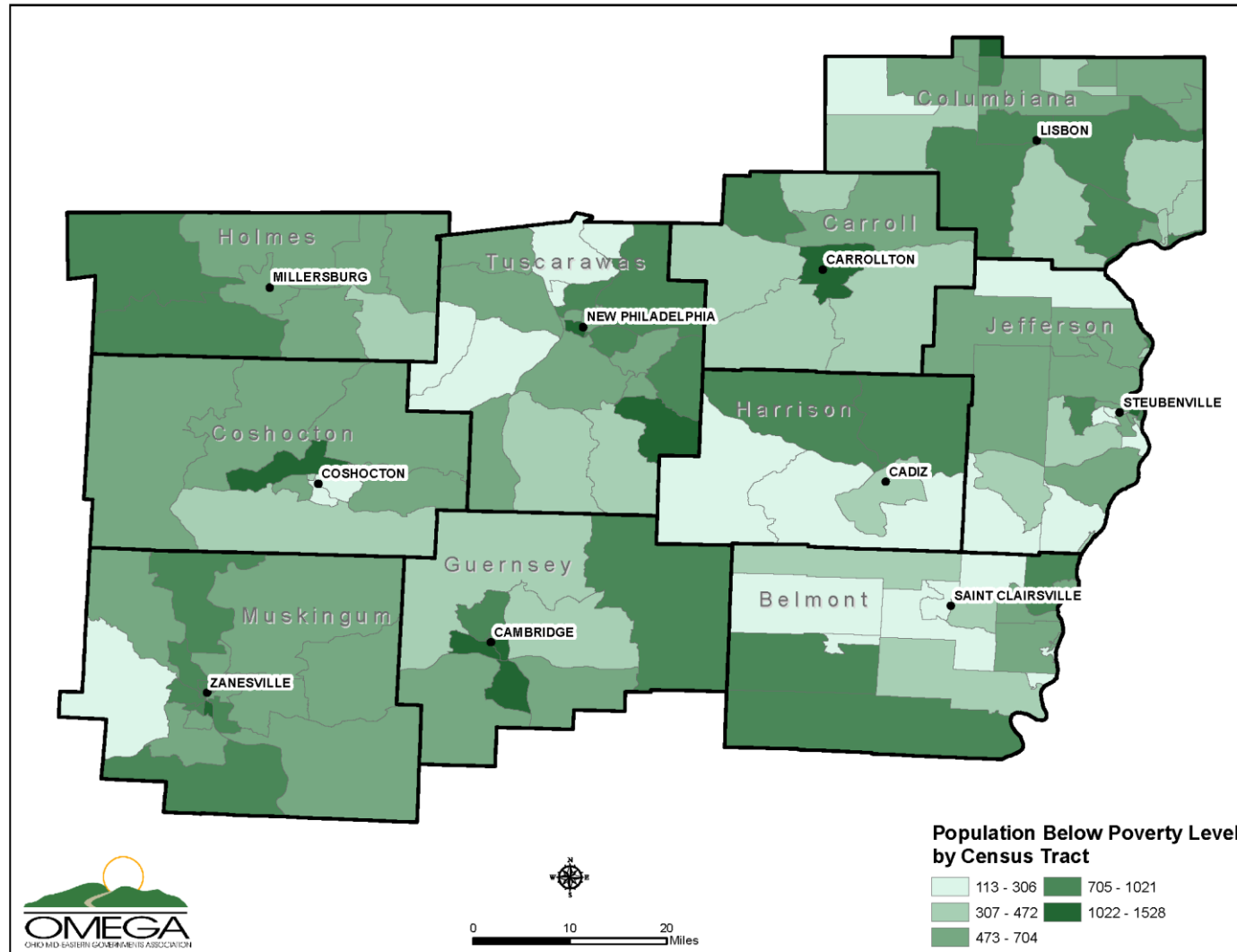
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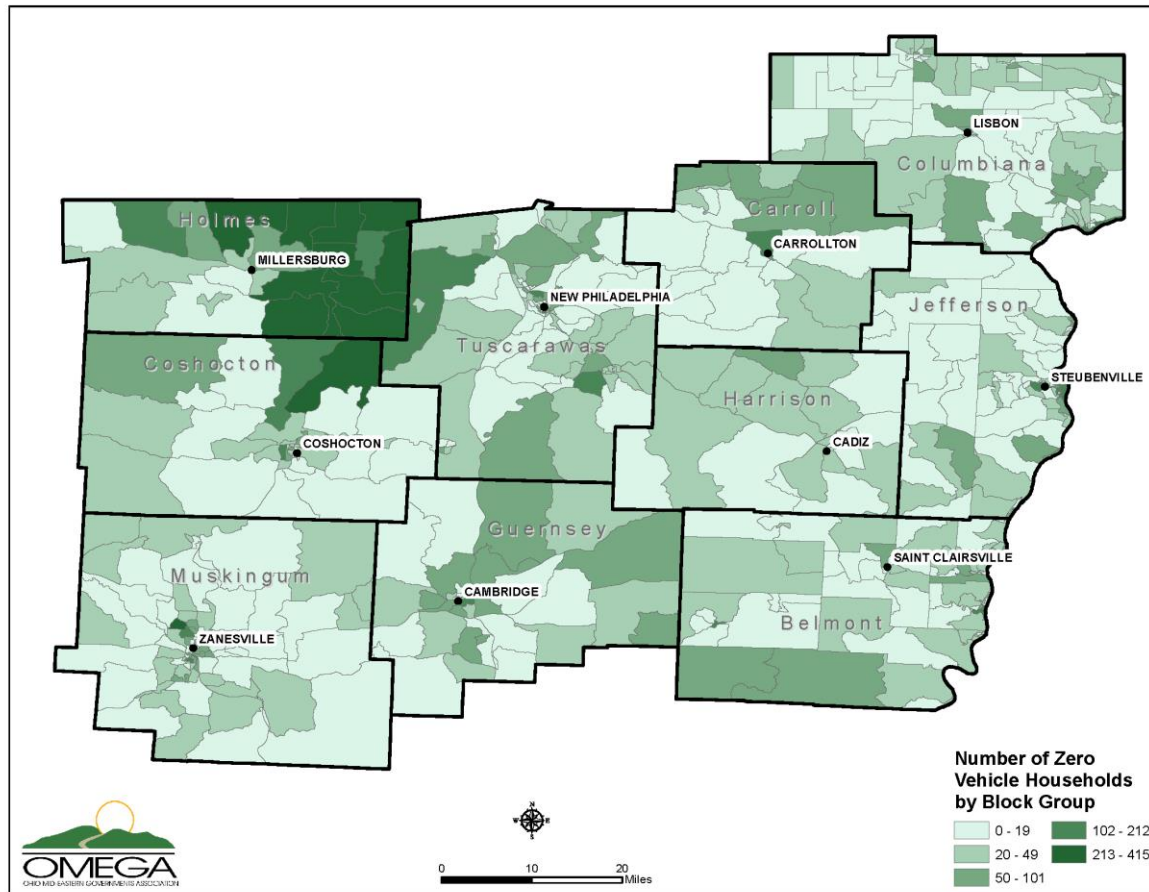
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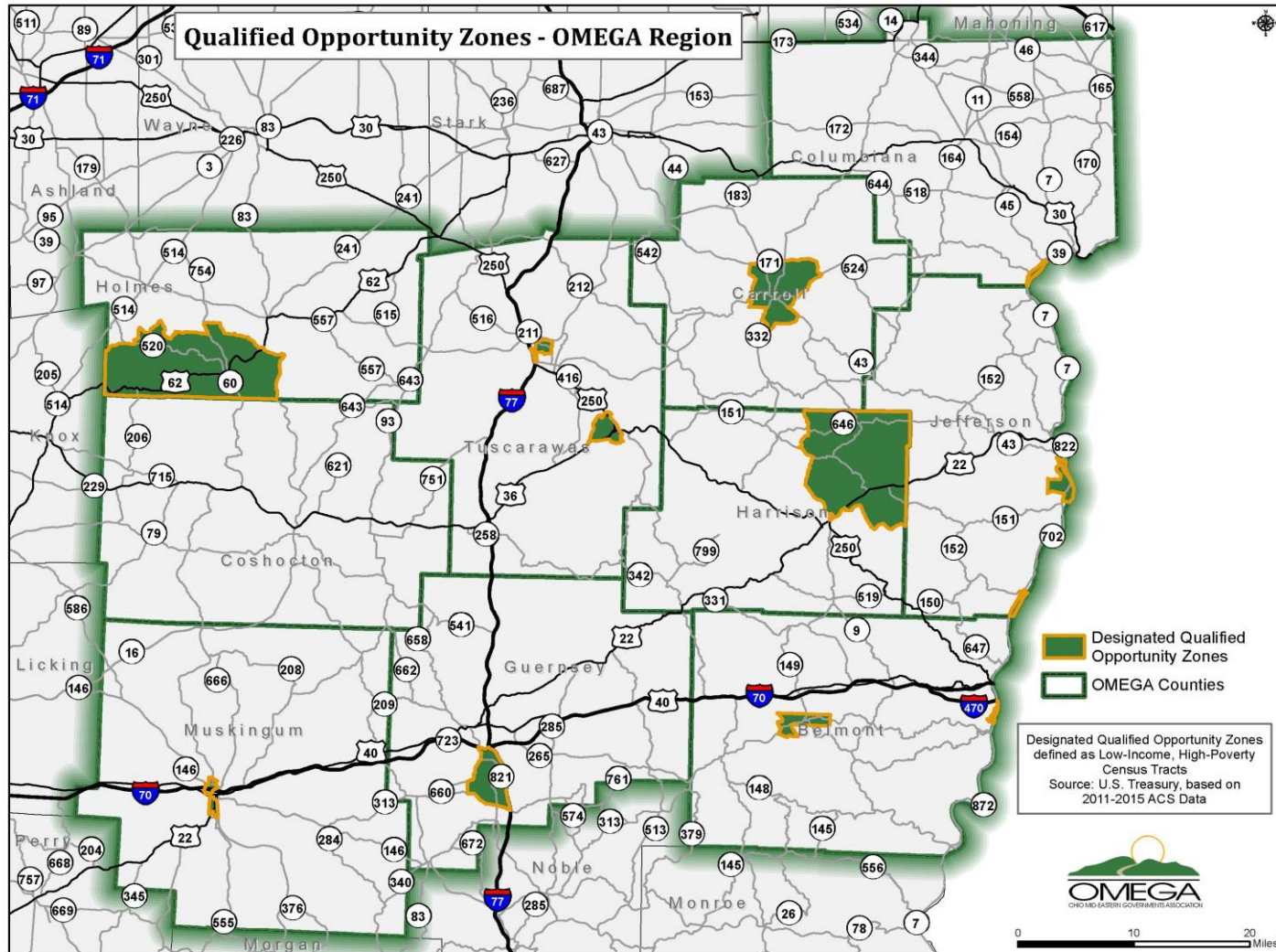
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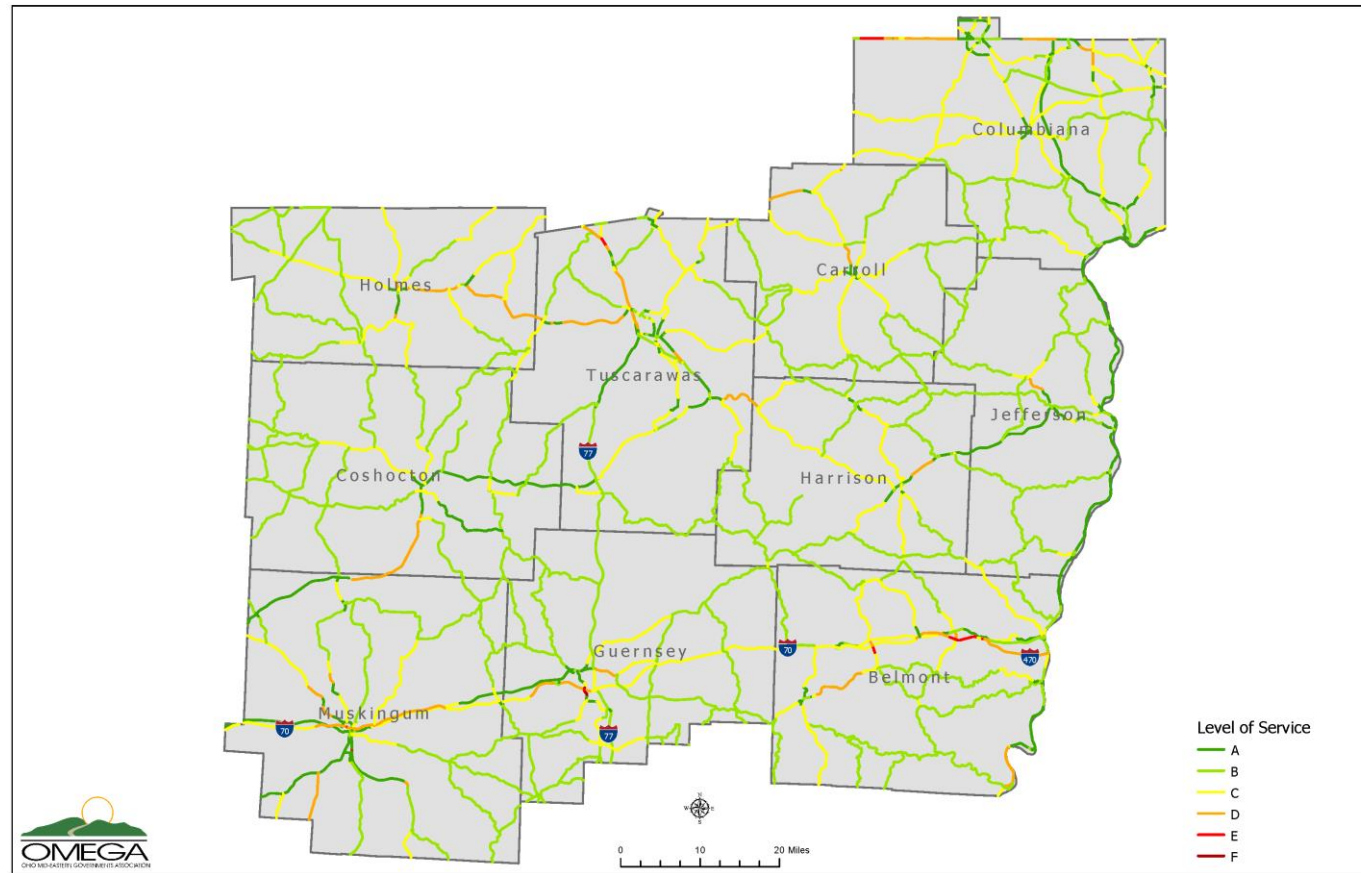
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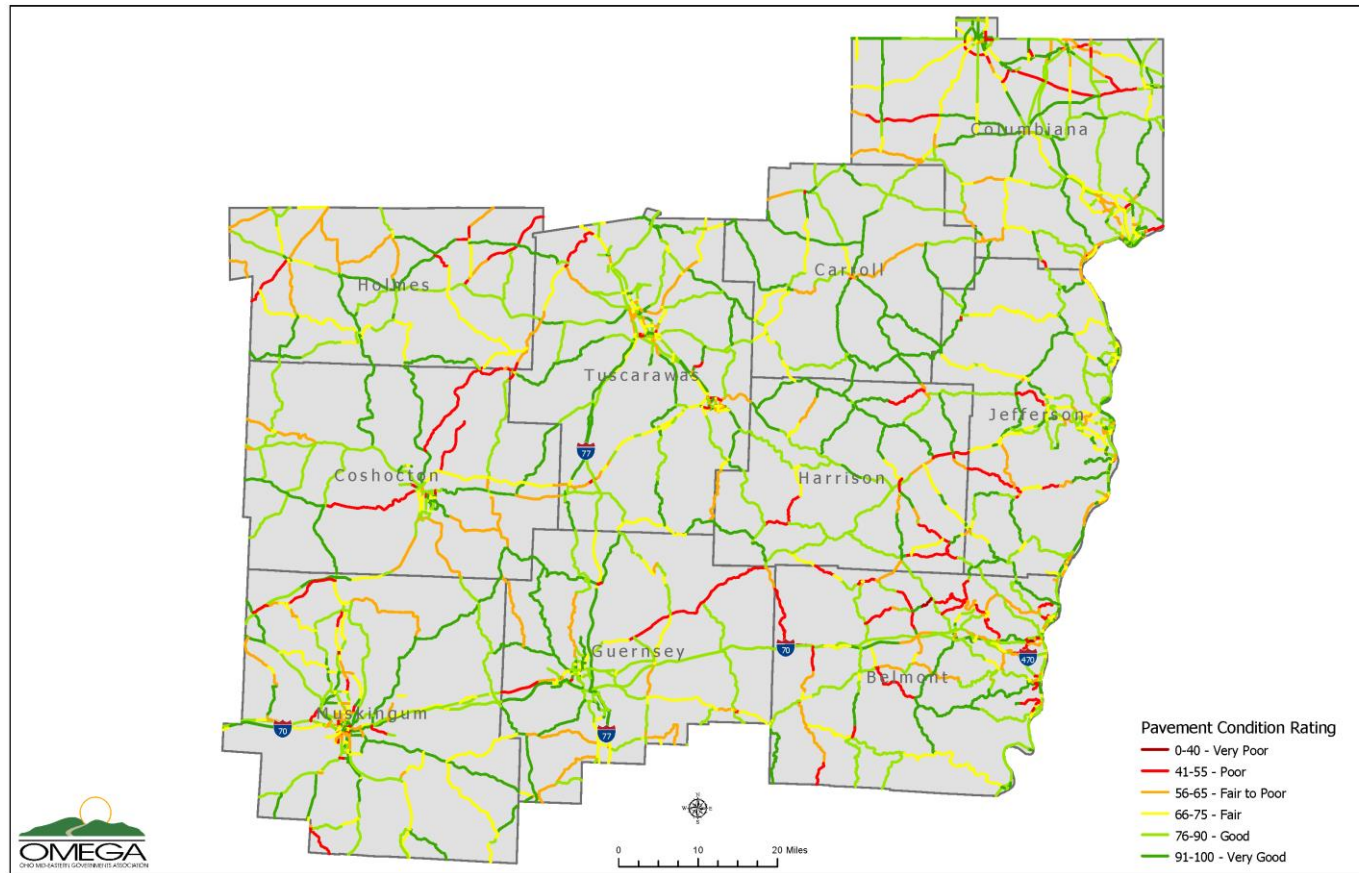
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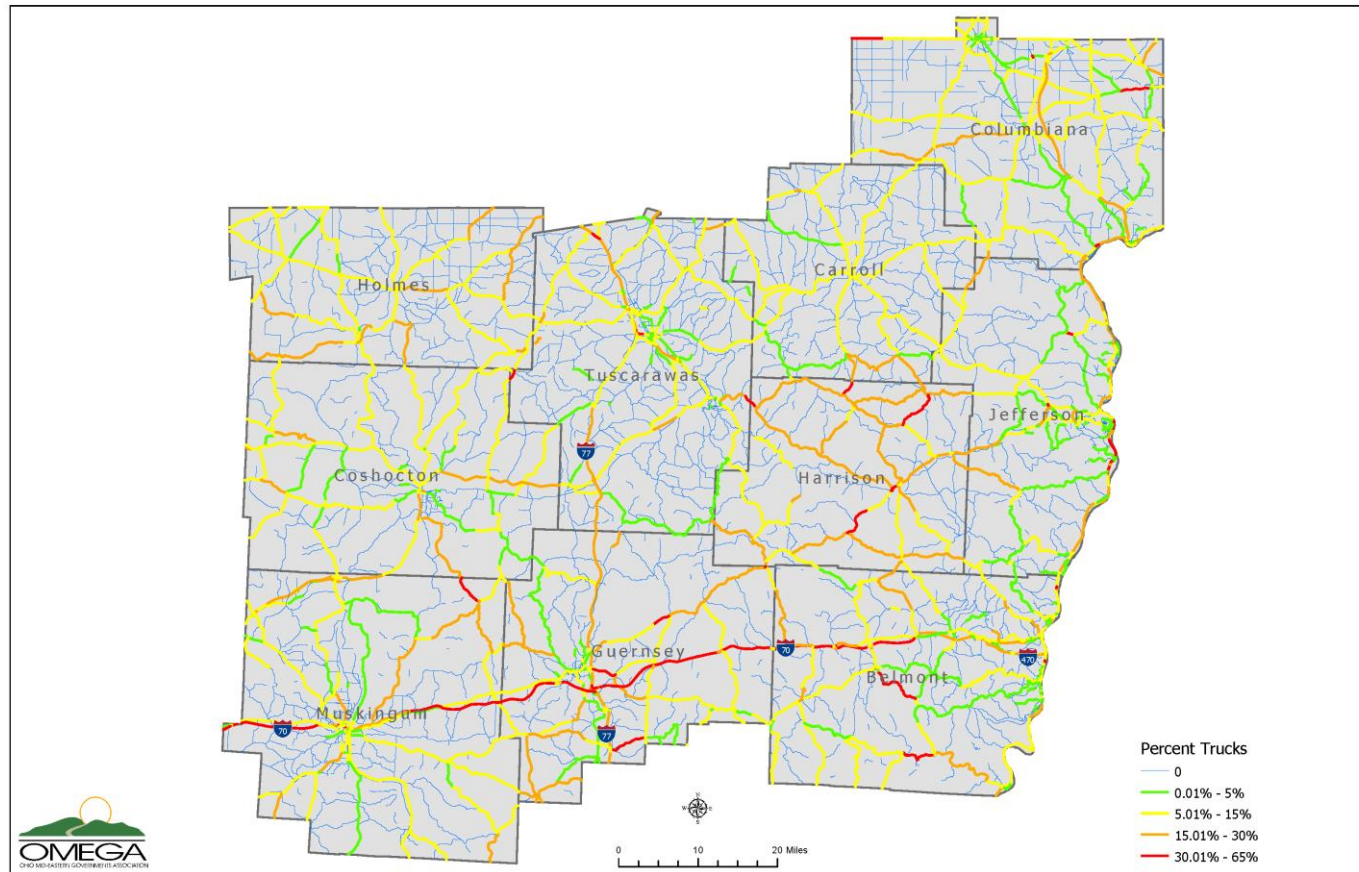
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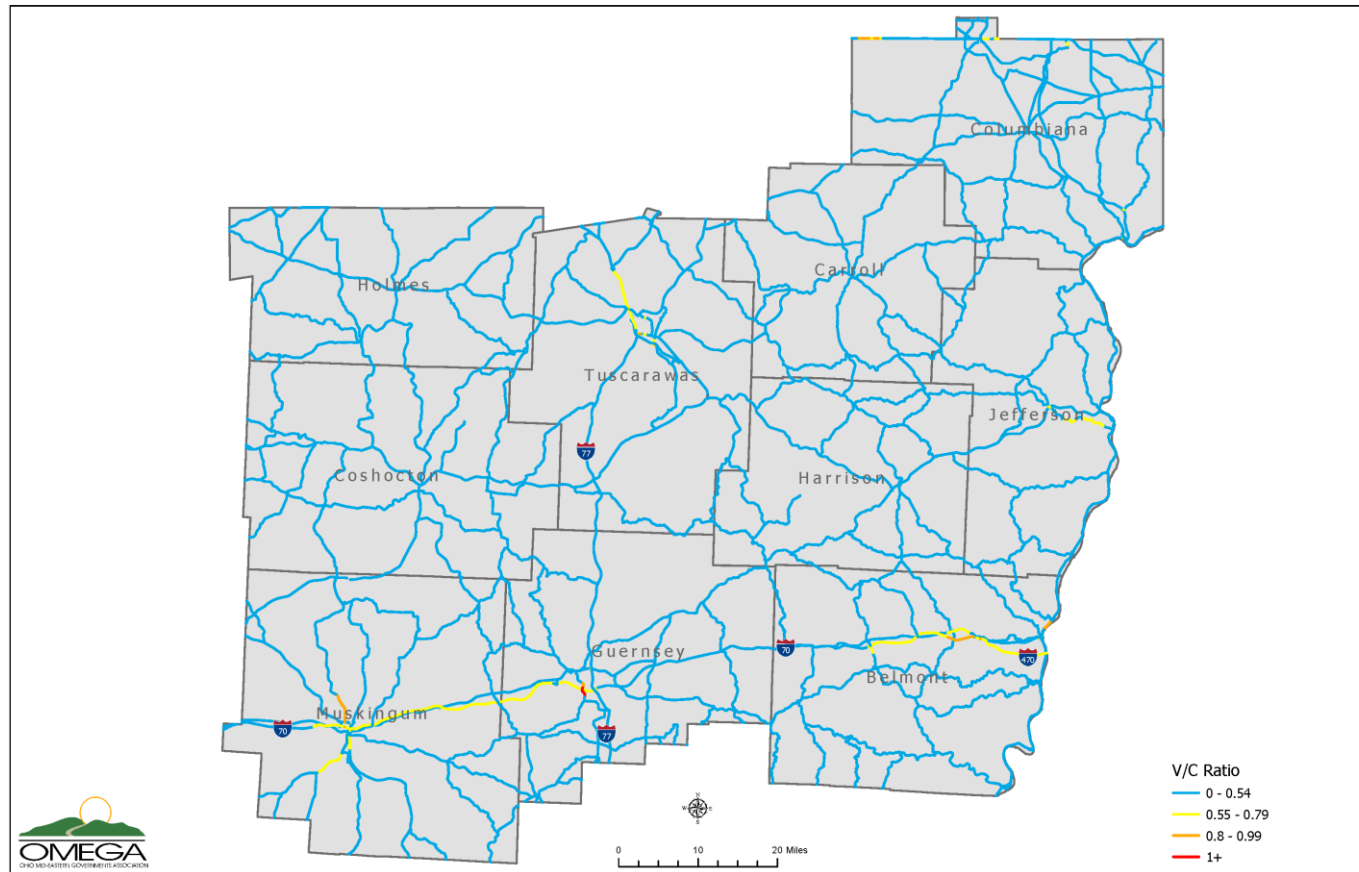
Existing Conditions



