

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*).

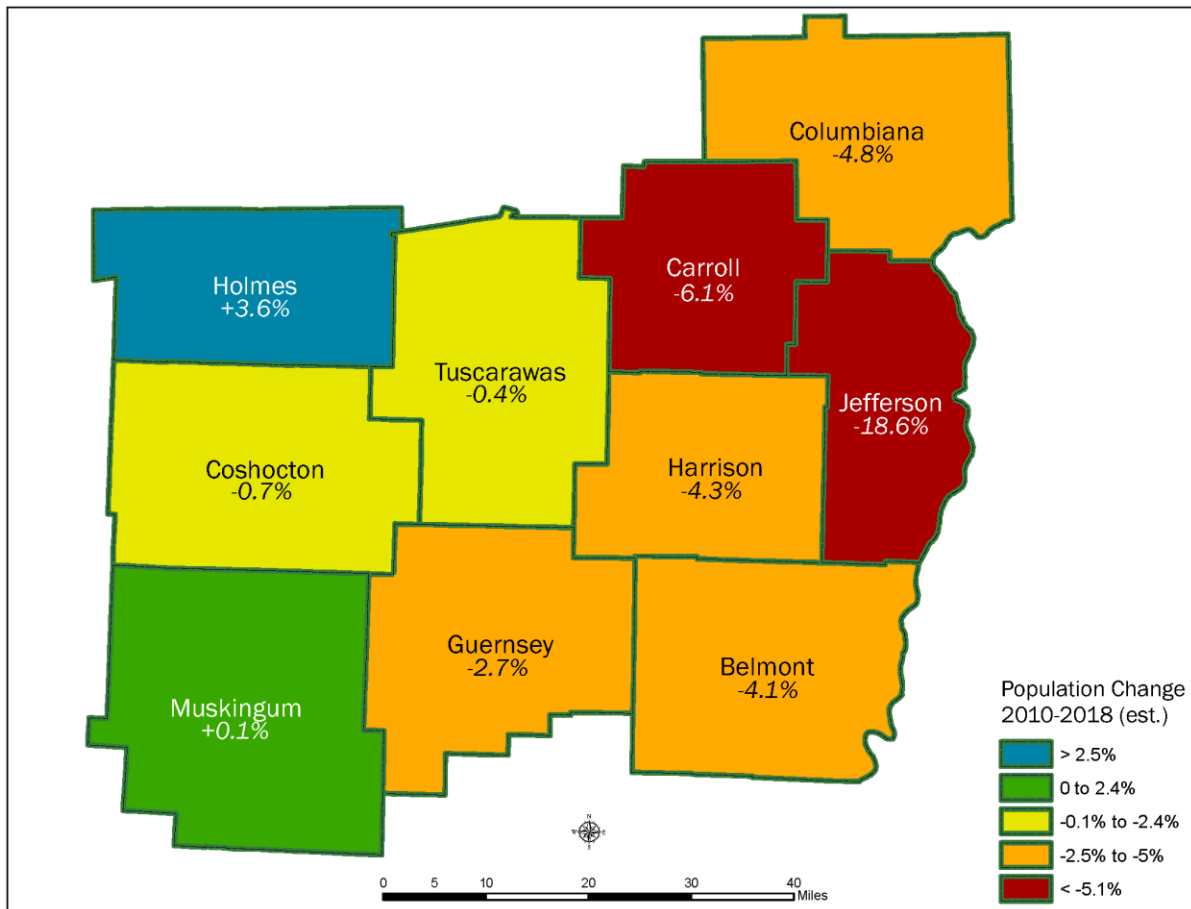


Figure 2-1: Population Change in OMEGA Region (source: US Census Bureau)

While population growth has been tepid, the Annual Average Daily Traffic (AADT) has increased on many of the major routes within 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.

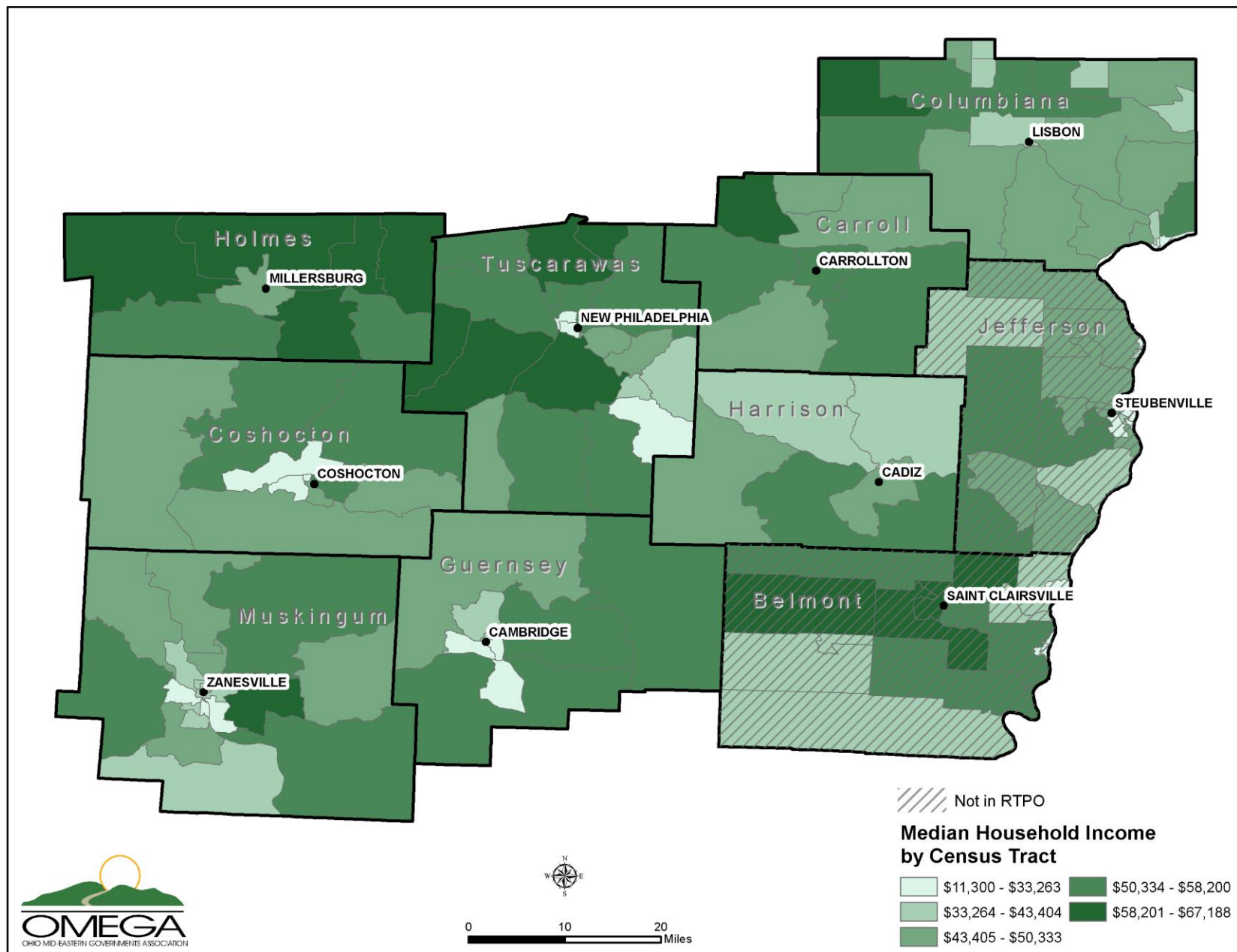


Figure 2-2: Median Household Income in OMEGA Region (source: US Census Bureau)

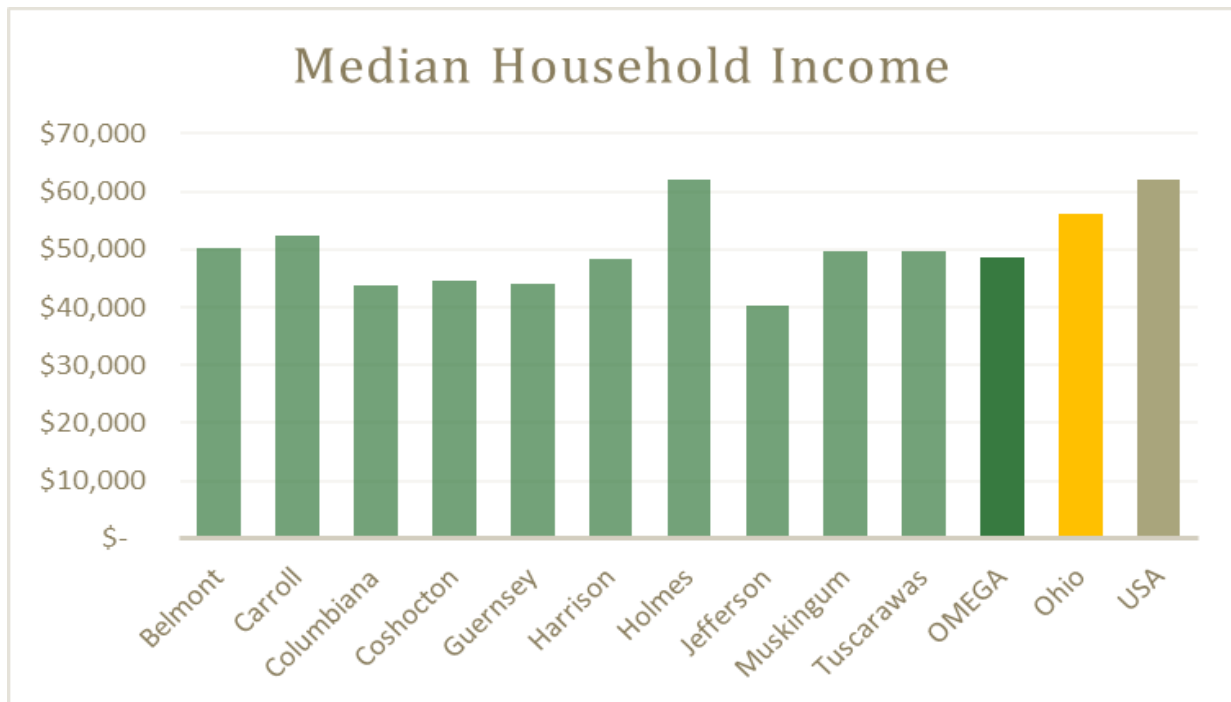


Figure 2-3: Median Household Income, 2018 Estimates (source: US Census Bureau)

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.

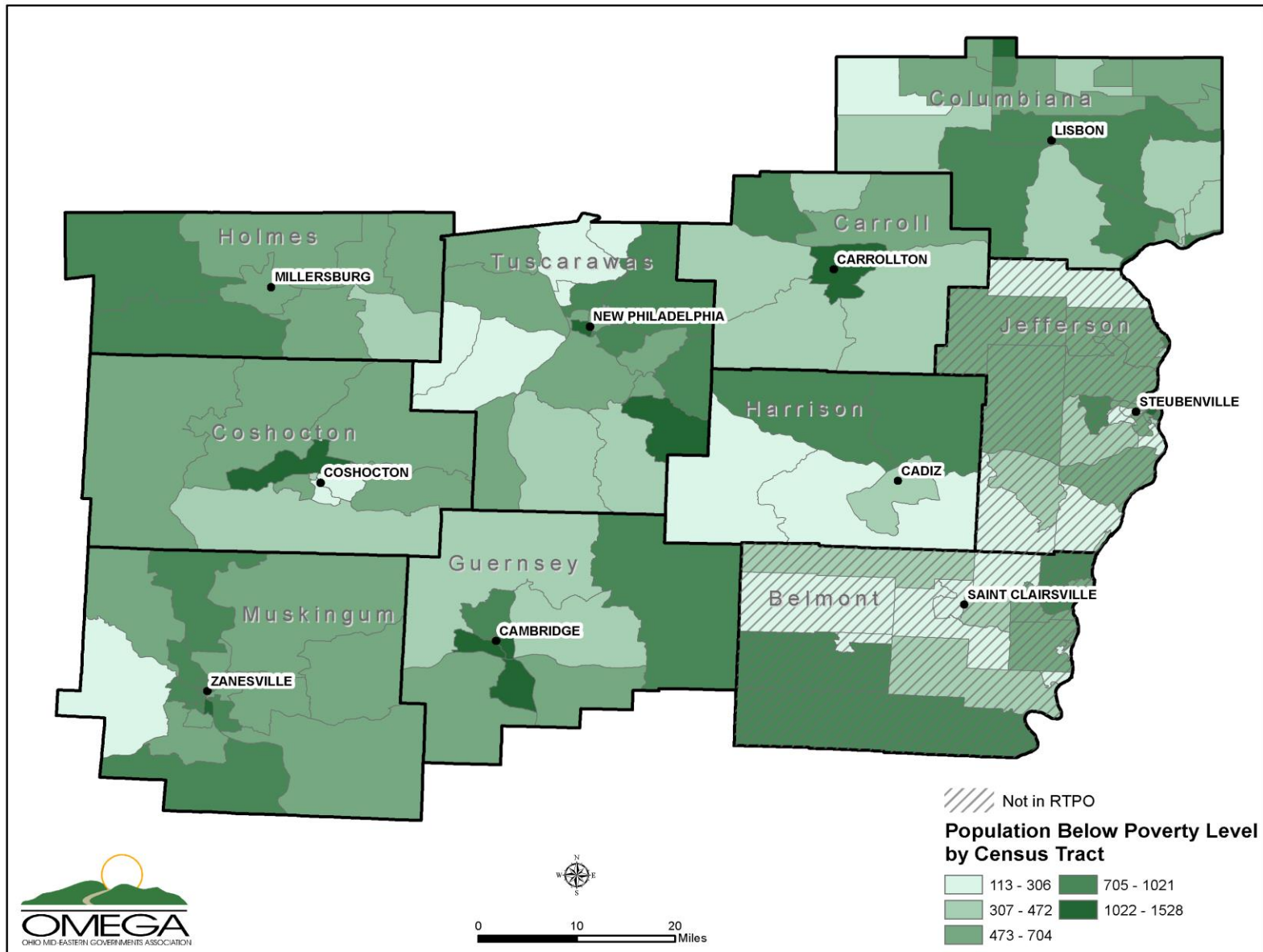


Figure 2-4: Population Below Poverty (source: US Census Bureau)