Existing Conditions



Existing Conditions



Transit

- Coming Soon!


Next Steps

- Send comments to OMEGA
 - Email: kevinb@omegadistrict.org or mcarmel@omegadistrict.org
 - Call: 740-439-4471
 - Mail: 326 Highland Avenue, Suite B; Cambridge, OH

Next Steps

- Take public survey and share on social media!!


Public Survey



OHIO MID-EASTERN GOVERNMENTS ASSOCIATION

[Home](#) [About OMEGA](#) [Our Programs](#) [Upcoming Events](#) [Reports](#) [Maps](#) [Contact Us](#)

PUBLIC SURVEY





OMEGA Transportation Survey

This survey should take approximately 5-7 minutes to complete. Survey answers will help guide the development of OMEGA's 2020-2045 Transportation Plan.

* Required

1. In what county do you live? *

www.omegadistrict.org/survey

OMEGA Contacts

Mail:

326 Highland Avenue, Suite B
Cambridge, OH 43725

Kevin Buettner, AICP

Transportation Director

Megan Carmel

GIS Coordinator/Transportation Planner

Email:

kevinb@omegadistrict.org

Email:

mcarmel@omegadistrict.org

Call:

740-439-4471 ext. 207

Call:

740-439-4471 ext. 210



Regional Development Plan

Public Meeting

May 4, 2020

AGENDA

1. OMEGA Overview
2. Regional Development Plan Overview
3. Regional Needs
4. Regional Recommendations
5. Comments / Q&A

OMEGA: Who Are We?