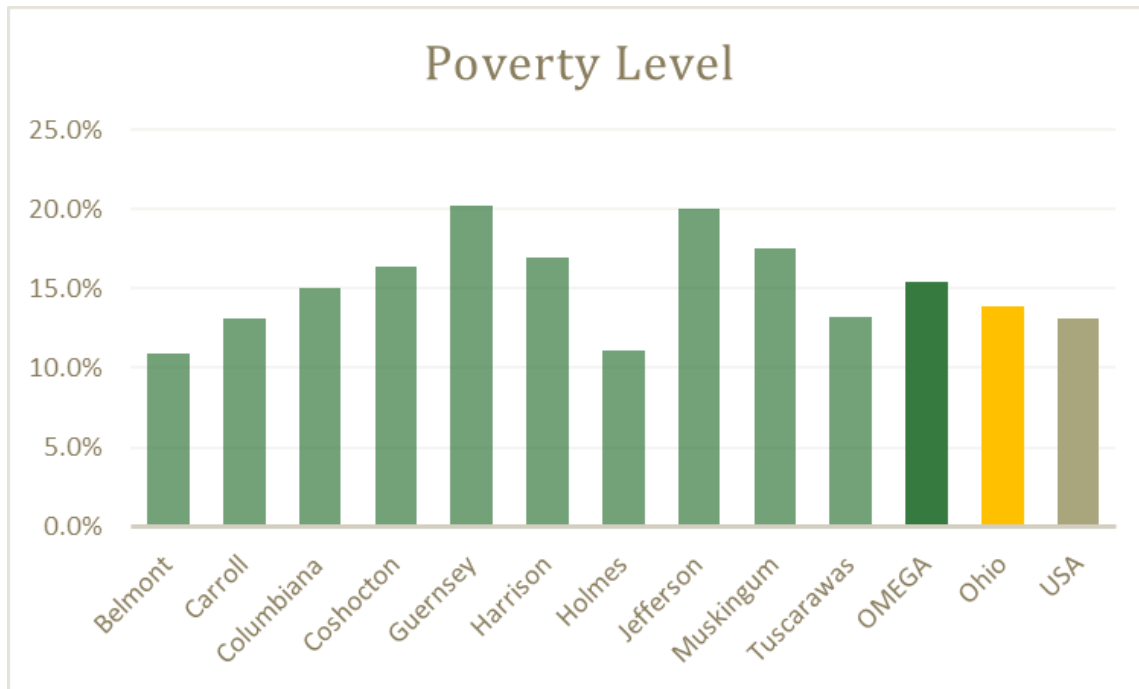


Figure 2-5: Poverty Level, 2018 Estimates (source: US Census Bureau)

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.

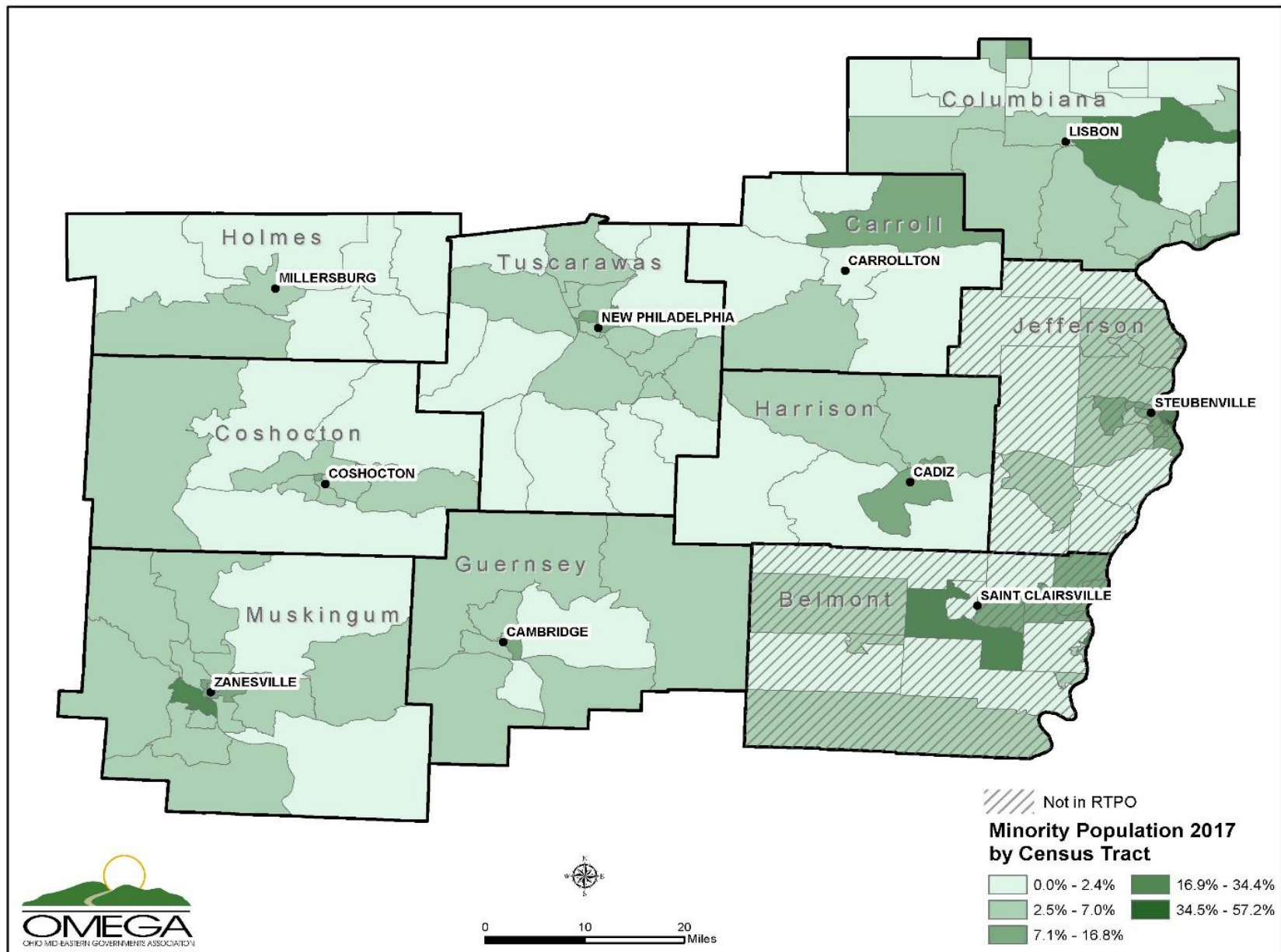


Figure 2-6: Minority Population by Census Tract (source: US Census Bureau)

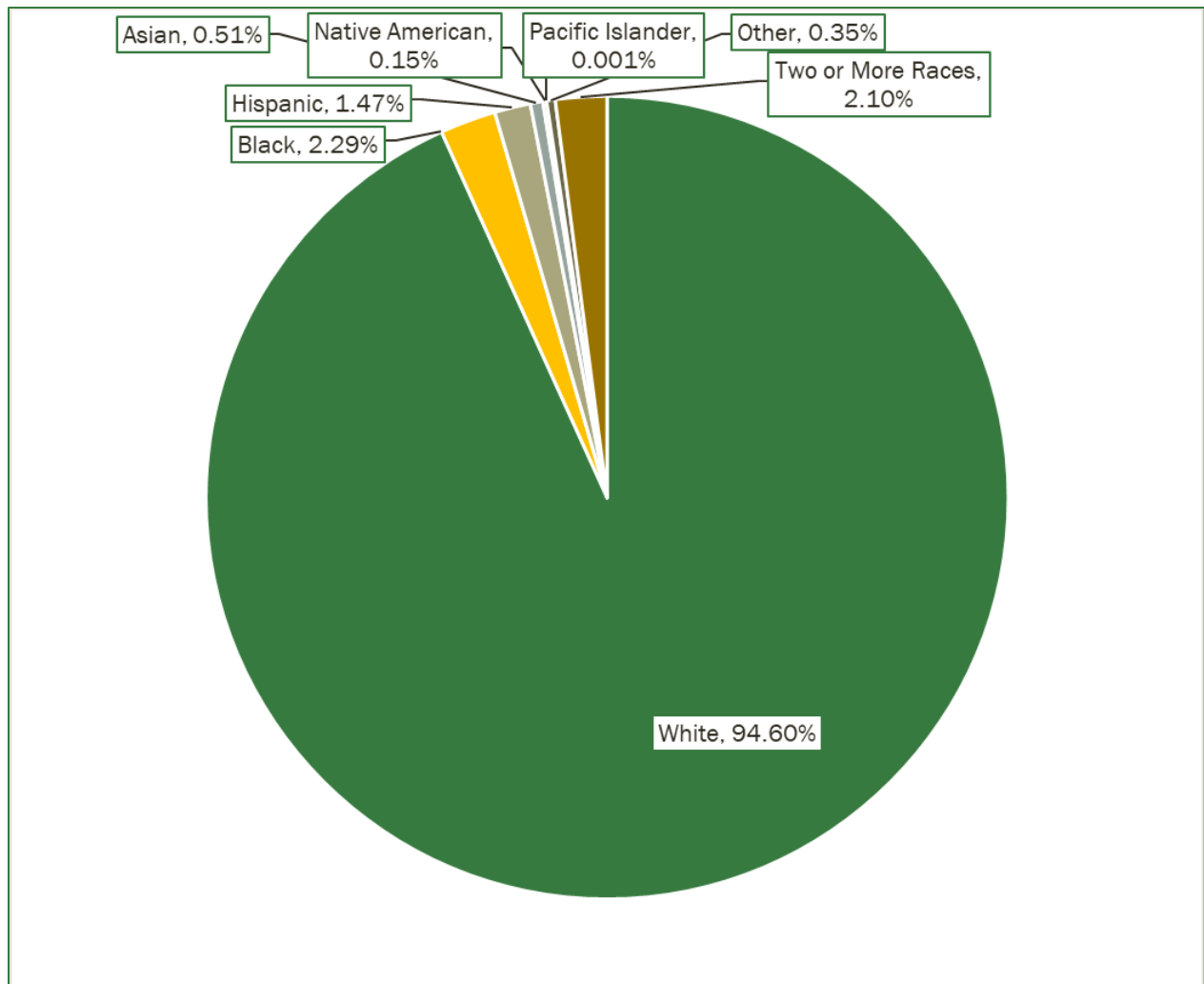


Figure 2-7: Minority Population, 2018 Estimates (source: US Census Bureau)

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.

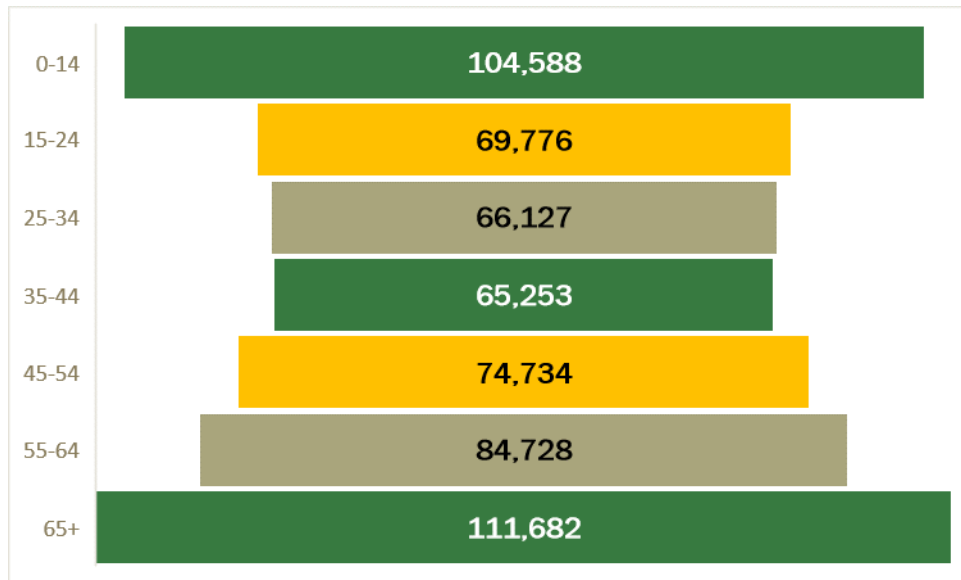


Figure 2-8: OMEGA Population Pyramid, 2018 Estimates (source: US Census Bureau)

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.

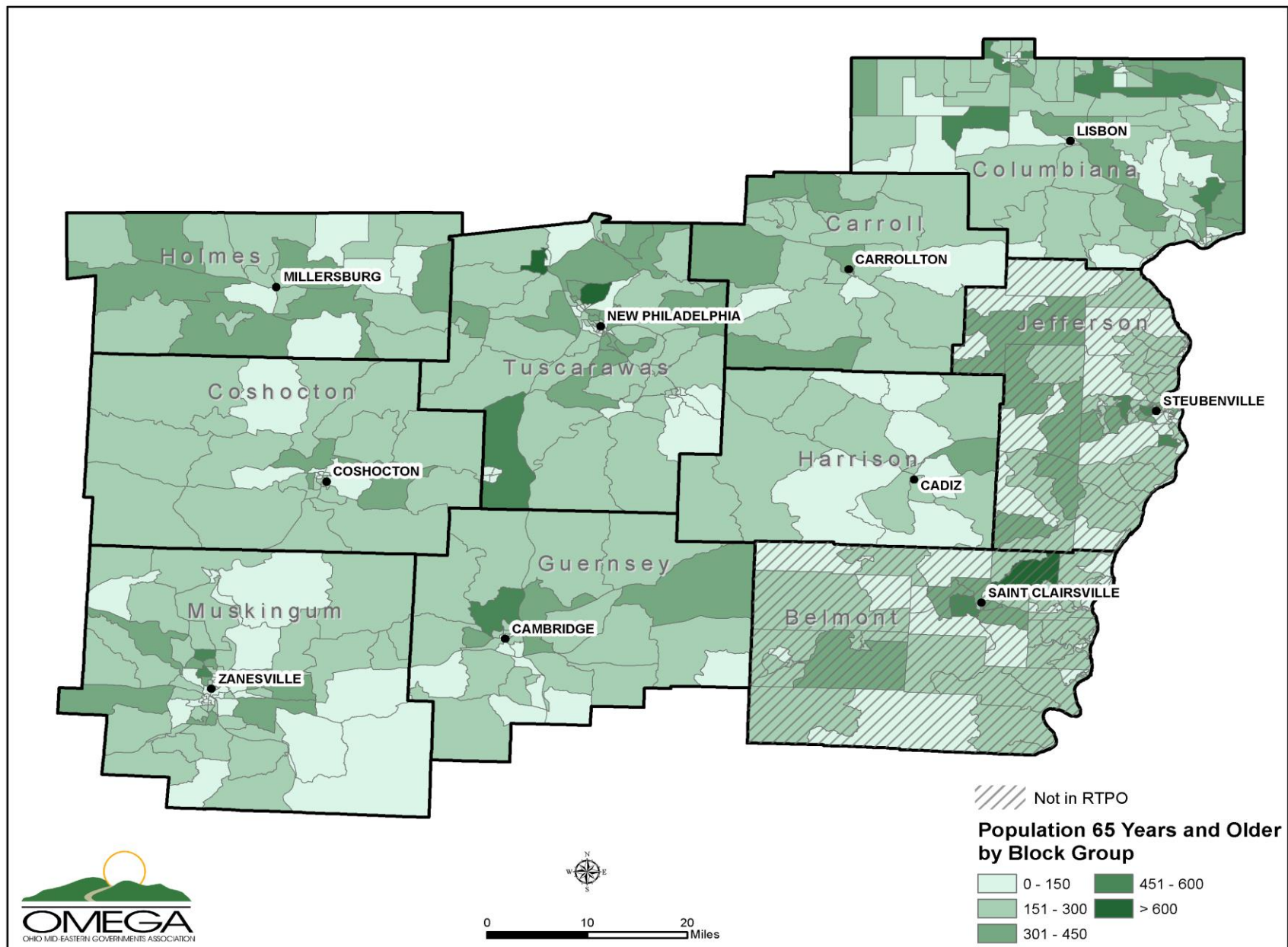


Figure 2-9: OMEGA Population Over 65 (source: US Census Bureau)

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.

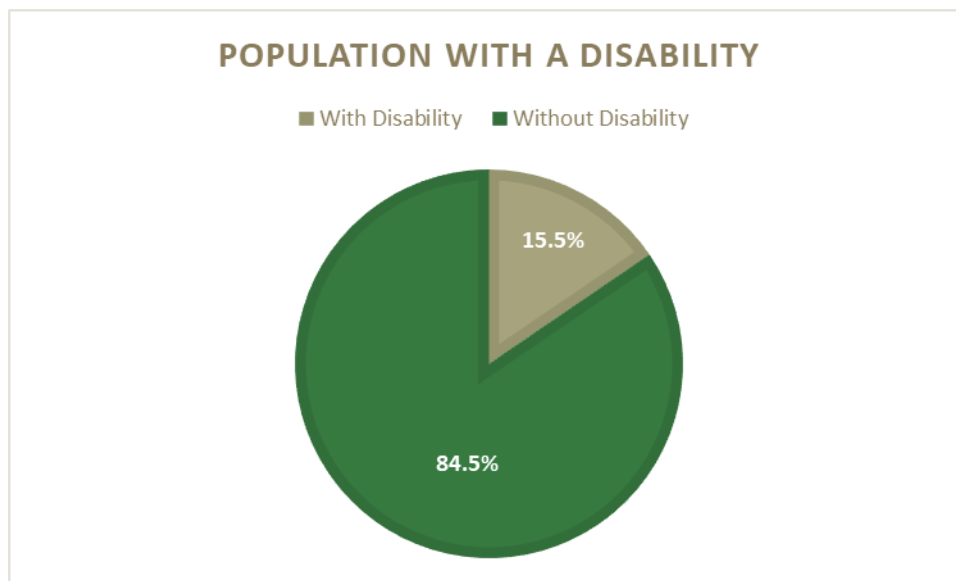


Figure 2-10: OMEGA Population with a Disability (source: US Census Bureau)

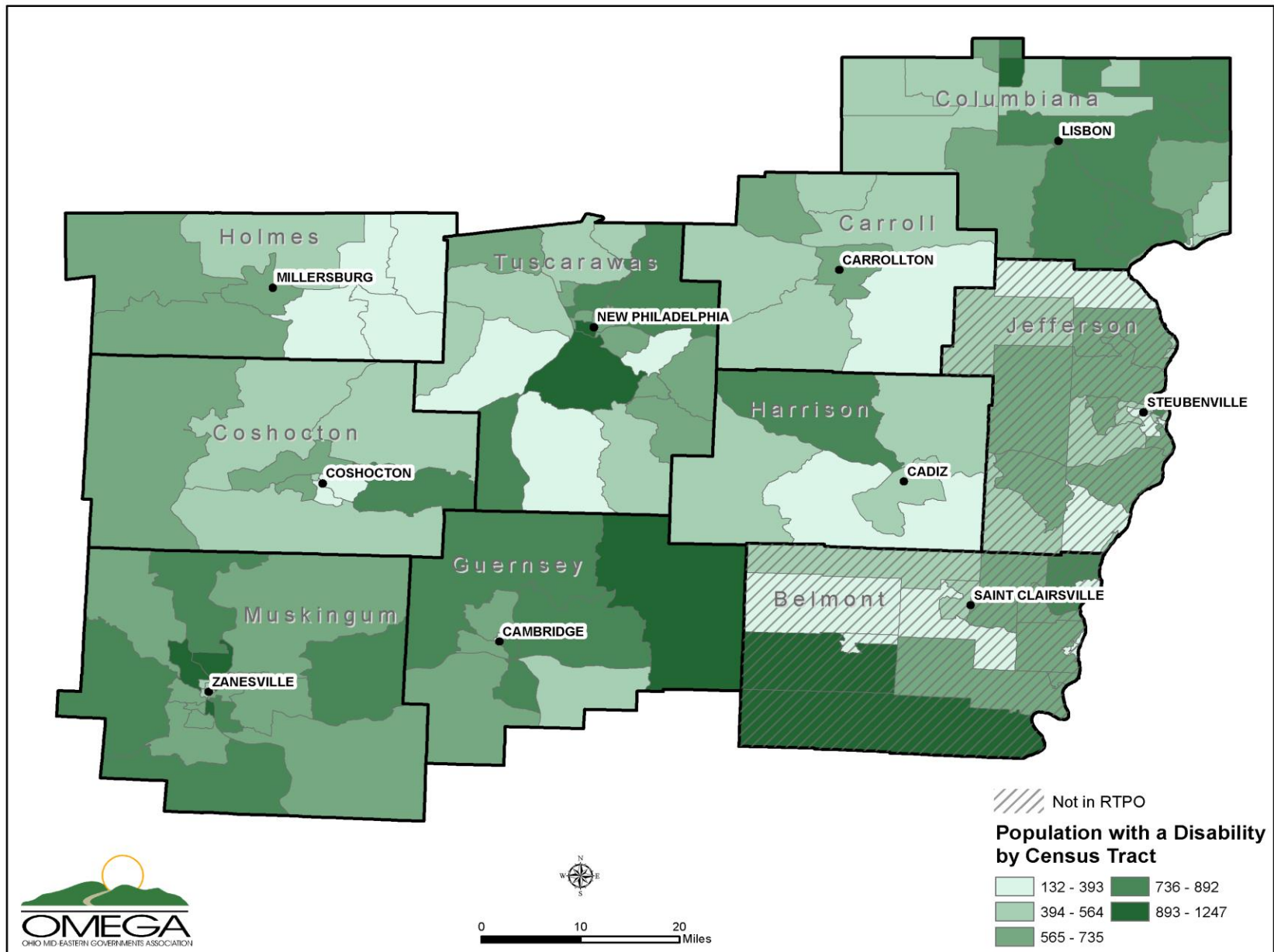


Figure 2-11: OMEGA Population with a Disability (source: US Census Bureau)

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.