- Local Development District
- Council of Governments
- Ten County Governments

Belmont*

Carroll

Columbiana

Coshocton

Guernsey

Harrison

Holmes

Jefferson*

Muskingum

Tuscarawas



- Twelve City Governments

Cambridge, Coshocton, Dover, East Liverpool, Martins Ferry*, New Philadelphia, St. Clairsville*, Salem, Steubenville*, Toronto*, Uhrichsville, and Zanesville

**Not Included in RTP0 (Transportation Planning)*

OMEGA's Services



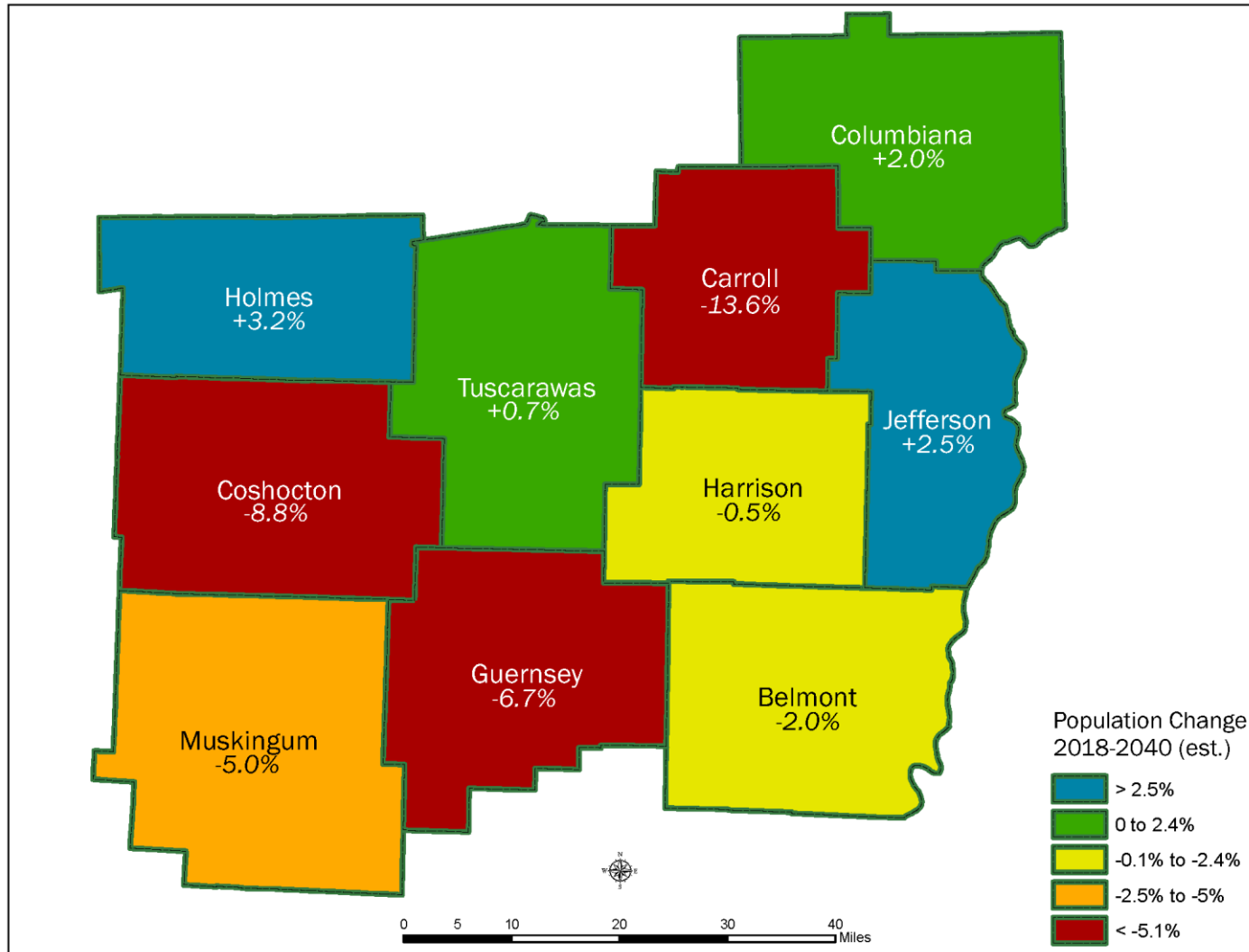
- **Mission:** *Provide a pathway to enhance community and economic growth in our region.*
- Provide Planning Assistance to Local Governments
- Provide Funding Administrative Services
- Administer ARC/GOA Program
- Administer Revolving Loan Fund Program
- **Develop Comprehensive Economic Development Strategy**
- Promote Collaboration
- Serve as District Liaison for the District 14 Natural Resource Advisory Council (Clean Ohio)
- **Regional Transportation Planning Organization**

Connecting Communities to Resources

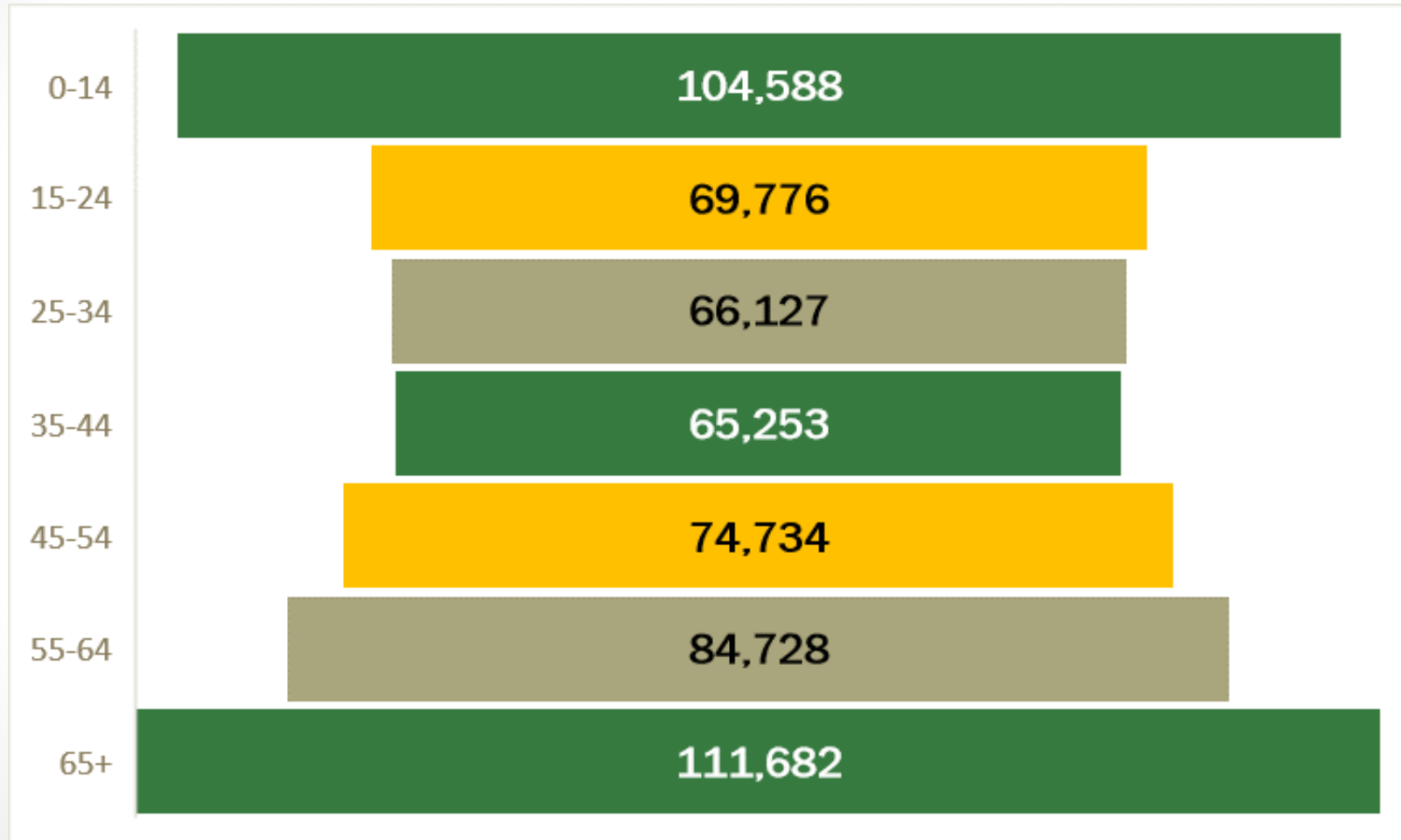
RTPO Services

- Short Range Planning
 - Active Transportation Plans / School Travel Plans
 - Regional Safety Planning
 - Participation in Statewide Planning
- Regional Transportation Planning
 - **Regional Transportation Plan**
 - Regional Transportation Improvement Plan
 - Regional Coordinated Human Services/Public Transit Plan
- Technical Services
 - GIS Database for Local Agencies
 - Road Safety Audits, Curve Speed Studies, Crash Analysis
 - Grant Writing, Traffic Counts, Workshops