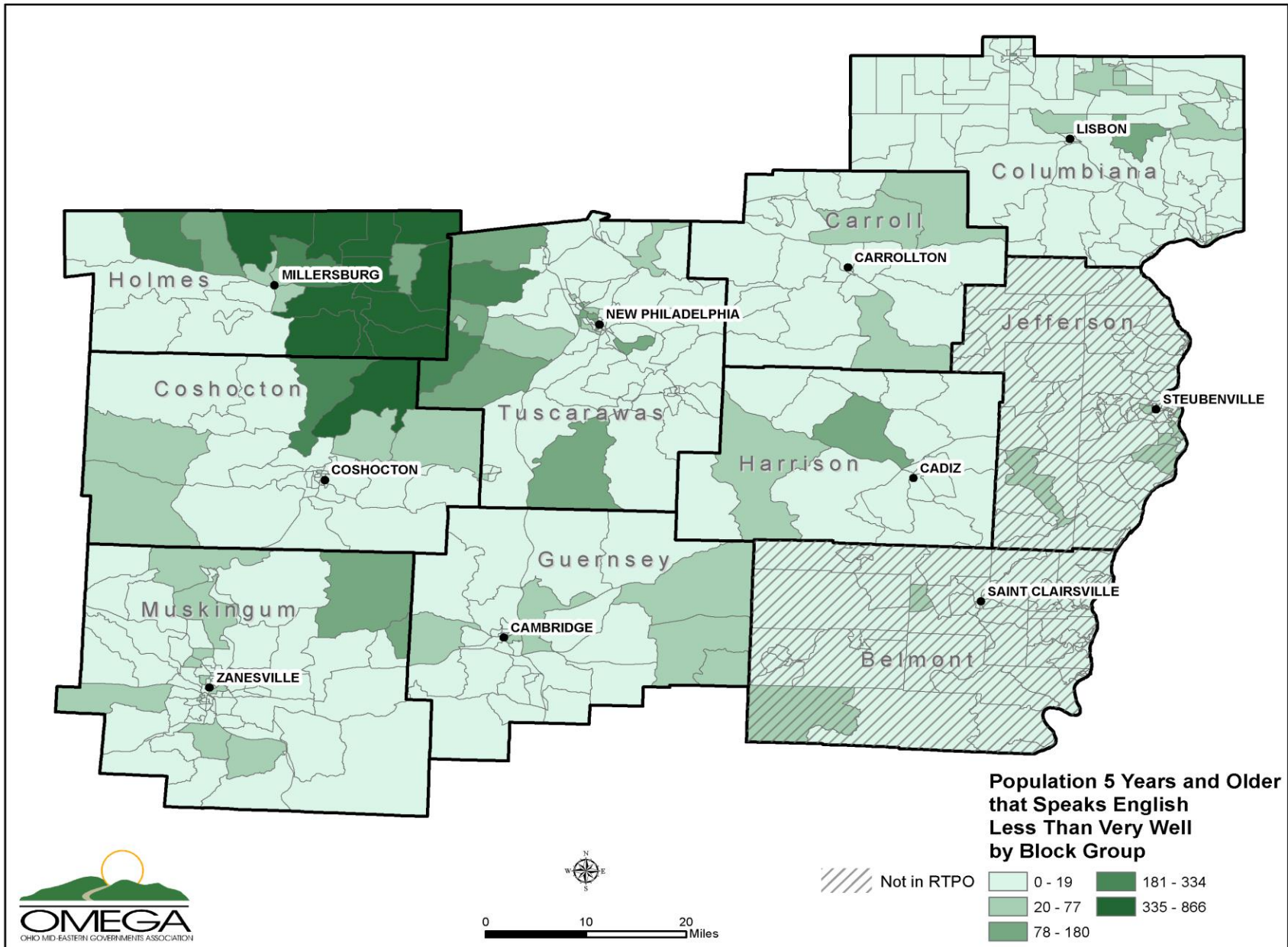


Figure 2-12: OMEGA Population Speaking English “Less Than Very Well” (source: US Census Bureau)

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

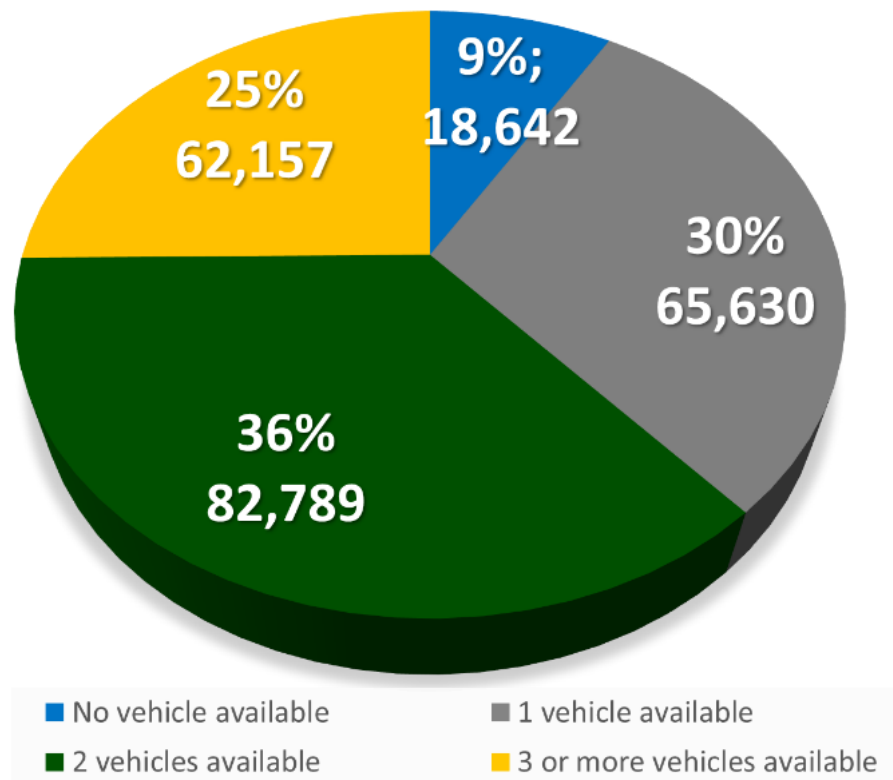


Figure 2-13: OMEGA Population - Zero Vehicle Households (source: US Census Bureau)

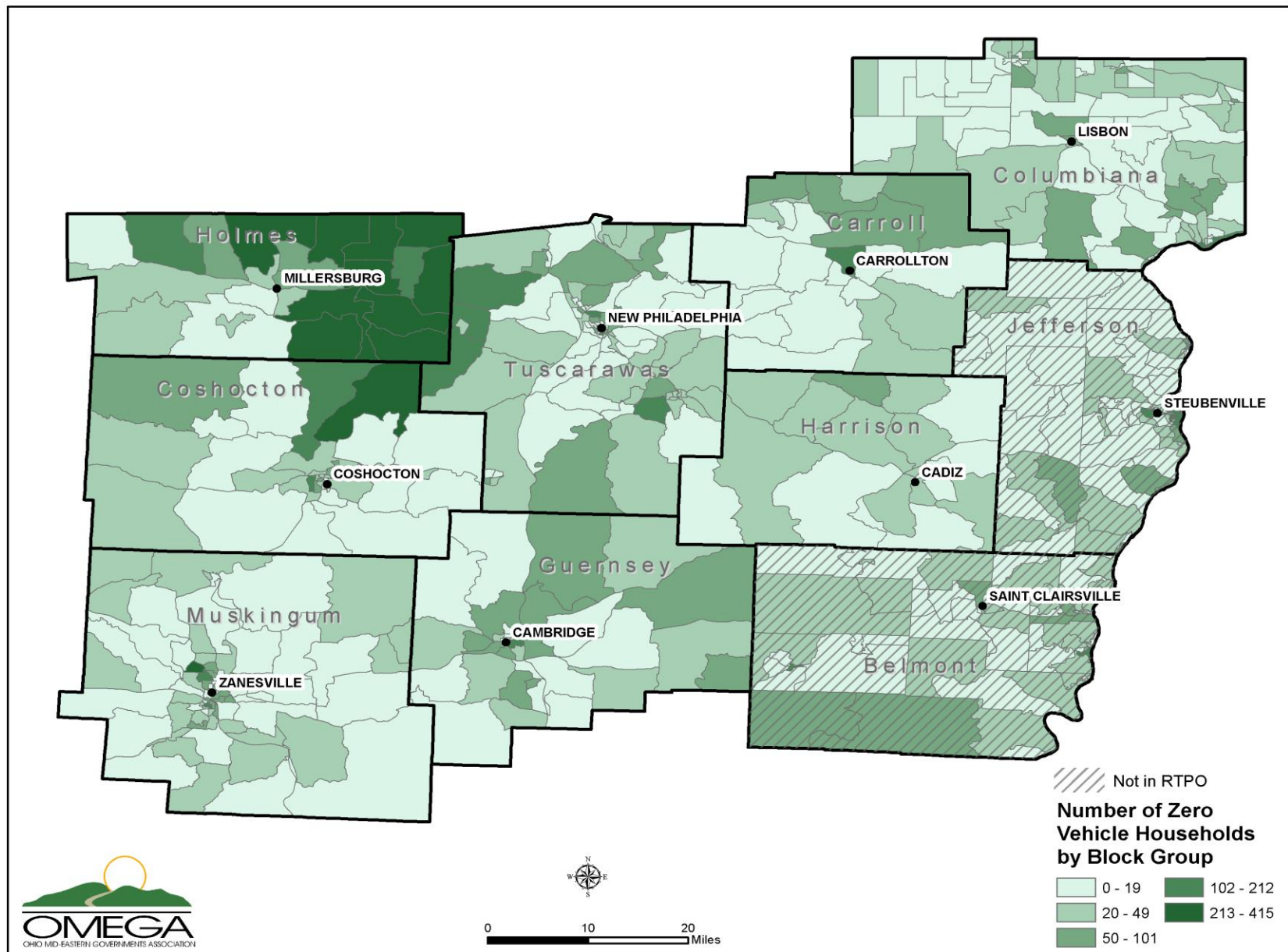


Figure 2-14: OMEGA Population - Zero Vehicle Households (source: US Census Bureau)

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 RTPs.

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 RTP 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

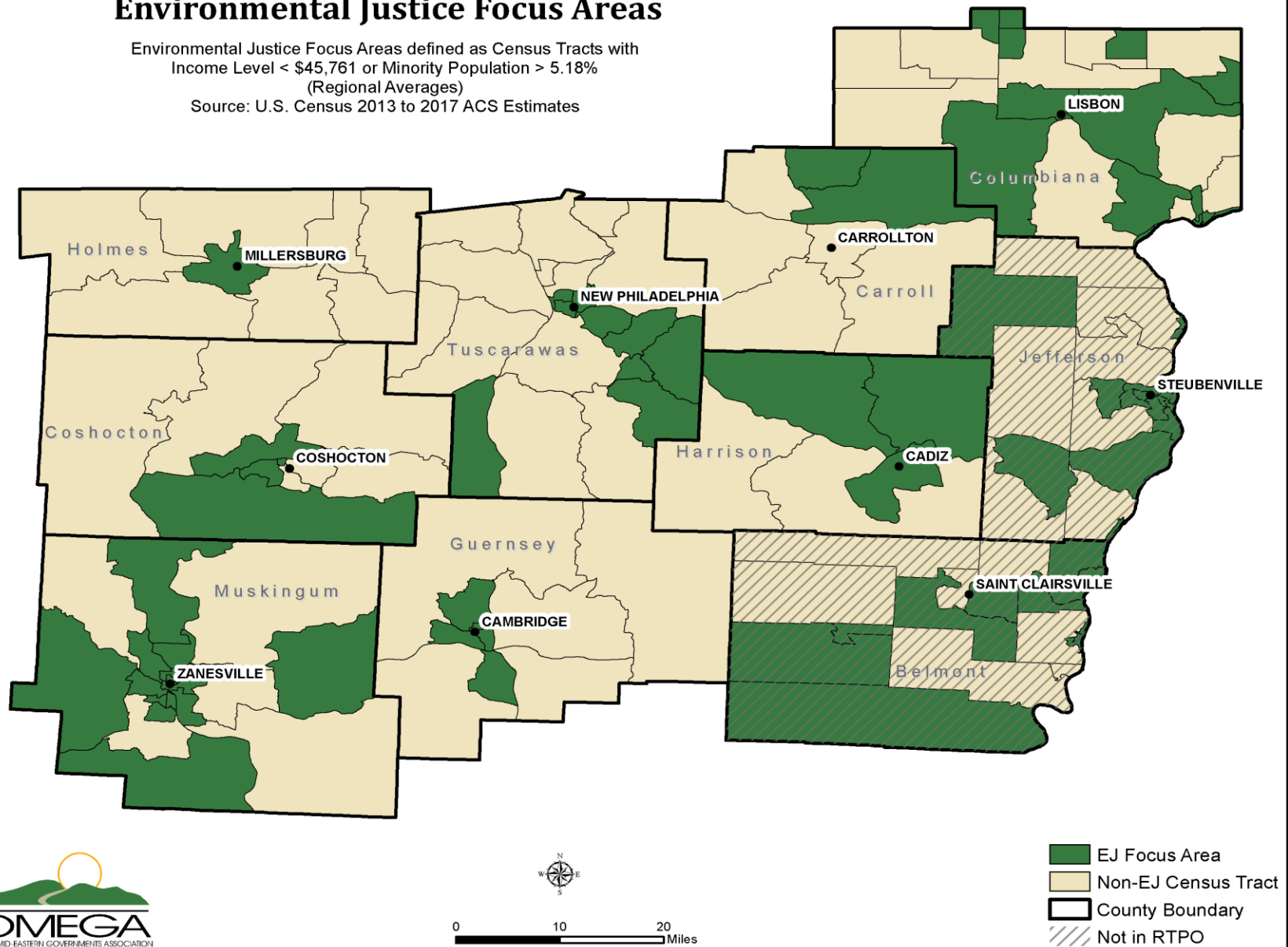


Figure 2-15: OMEGA Environmental Justice Focus Areas

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.

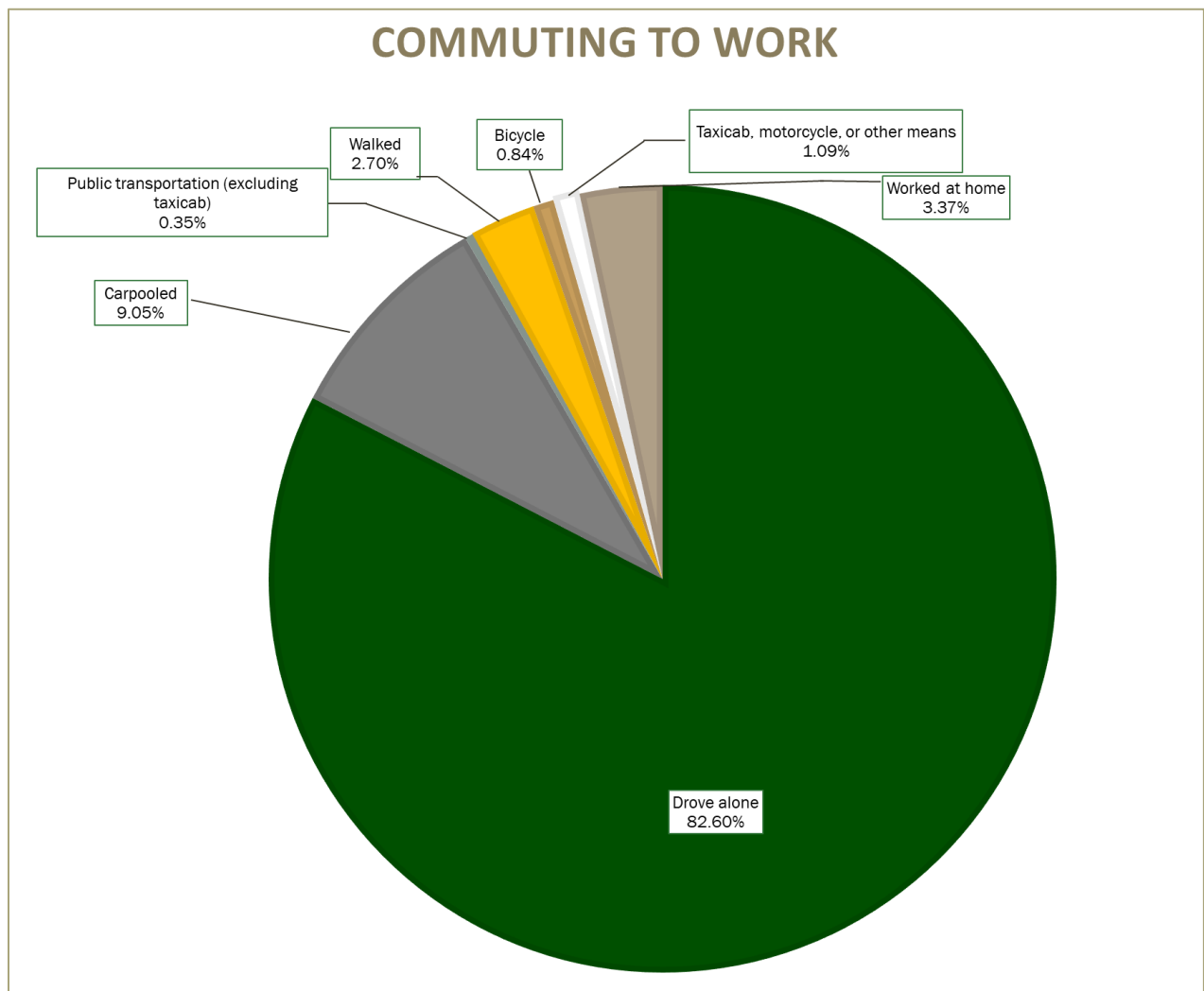


Figure 2-16: OMEGA Population Commuting to Work (source: US Census Bureau)

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.

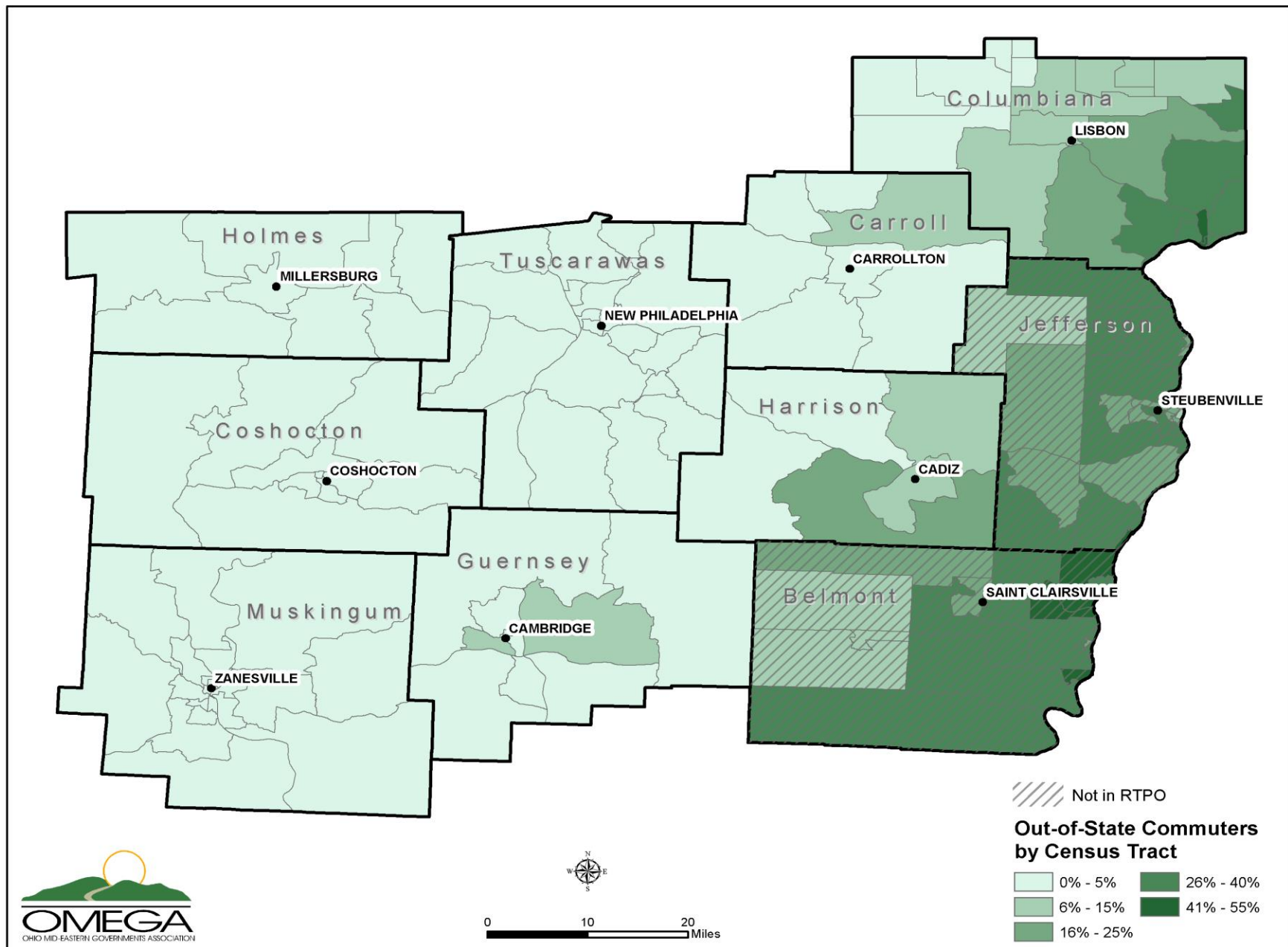


Figure 2-17: Regional Out-of-State Commuters (source: US Census Bureau)

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.

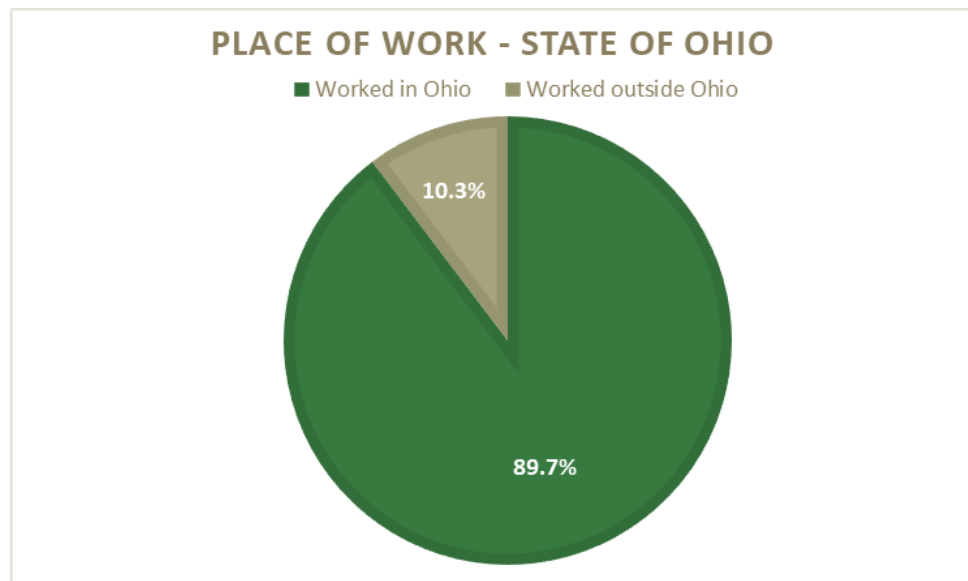


Figure 2-18: Commuters' Place of Work – State (source: US Census Bureau)

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.

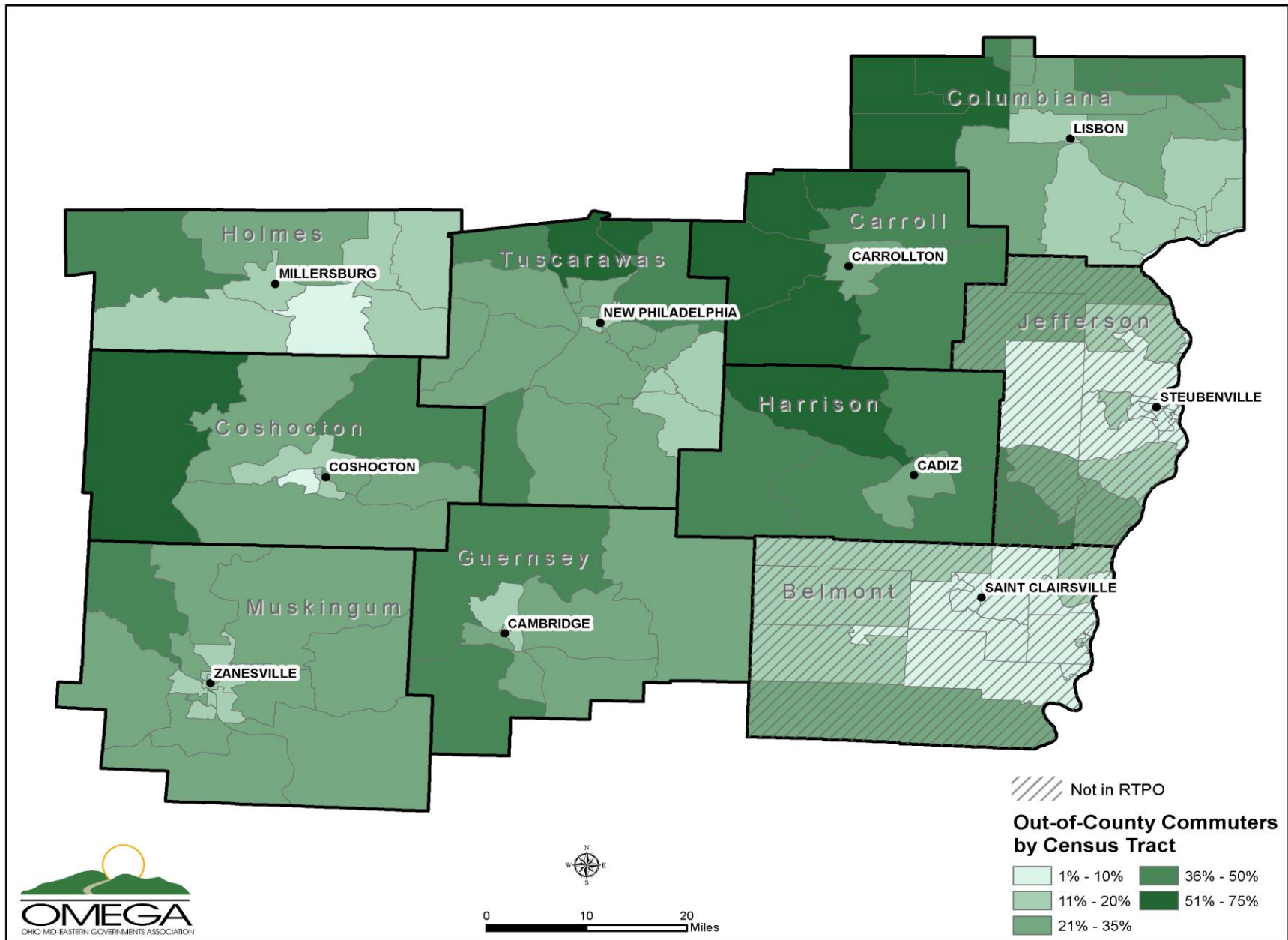


Figure 2-19: Regional Out-of-County Commuters (source: US Census Bureau)

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.