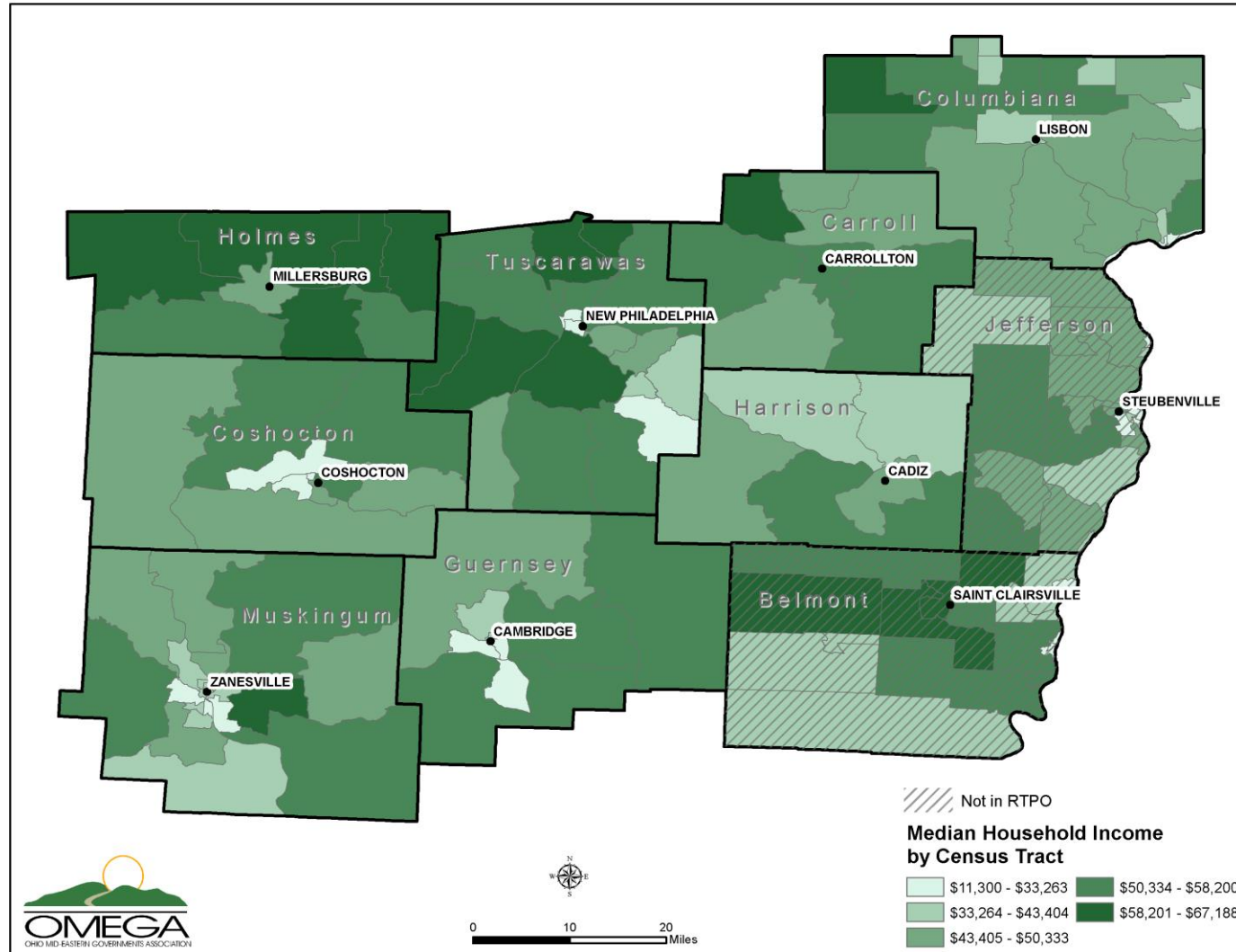
Population Projections



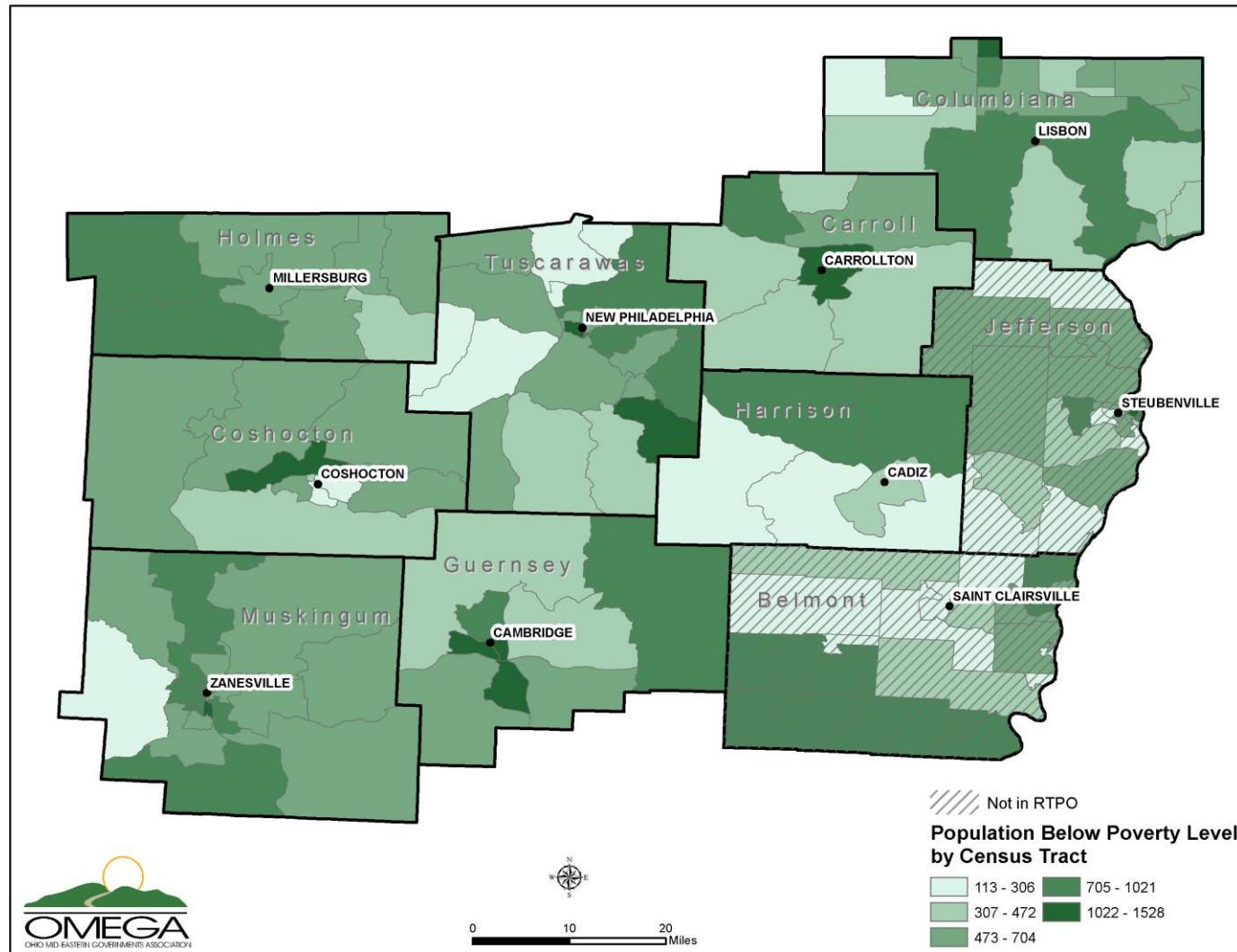
Population Pyramid



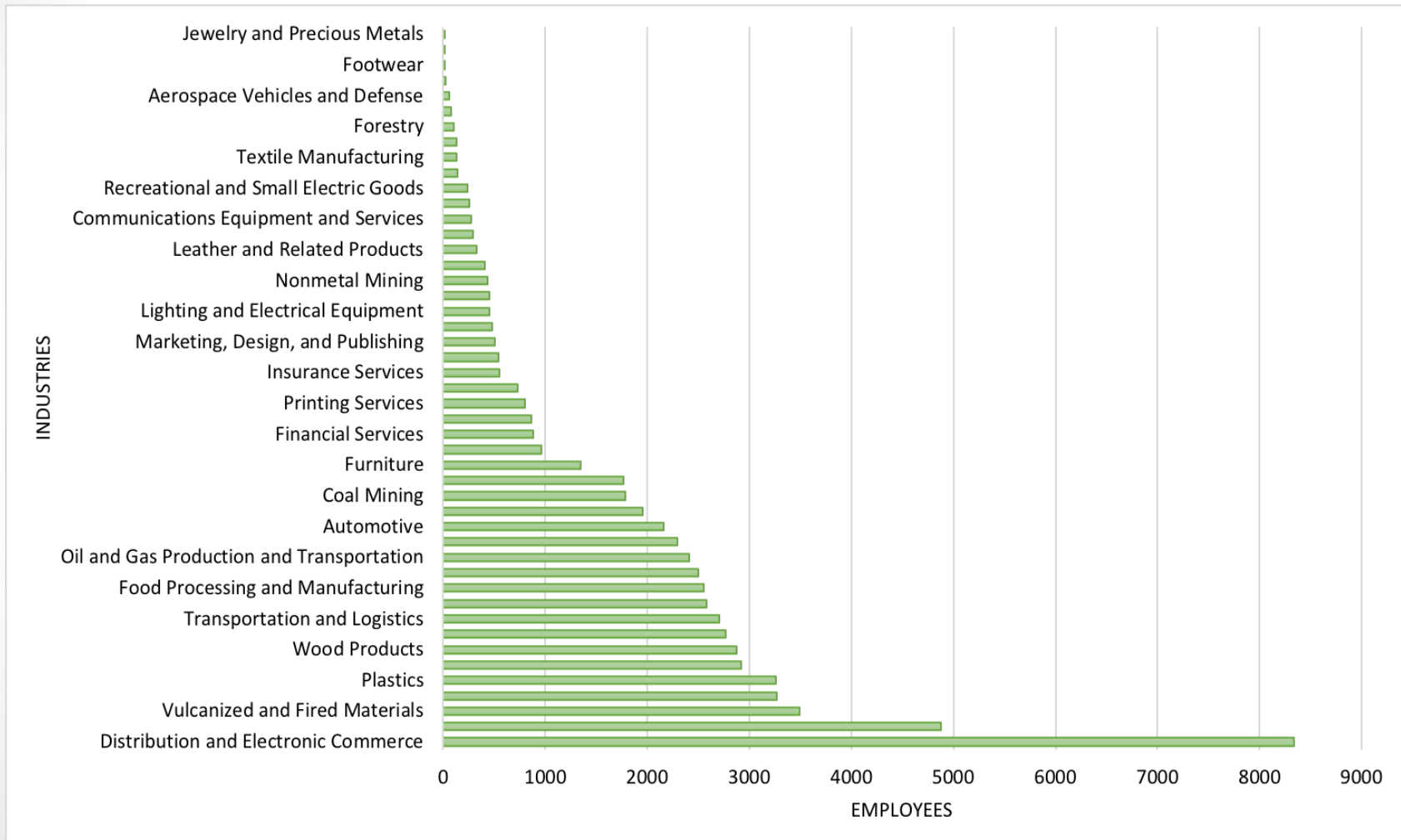
Median Household Income



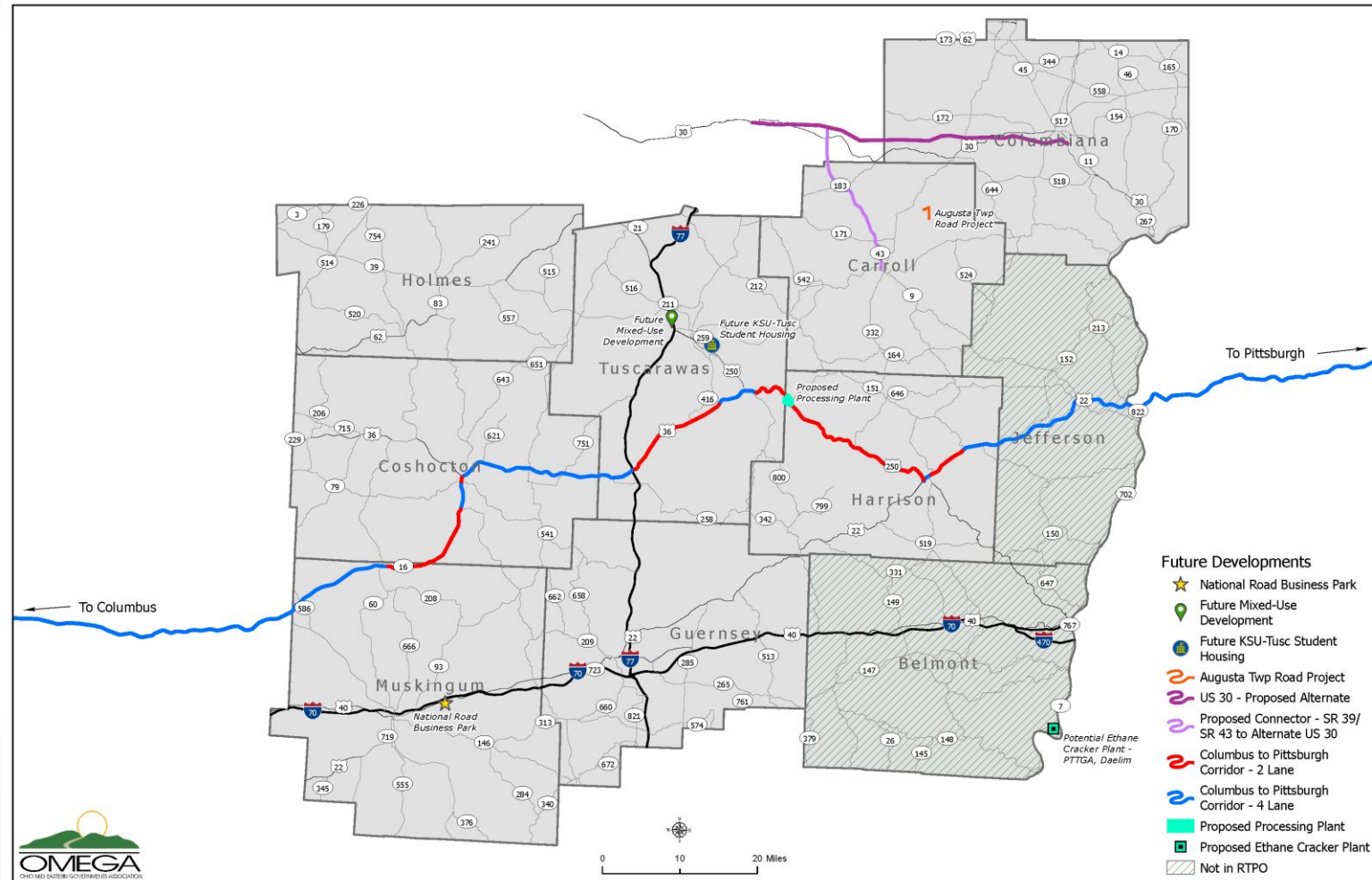
Poverty Level



Industry Clusters



Future Developments



Proposed Goals

- Preserve Regional Assets to Support Local Economies
- Increase the Safety of Regional Infrastructure
- Facilitate Economic and Community Development
- Develop & Maintain Regional Resiliency



Input on Our Goals

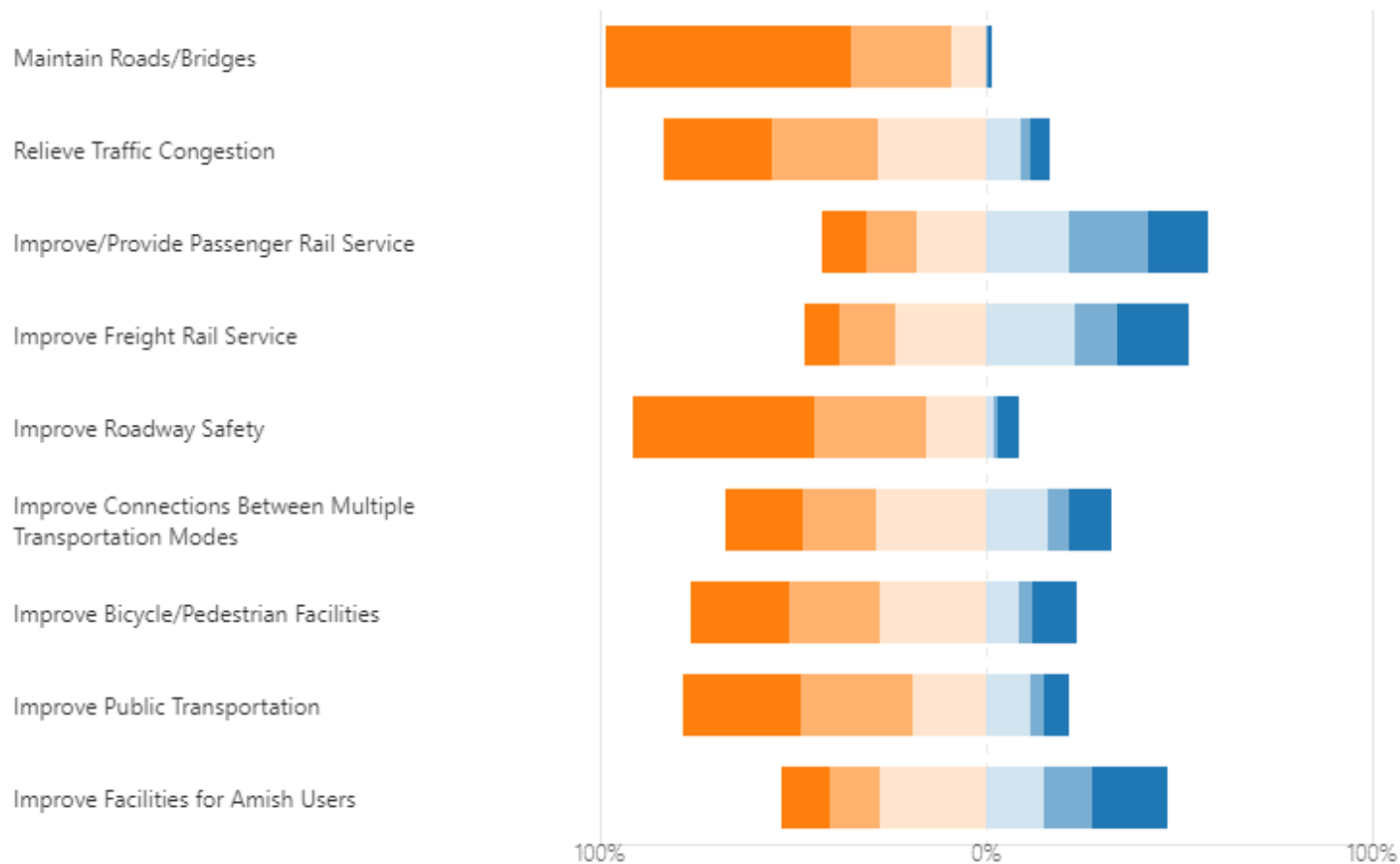
Goals	Why We Chose Them?
Preserve Regional Assets to Support Local Economies	<ul style="list-style-type: none">• Preserve what we have• Cost savings• Save resources
Increase the Safety of Regional Infrastructure	<ul style="list-style-type: none">• Safety is crucial to a functioning economy
Facilitate Economic and Community Development	<ul style="list-style-type: none">• Grow the regional economy• Reinvest in communities• Prepare for the future
Develop & Maintain Regional Resiliency	<ul style="list-style-type: none">• Prepare for extreme weather events• Identify areas with potential mine subsidence• Diversify economy to withstand economic downturns