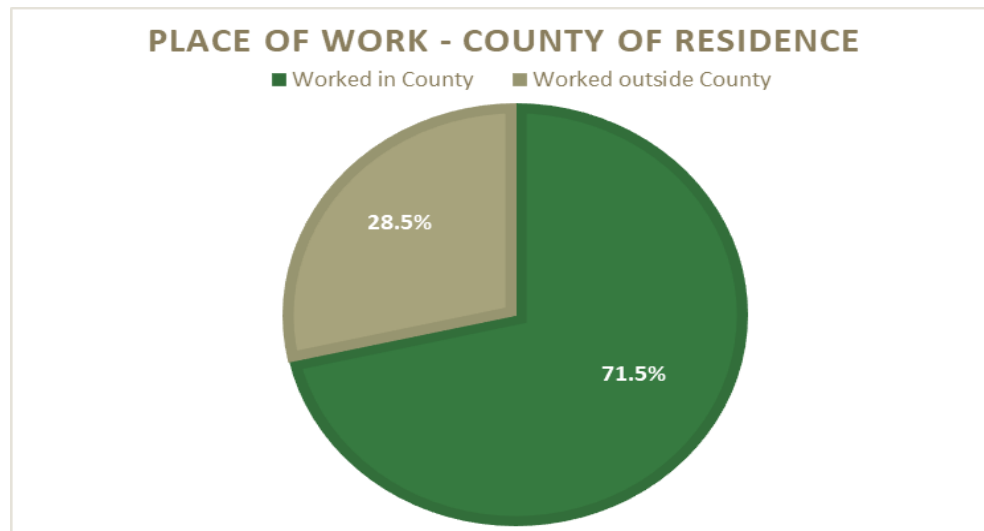


Figure 2-20: Commuters' Place of Work – County (source: US Census Bureau)

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 Frazesburg;
- **Tuscarawas County:** near New Philadelphia and in the southeast around Uhrichsville.

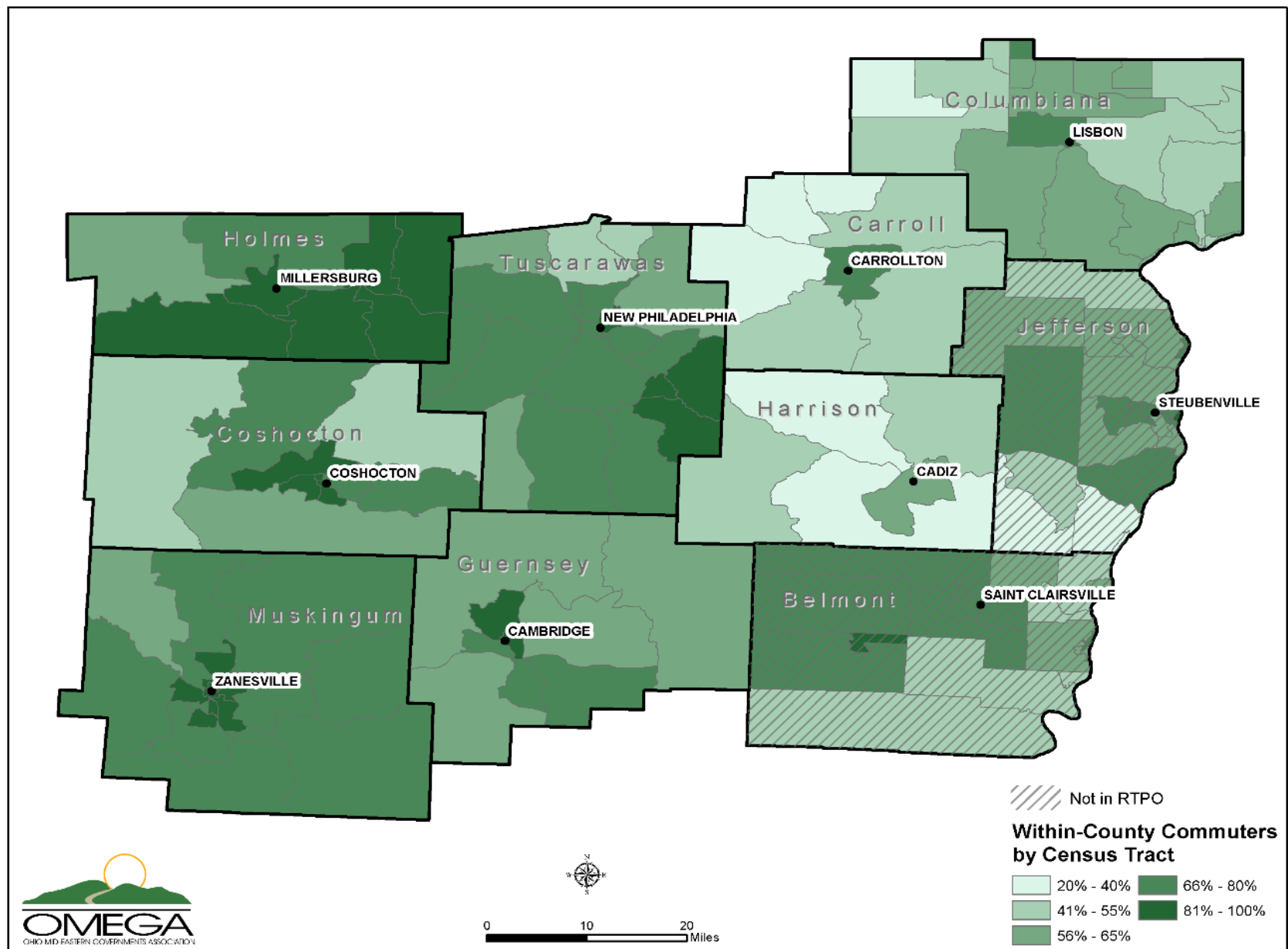


Figure 2-21: Regional Within-County Commuters (source: US Census Bureau)

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.

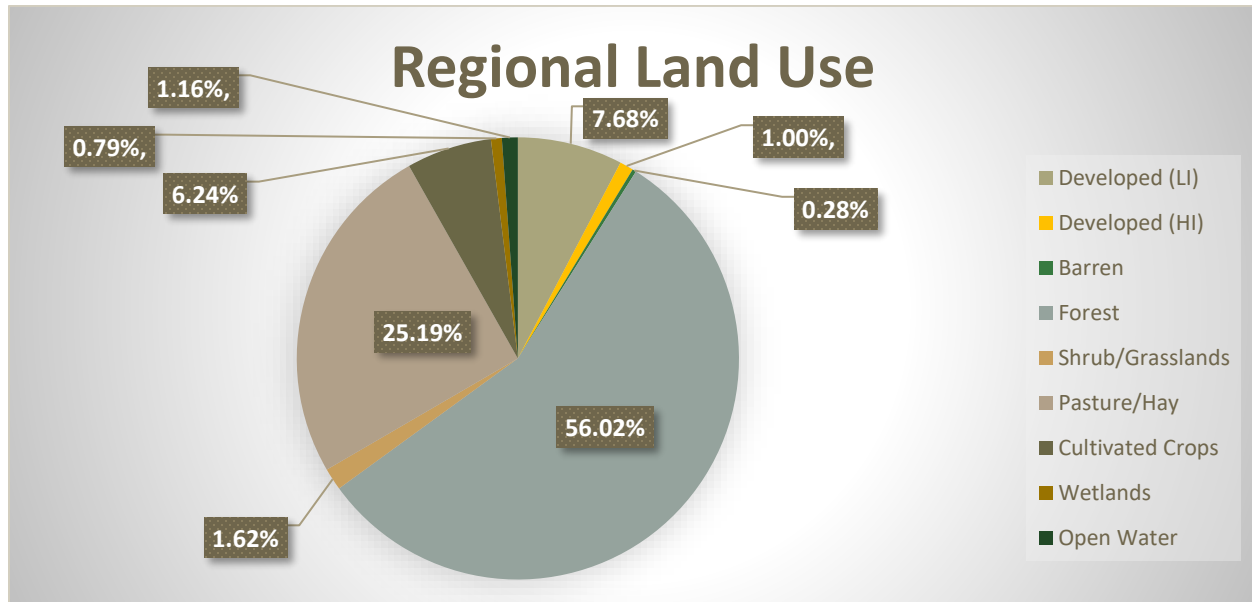


Figure 2-22: Regional Land Use (Source: Ohio Development Services Agency)

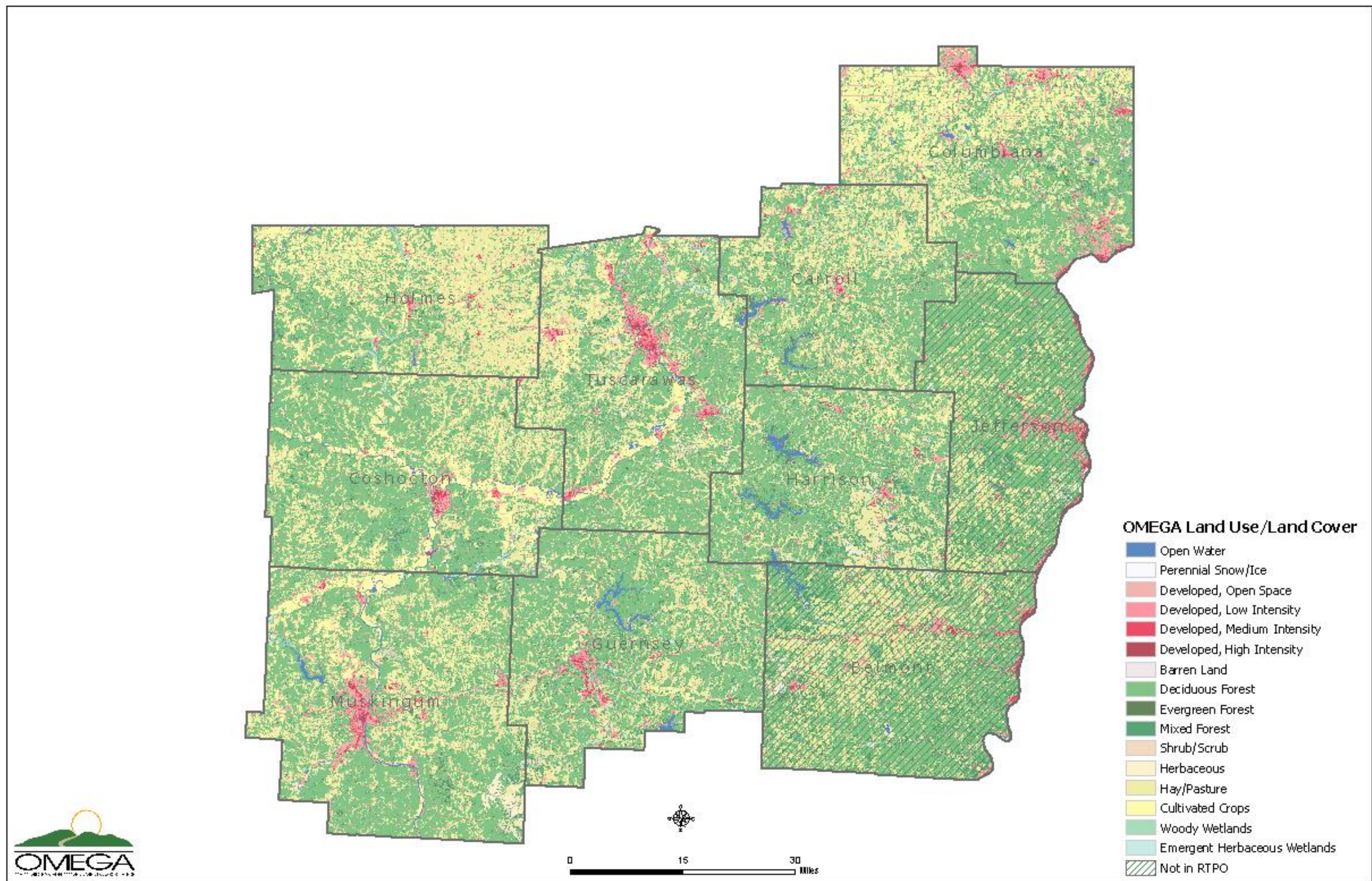


Figure 2-23: Land Use/Land Cover

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 RTP. 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.

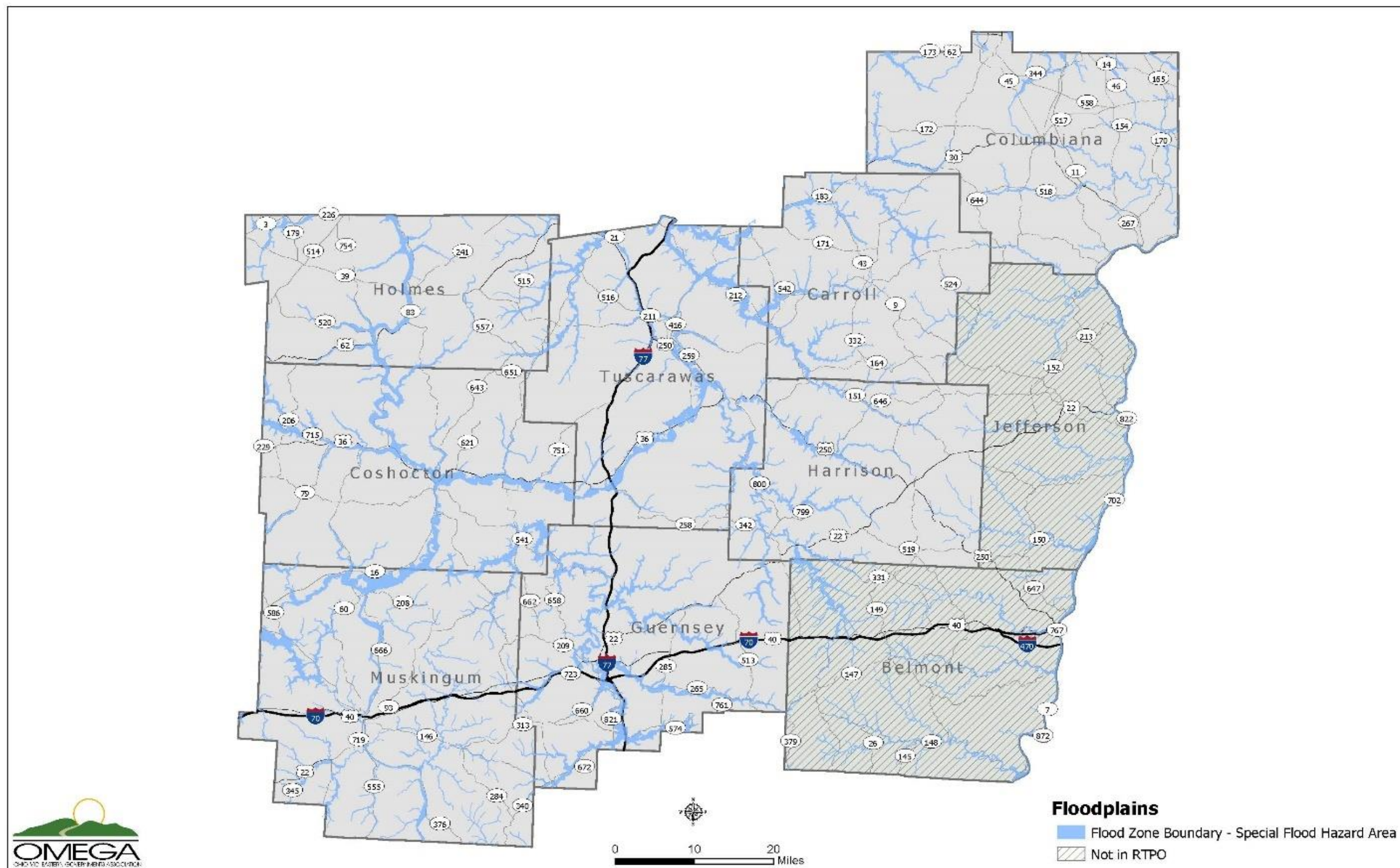


Figure 2-24: Floodplains

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

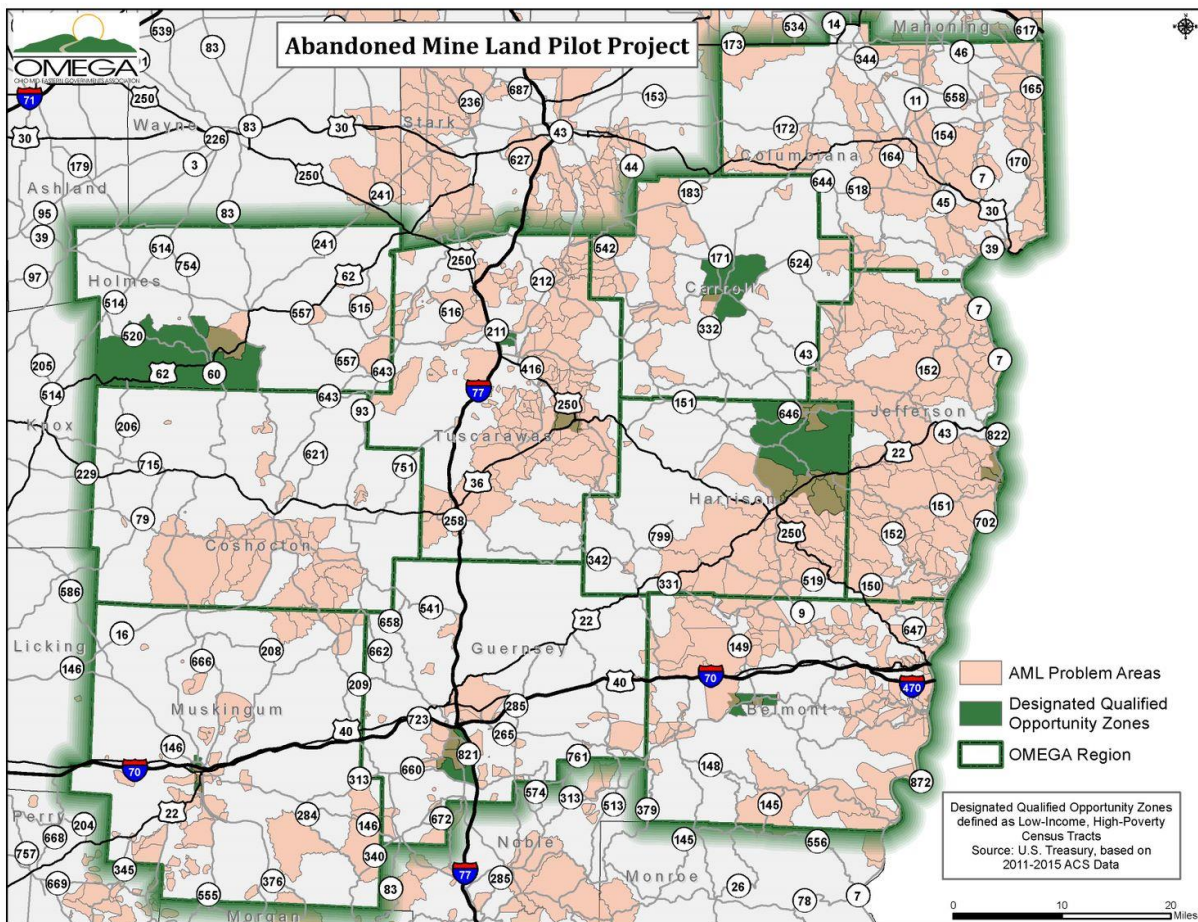


Figure 2-25 – Abandoned Mine Lands with Opportunity Zones

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.