Public Survey Summary

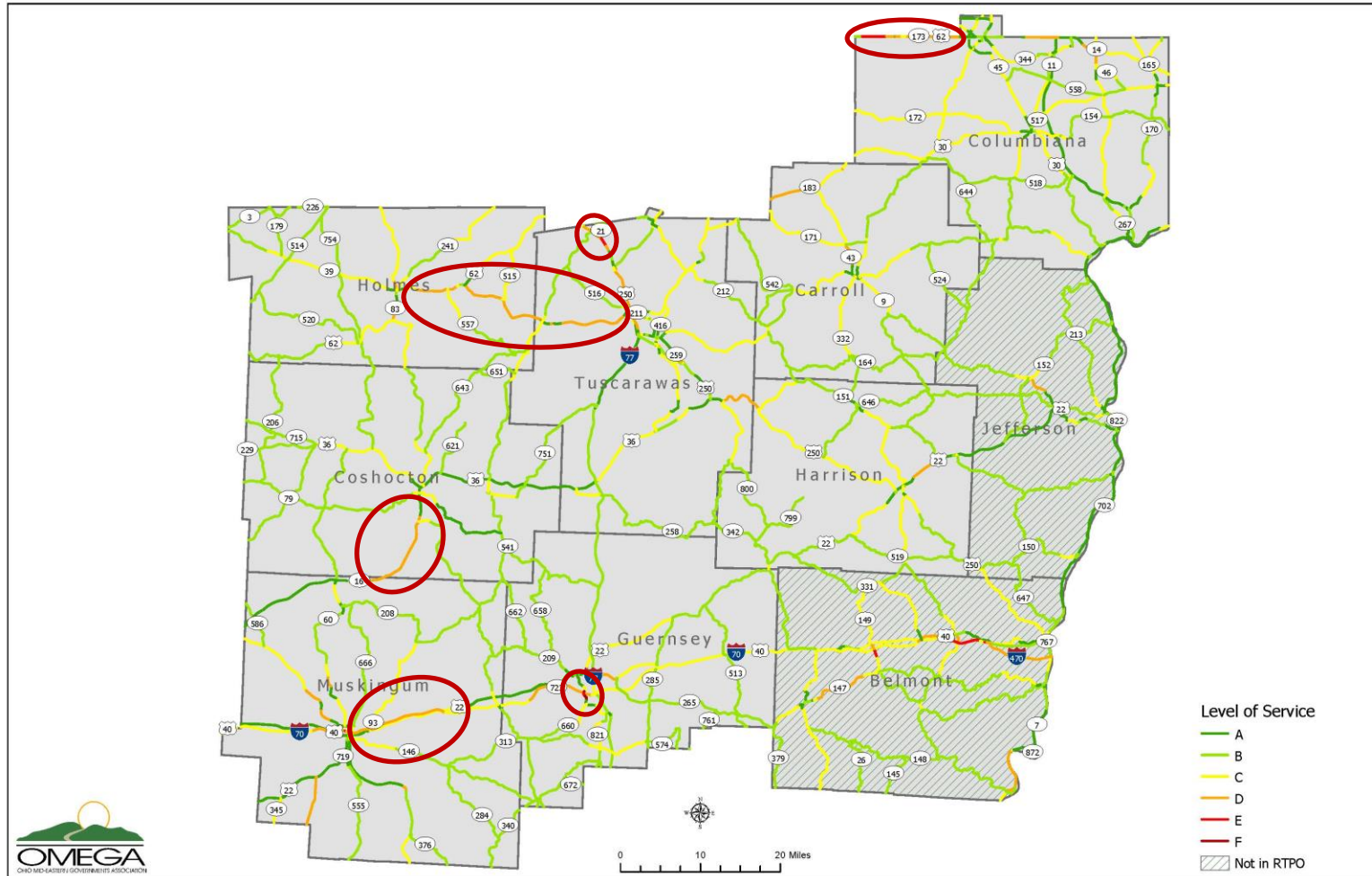
8. Transportation Priorities

[More Details](#)

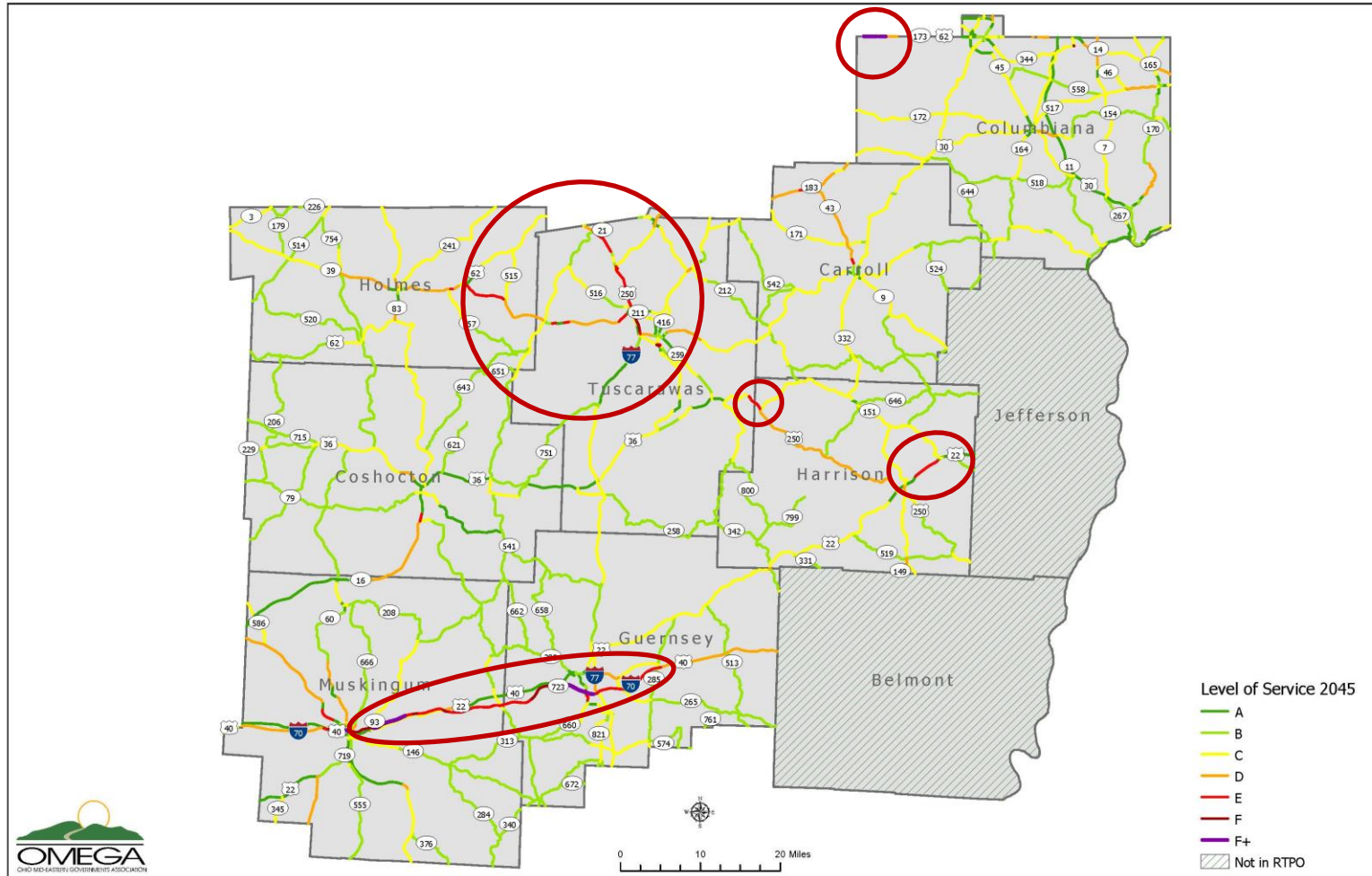
Extremely Important Very Important Important Less Important Not Important No Opinion



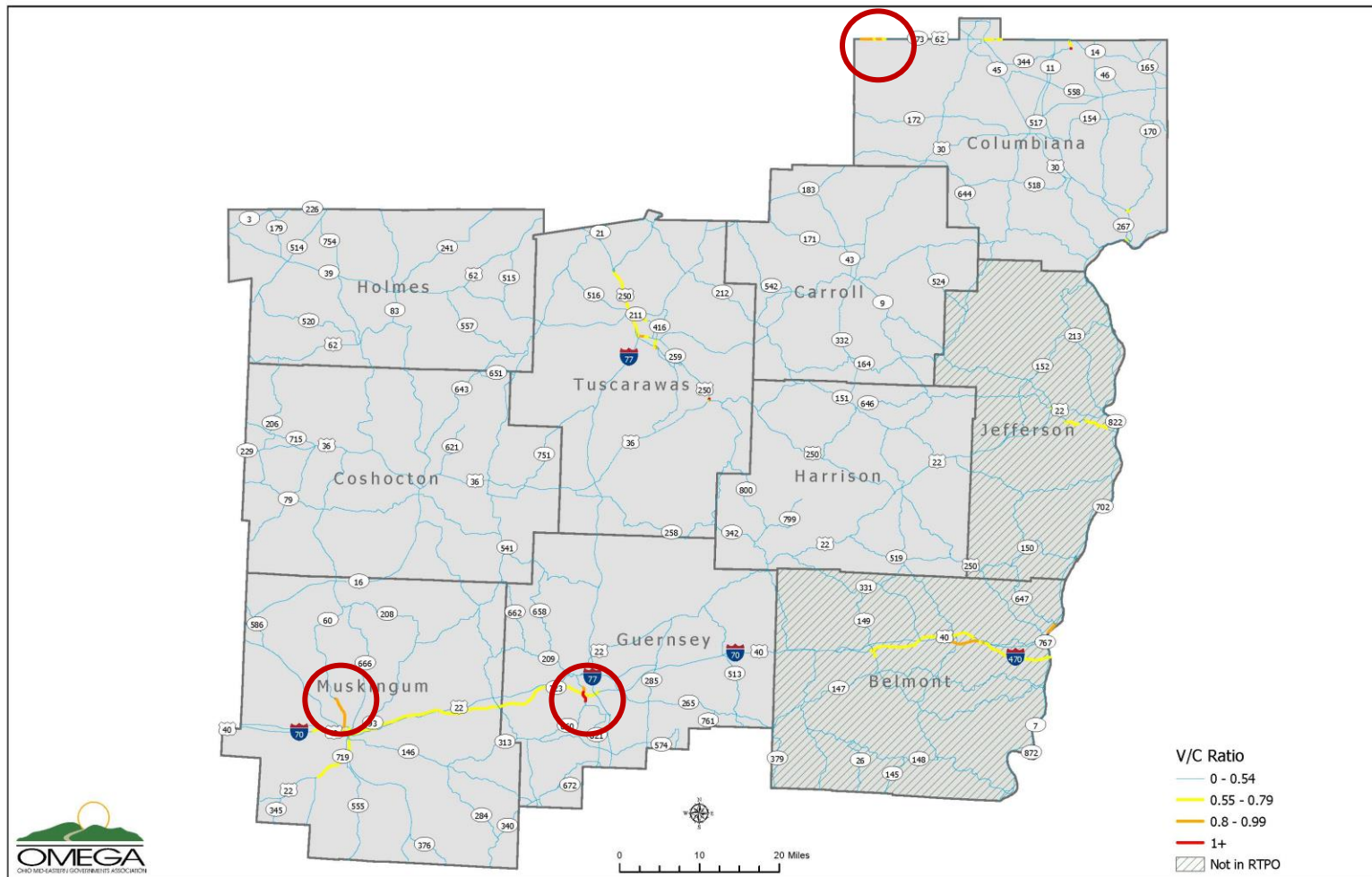
Level of Service - Current



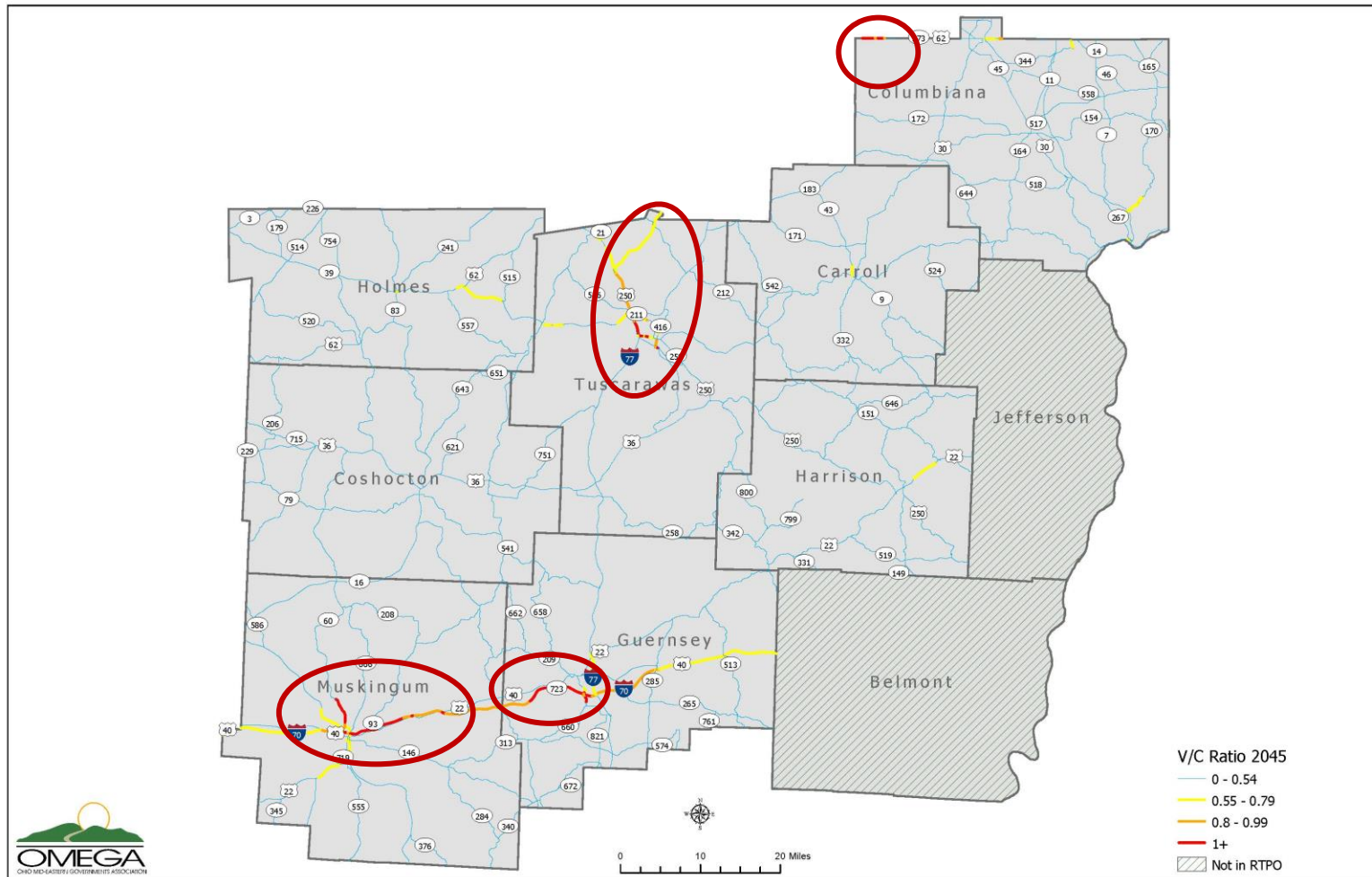
Level of Service - Future



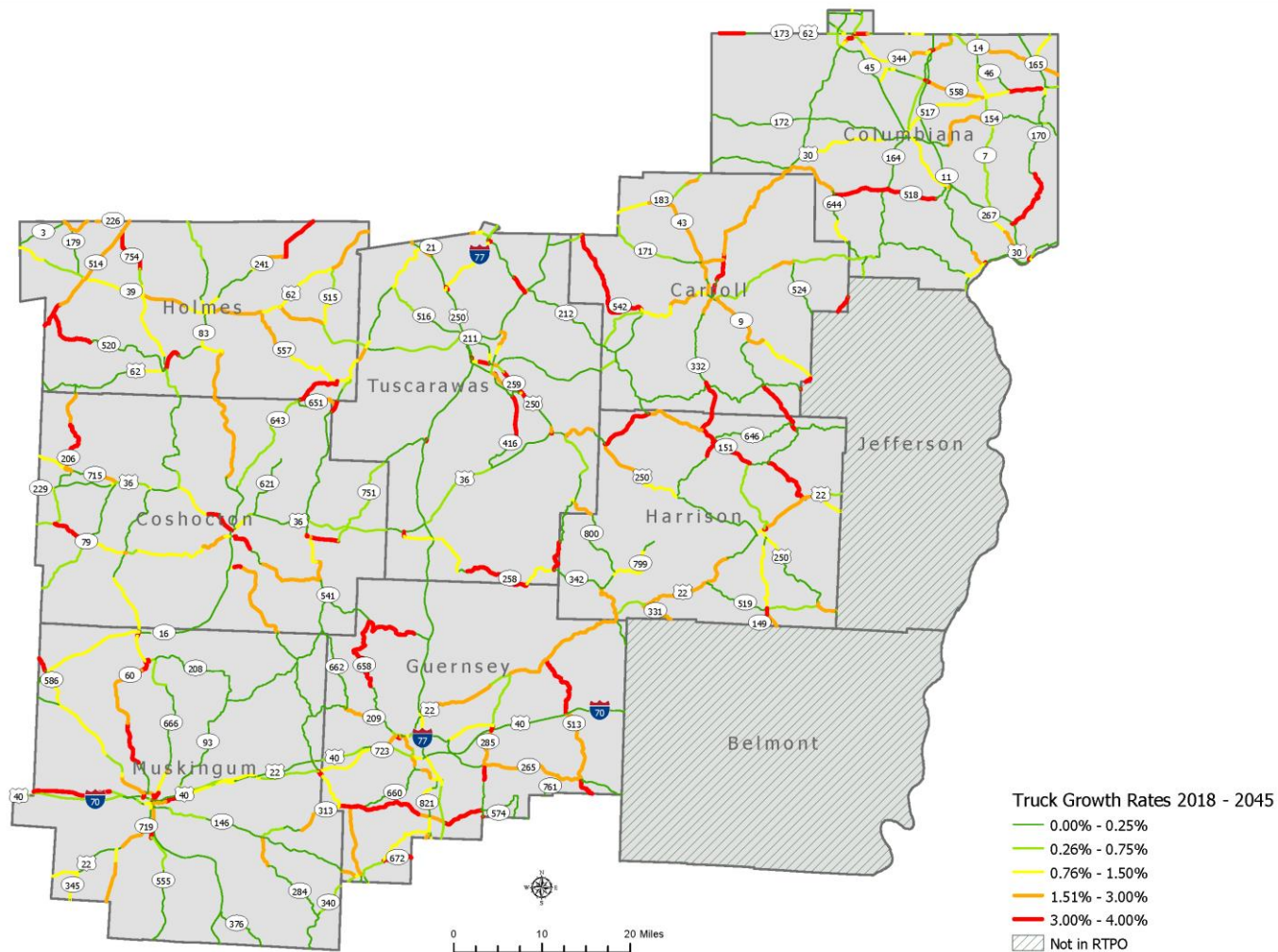
Volume to Capacity Ratio - Current



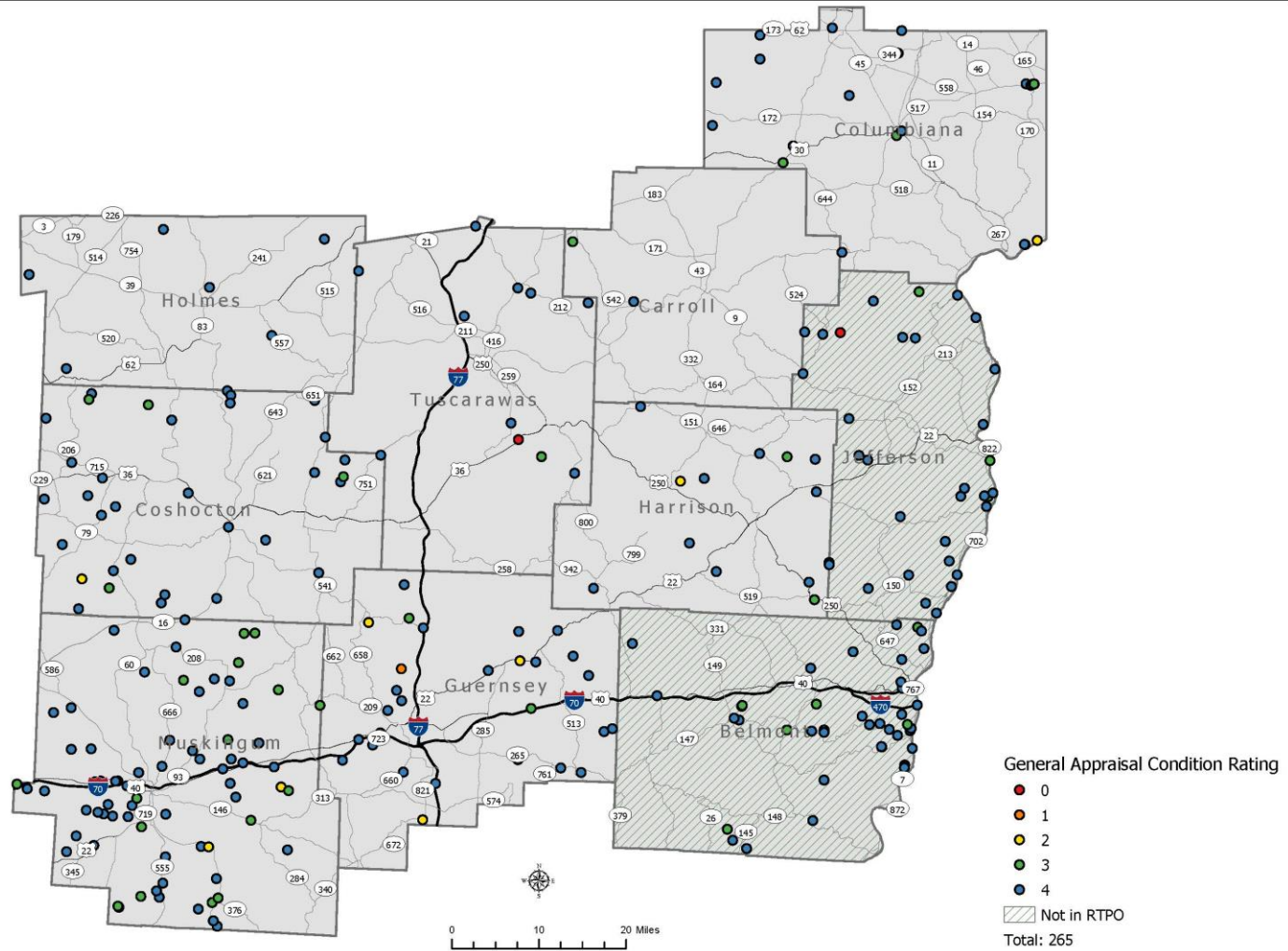
Volume to Capacity Ratio - Future



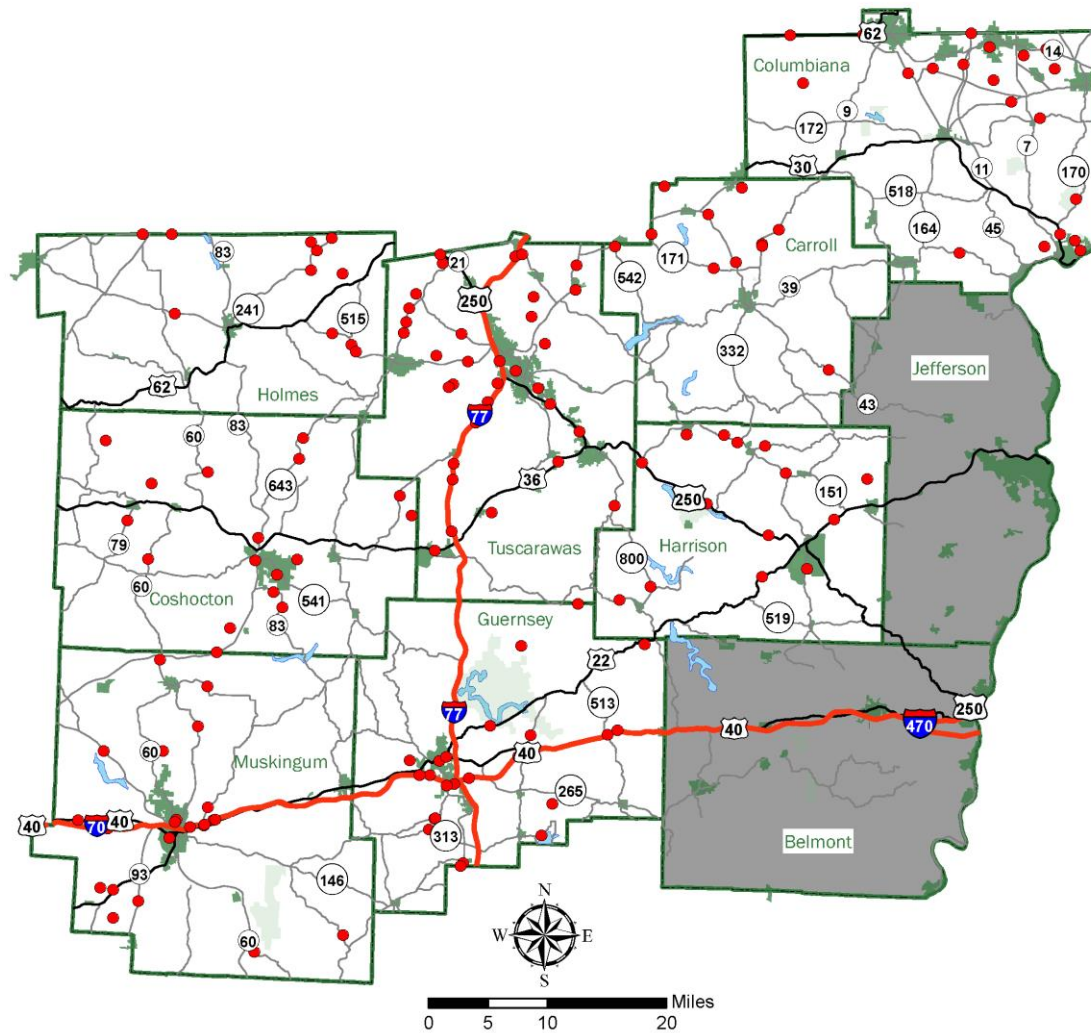
Truck Traffic Increase *(projected)*



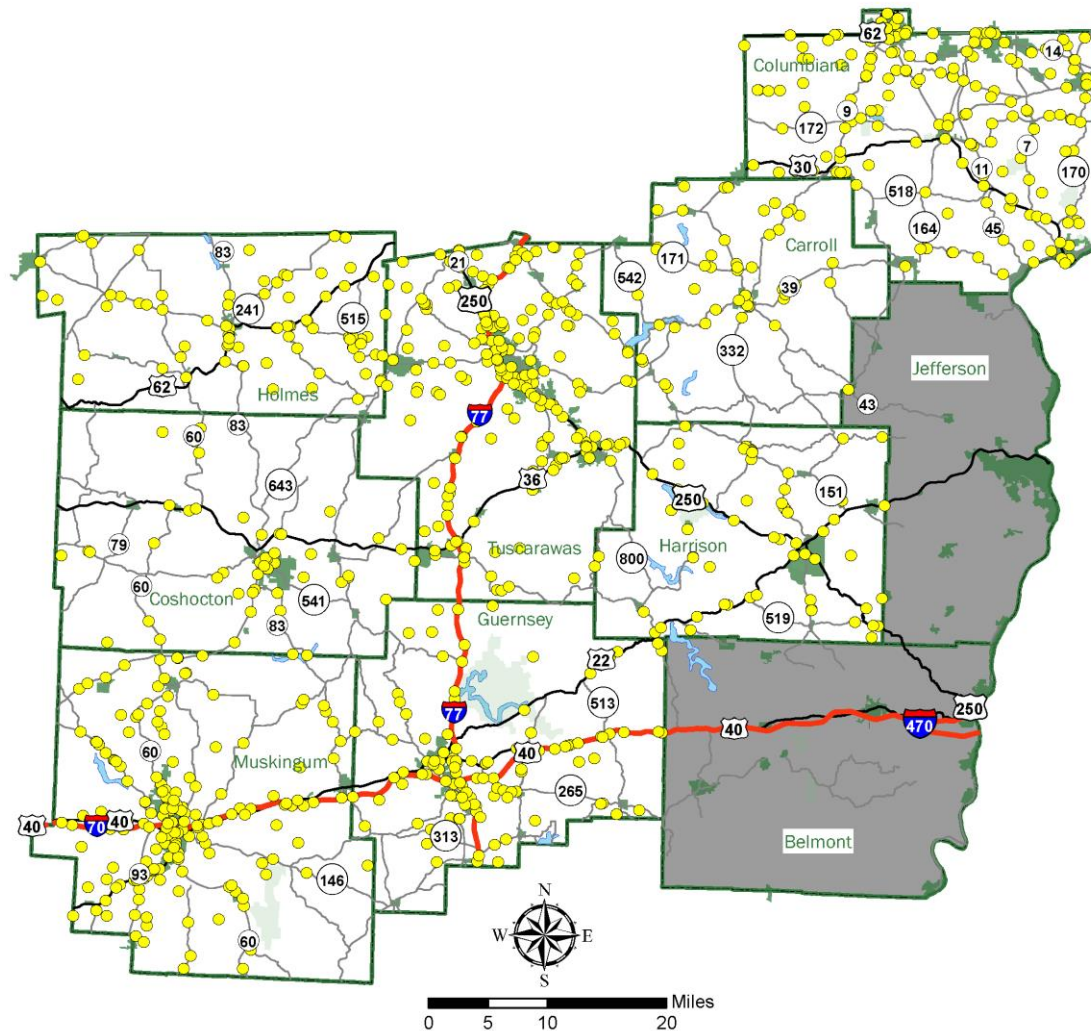
Deficient Bridges



Fatal Crashes (2016-2018)

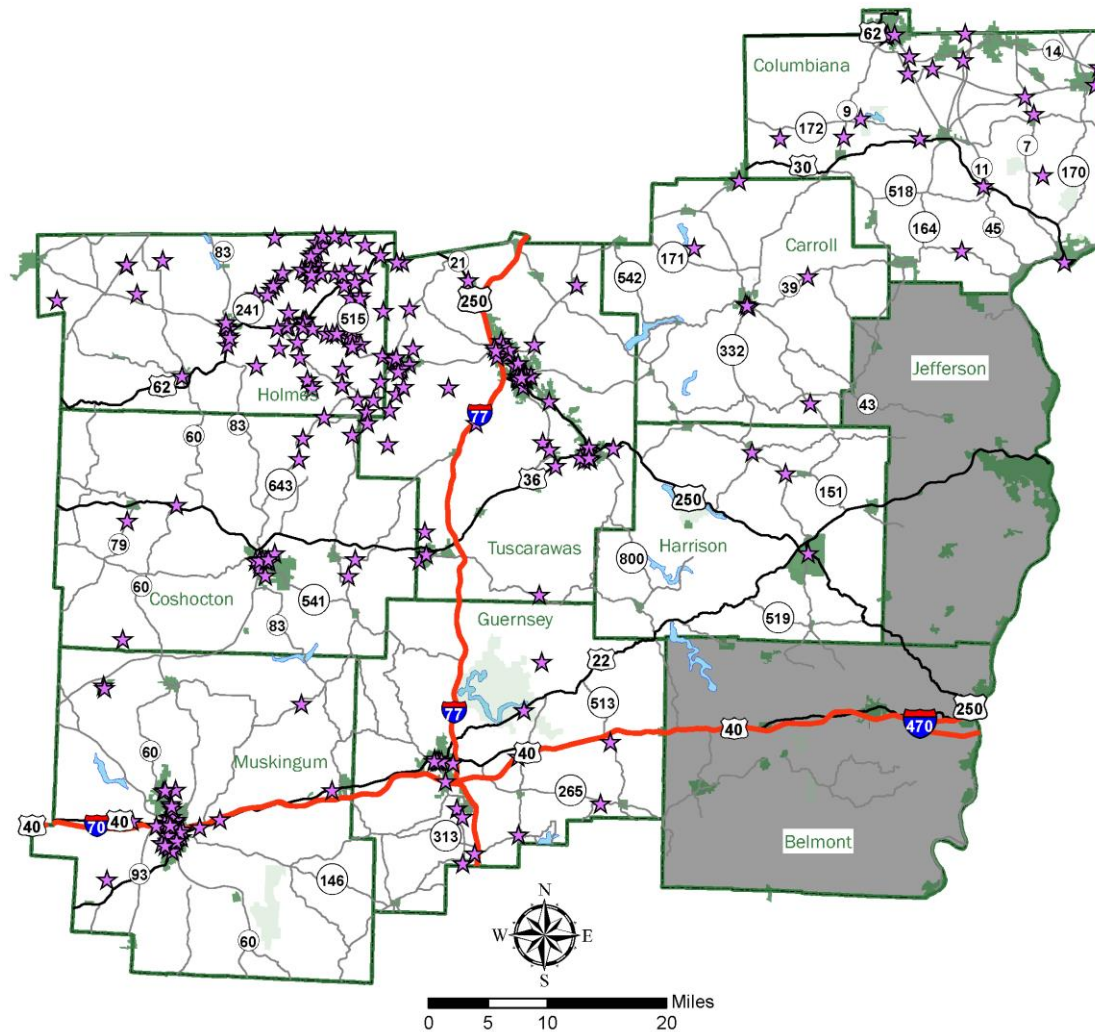


Serious Injury Crashes (2016-2018)

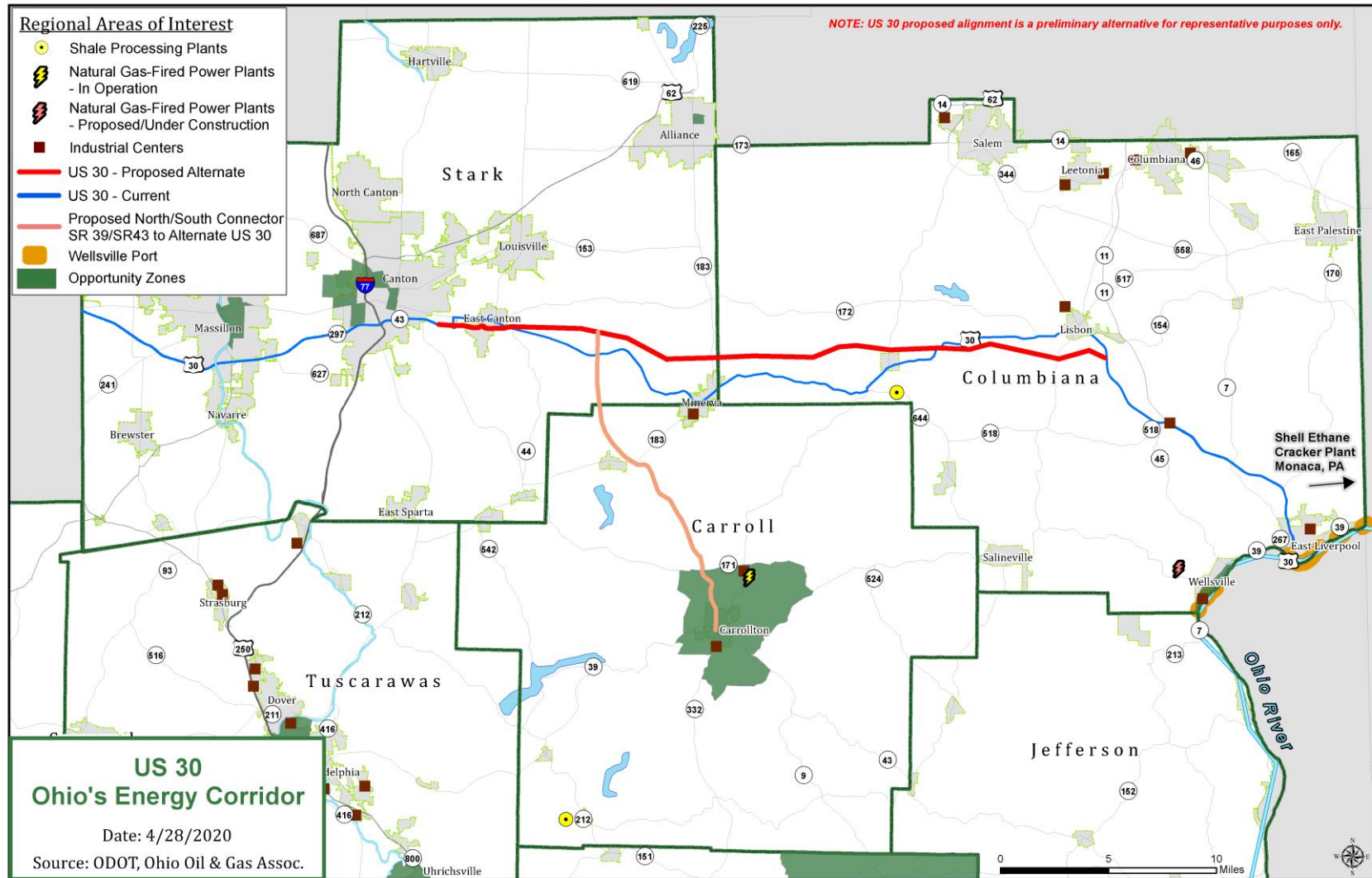


Bicycle/Pedestrian/Buggy Crashes

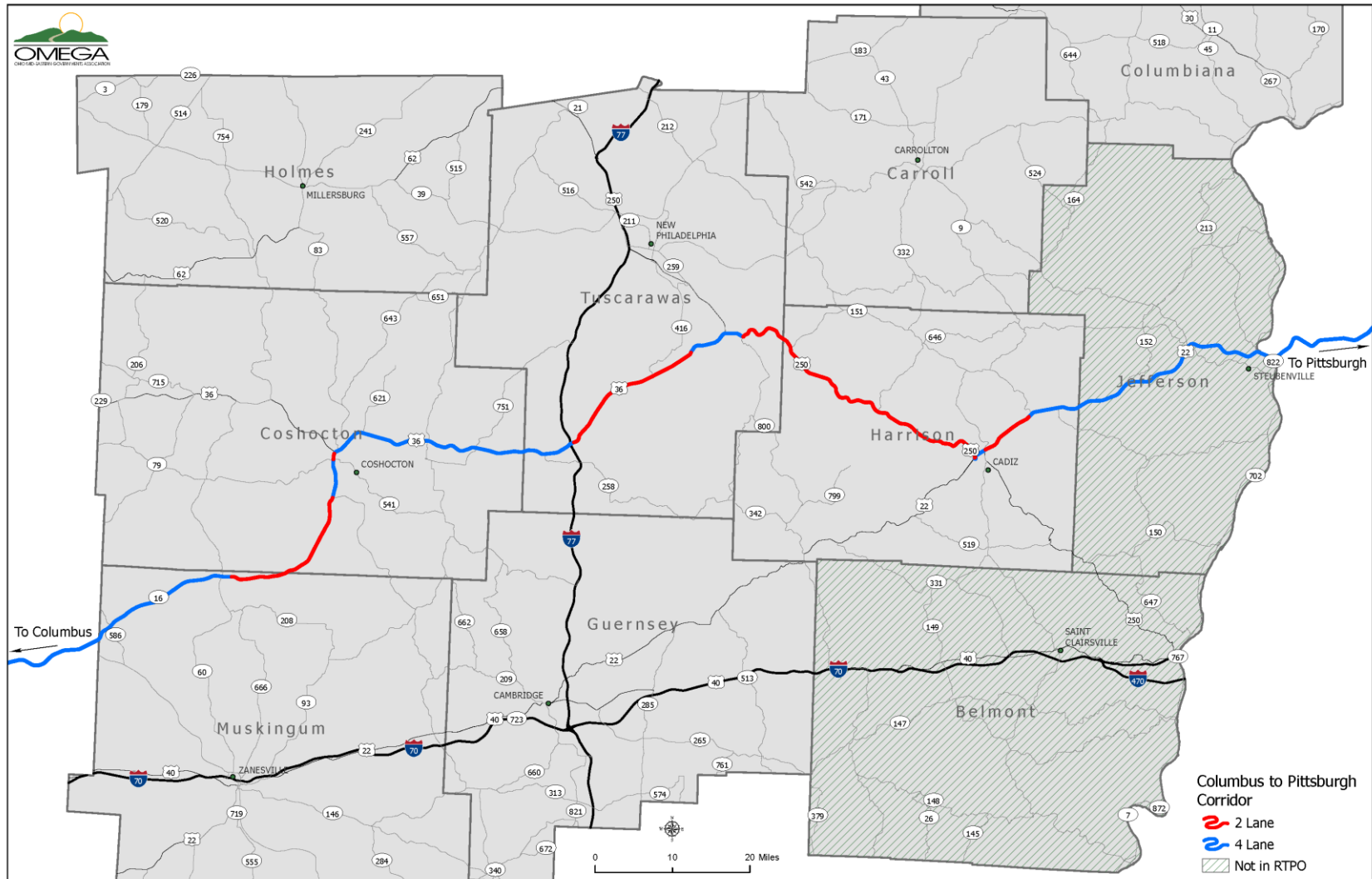
(2016-2018)



US 30 Corridor

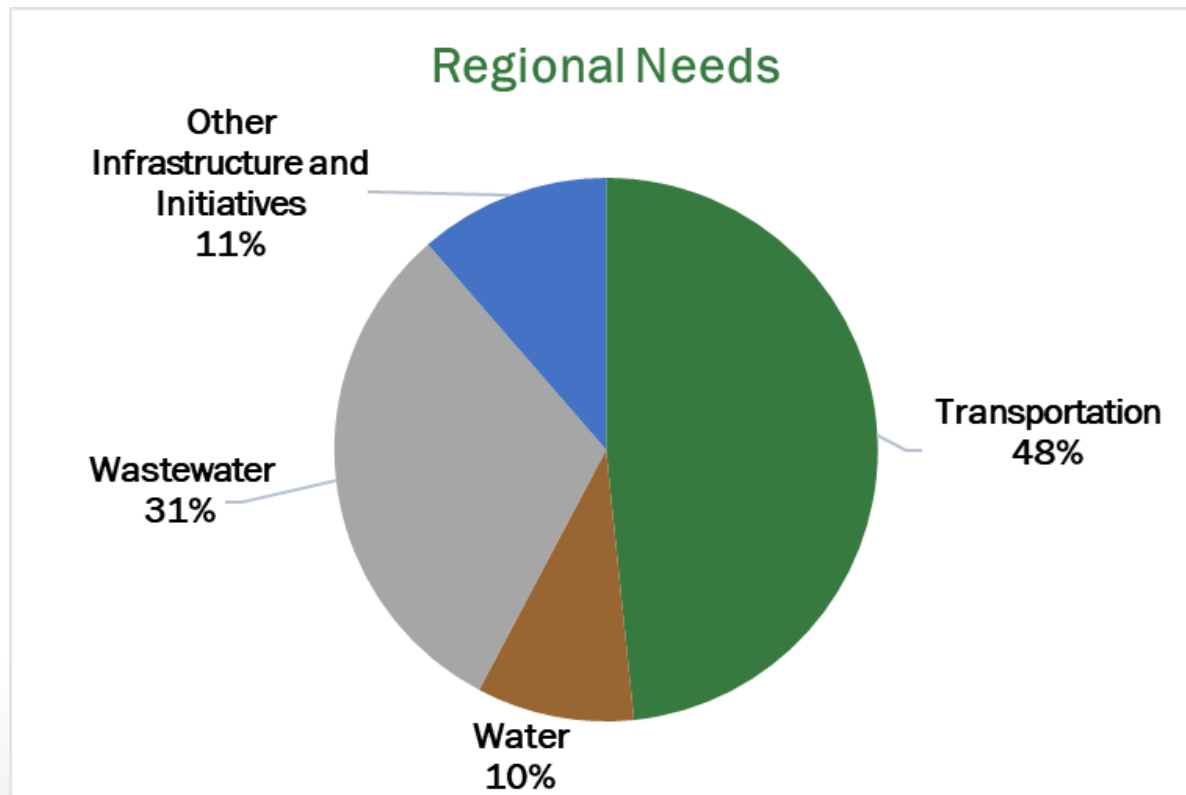


Columbus to Pittsburgh Corridor



Summary of Needs

- Transportation = \$117 million
- Water = \$23 million
- Wastewater = \$75 million
- Other Infrastructure & Initiatives = \$28 million



The 3 “I’s”

- Invest in the Region!
 - Broadband
 - Infrastructure
 - Workforce
- Include Everyone!
- Improve Resiliency!

Planning Webpage



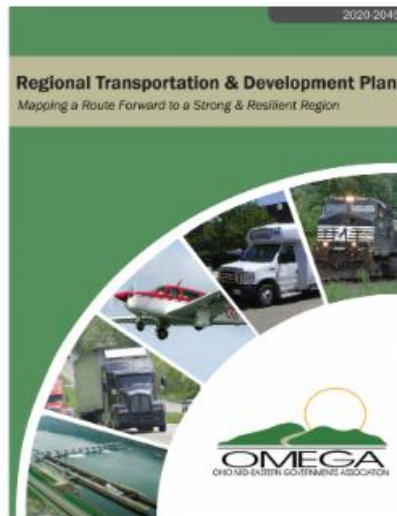
OHIO MID-EASTERN GOVERNMENTS ASSOCIATION

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LONG-RANGE TRANSPORTATION PLAN



Long Range Transportation Plan + CEDS



Beginning in July 2019, OMEGA Transportation staff will begin work on the 2020-2040 Long Range Transportation Plan. This plan will identify transportation needs, policies, strategies and projects over the next twenty years. It will be revised annually, and fully updated every five years. In partnership with our regional economic development professionals, we will merge the Comprehensive Development Strategy (CEDS) into our Long Range Transportation Plan. Additional information and links will be made available on this page in the future.

The 2015 Transportation Plan can be found [here](#).

QUESTIONS/COMMENTS?

Kevin Buettner, AICP, LEED AP ND

Transportation Director

740-439-4471 ext. 207

kevinb@omegadistrict.org

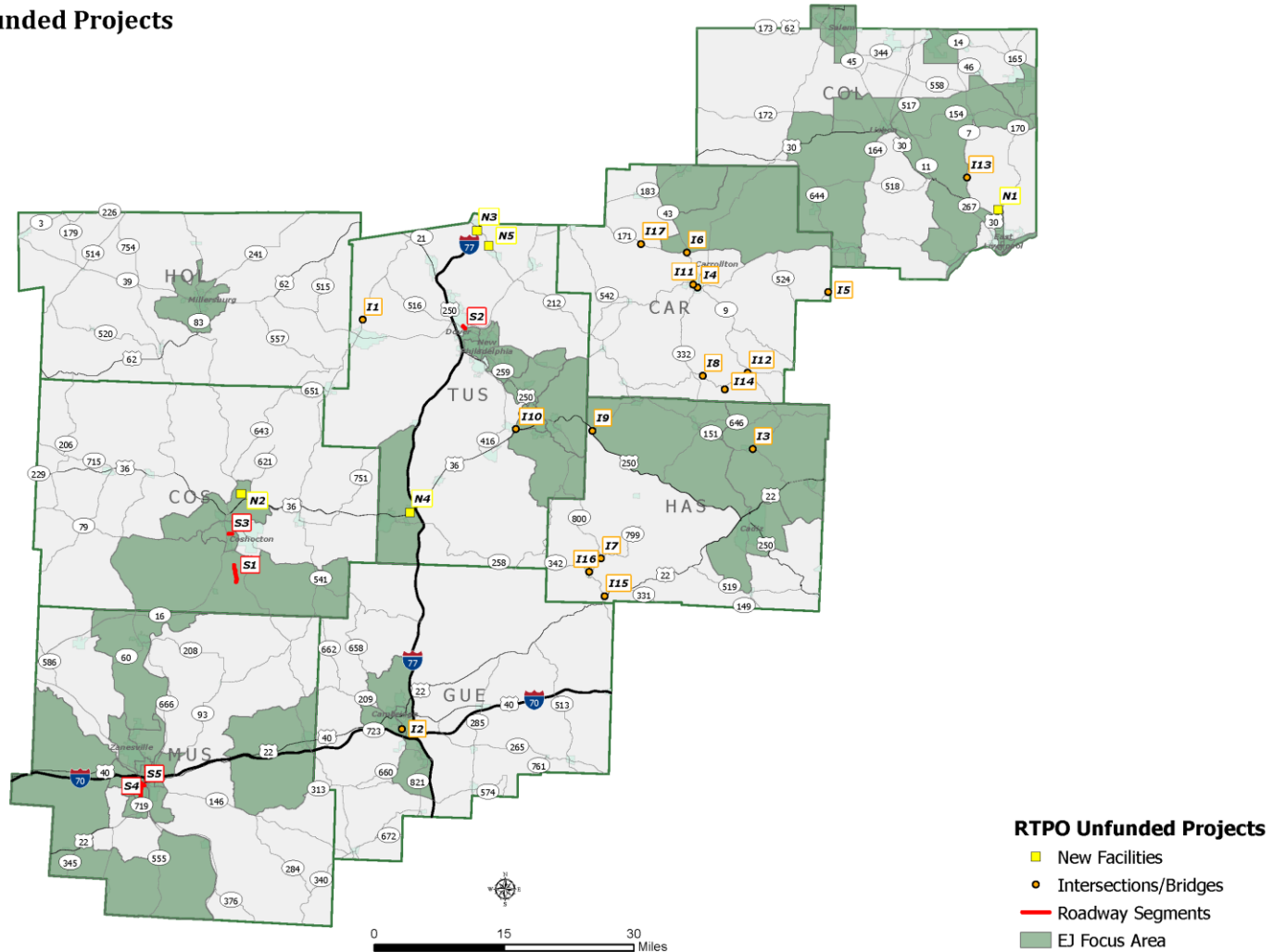
<https://omegadistrict.org/programs/transportation/plan2020/>

Input on Our Goals

Goals	Why We Chose Them?
Preserve Regional Assets to Support Local Economies	<ul style="list-style-type: none">• Preserve what we have• Cost savings• Save resources
Increase the Safety of Regional Infrastructure	<ul style="list-style-type: none">• Safety is crucial to a functioning economy
Facilitate Economic and Community Development	<ul style="list-style-type: none">• Grow the regional economy• Reinvest in communities• Prepare for the future
Develop & Maintain Regional Resiliency	<ul style="list-style-type: none">• Prepare for extreme weather events• Identify areas with potential mine subsidence• Diversify economy to withstand economic downturns

Input on Proposed Projects

OMEGA RTPO Unfunded Projects



Send Comments to OMEGA

Due June 19, 2020

Kevin Buettner, AICP

Transportation Director

Email:

kevinb@omegadistrict.org

Call:

740-439-4471 ext. 207

Megan Carmel

GIS Coordinator/Transportation Planner

Email:

mcarmel@omegadistrict.org

Call:

740-439-4471 ext. 210

Mail:

326 Highland Avenue, Suite B
Cambridge, OH 43725

Online:

<https://omegadistrict.org/programs/transportation/plan2020/>

Appendix G – Resolution



RESOLUTION NO. 2020-09

A RESOLUTION ADOPTING THE 2020 OMEGA REGIONAL TRANSPORTATION AND DEVELOPMENT PLAN CONTAINING THE LONG-RANGE TRANSPORTATION PLAN AND THE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY.

WHEREAS, the Ohio Mid-Eastern Governments Association (OMEGA) is an Economic Development District designated by the Economic Development Administration (EDA) serving Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, and Tuscarawas Counties; and

WHEREAS, the EDA provides grant funding for Economic Development Districts to develop and implement a Comprehensive Economic Development Strategy (CEDS) and offer a full range of economic development services, including technical assistance; and

WHEREAS, OMEGA is designated as the Regional Transportation Planning Organization (RTPO) by the Governor for Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas Counties; and

WHEREAS, federal and state directives provide for RTPOs to develop a long-range Regional Transportation Plan, in cooperation with state and local officials; regional and local transit operators; port officials; grant recipients under sections of Title 49, U.S.C., and other affected transportation and regional planning and implementing agencies; and

WHEREAS the OMEGA Regional Transportation and Development Plan outlines the goals and strategies OMEGA staff will undertake to identify the transportation and other development needs of the region, identifies existing and future conditions, and makes policy and project recommendations; and

WHEREAS, the Transportation Advisory Committee recommended that the Executive Board approve the Regional Development Plan; and

WHEREAS, the OMEGA Regional Transportation and Development Plan was developed and reviewed consistent with OMEGA's Public Participation Policy and has been reviewed and accepted by the Transportation Advisory Committee and has been coordinated with regional and local transit operators and local community officials; and

NOW THEREFORE BE IT RESOLVED BY THE EXECUTIVE BOARD OF OMEGA:

Section 1: The Executive Board adopts the OMEGA Regional Transportation and Development Plan.

Section 2: The Executive Board affirms that the public had adequate opportunity to comment on the OMEGA Regional Transportation and Development Plan.

Section 3: The Executive Board approves submission of the OMEGA Regional Transportation and Development Plan to the Ohio Department of Transportation.



Section 4: The Executive Board approves submission of the OMEGA Regional Transportation and Development Plan to the Economic Development Administration.

Section 5: If applicable, any final comments regarding the plan that are received from ODOT, EDA, board members, and/or general public will be addressed upon their receipt by OMEGA.

Section 6: If any of these comments result in substantive changes to the OMEGA Transportation and Development Plan, then such changes will be brought forth to the Executive Board for approval.

DATE: June 14, 2020

Chris Abbuhl
President

Ray Eyler
Secretary

Domenick Mucci, Jr.
Vice-President

Tiffany Swigert
Treasurer