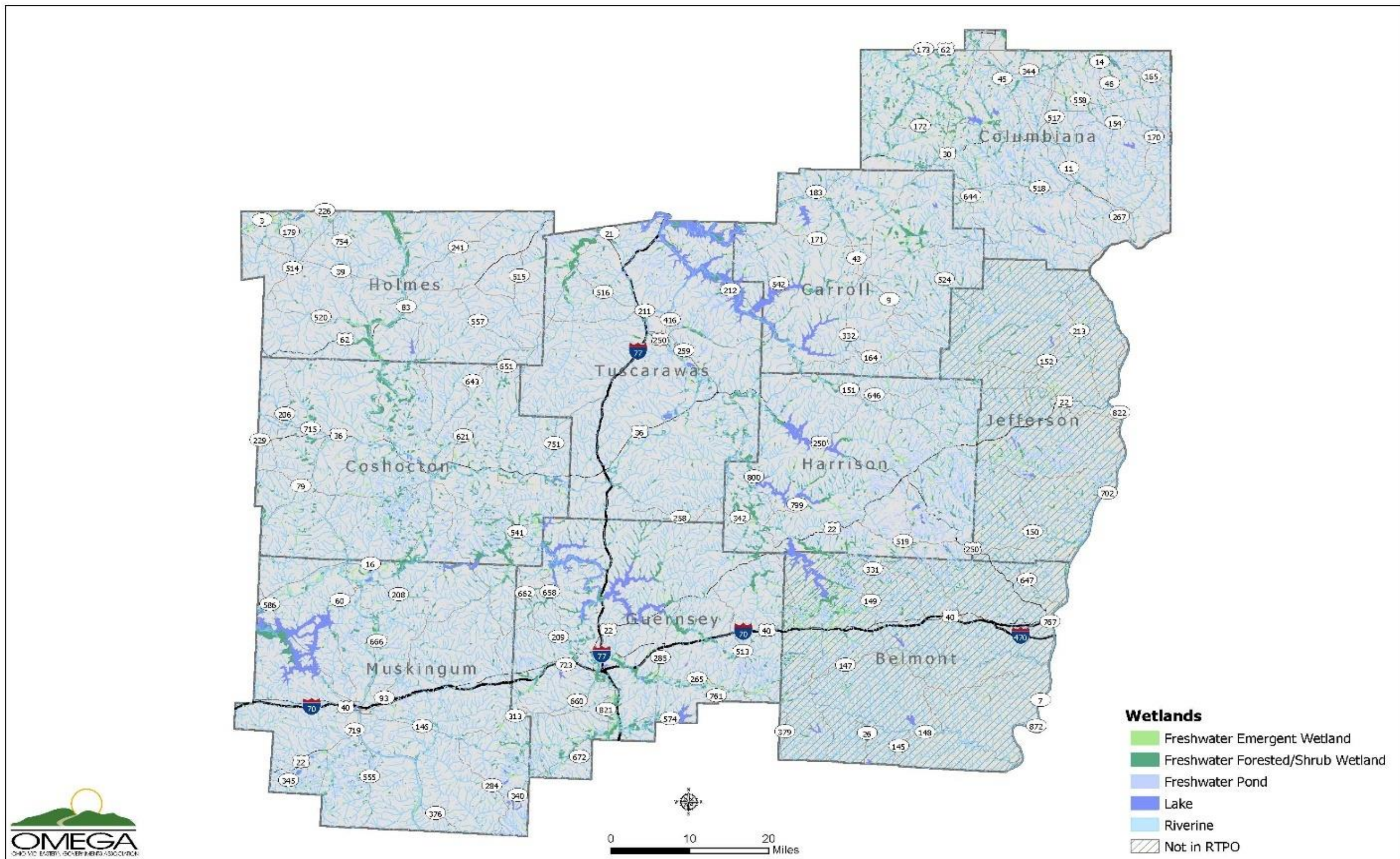


Figure 2-26: Wetlands

2.4 ARC County Economic Status

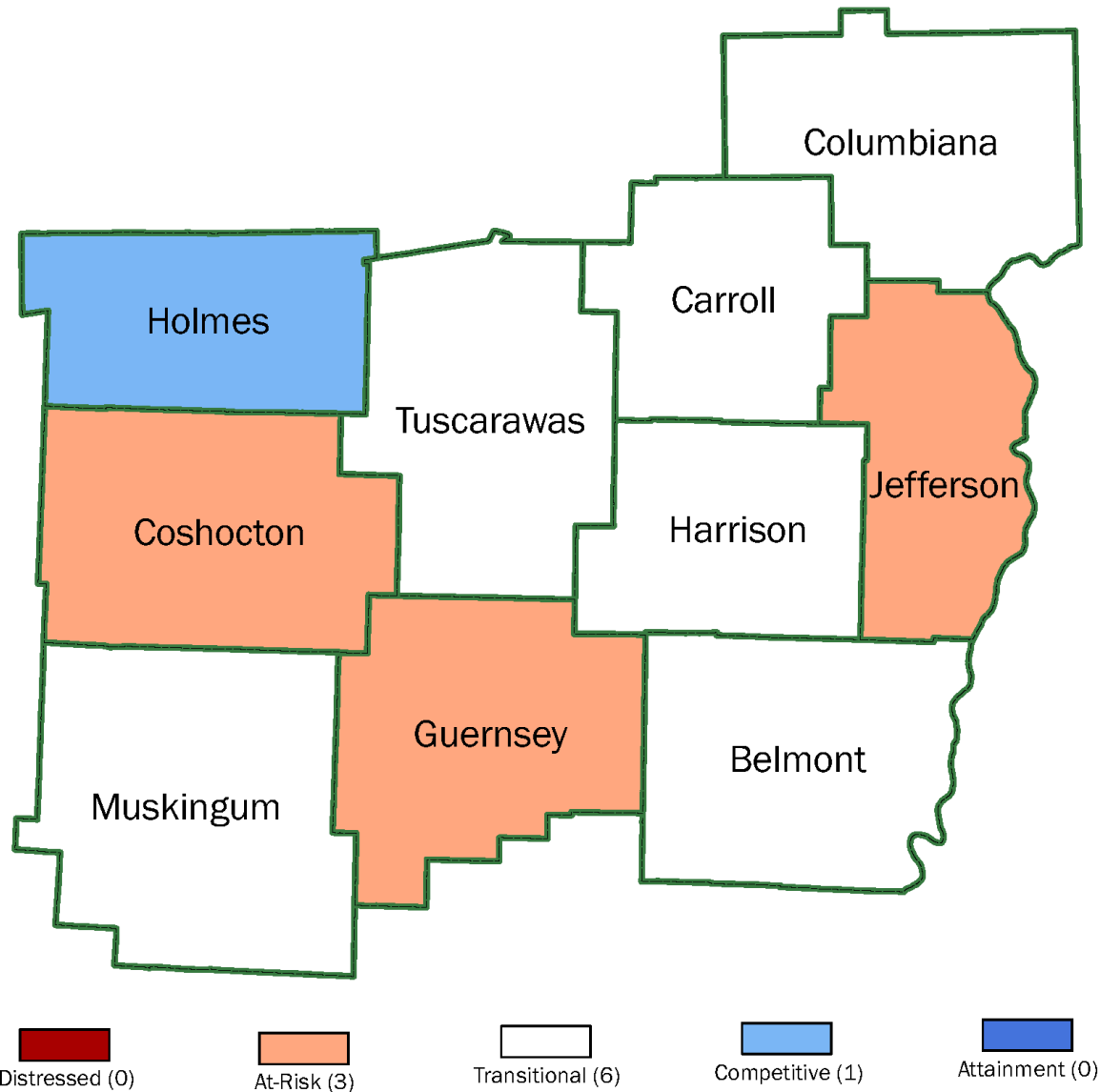


Figure 2-27: ARC County Economic Levels FY 2020

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 2-27** 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 Service¹.

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 classification².

¹ <https://www.irs.gov/newsroom/opportunity-zones-frequently-asked-questions>

² <https://appalachiancommunitycapitalcdfi.org/oa-program/>

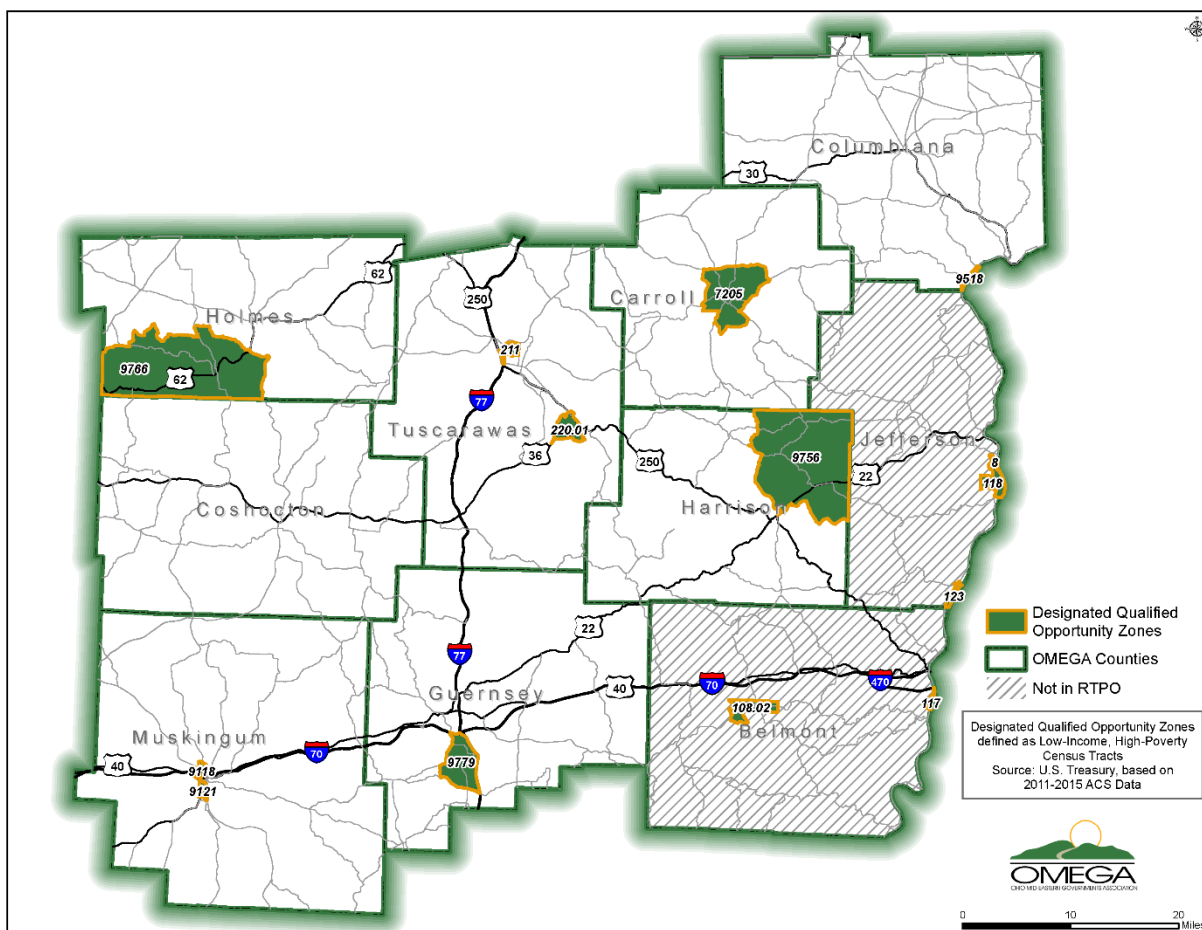


Figure 2-28: Qualified Opportunity Zones

Figure 2-28 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

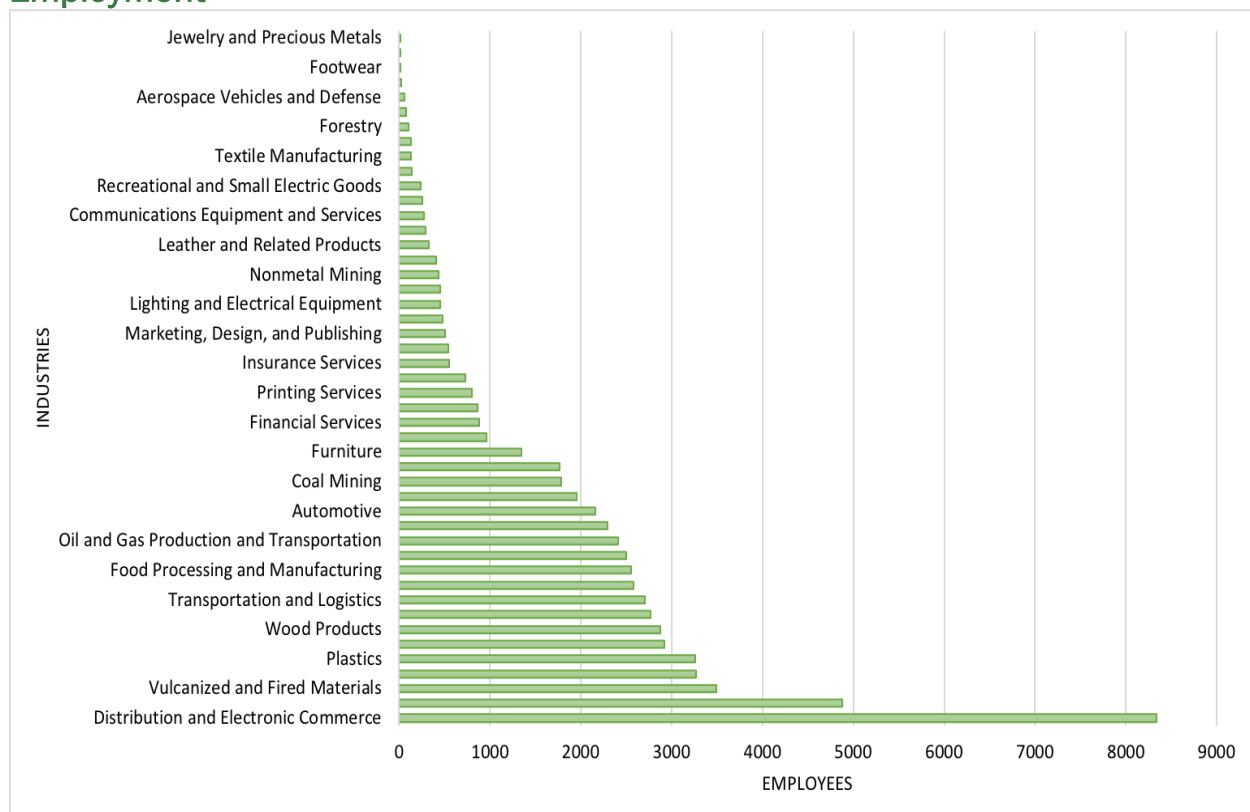
Over the last 10 years, county labor force figures have trended downward; however, in most cases the decline has slowed over the most recent 5-year period. Possible contributing factors to the 10-year rate of change are the 2008-2011 recession and decline in the coal industry in the region. The slowing 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



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' are 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. 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.

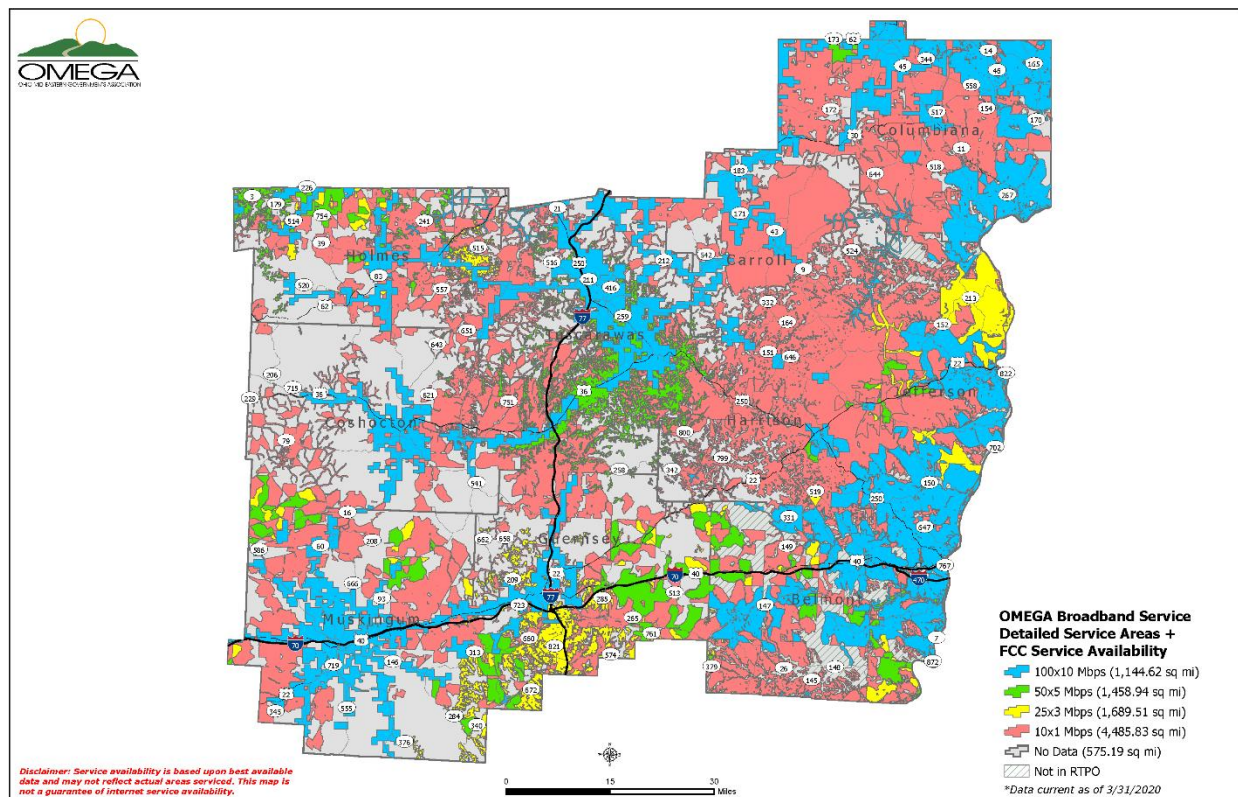


Figure 2-29: Broadband Service Coverage

Figure 2-29 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
Source: U.S. Census Bureau - impacted by seasonal and recreational use					

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.

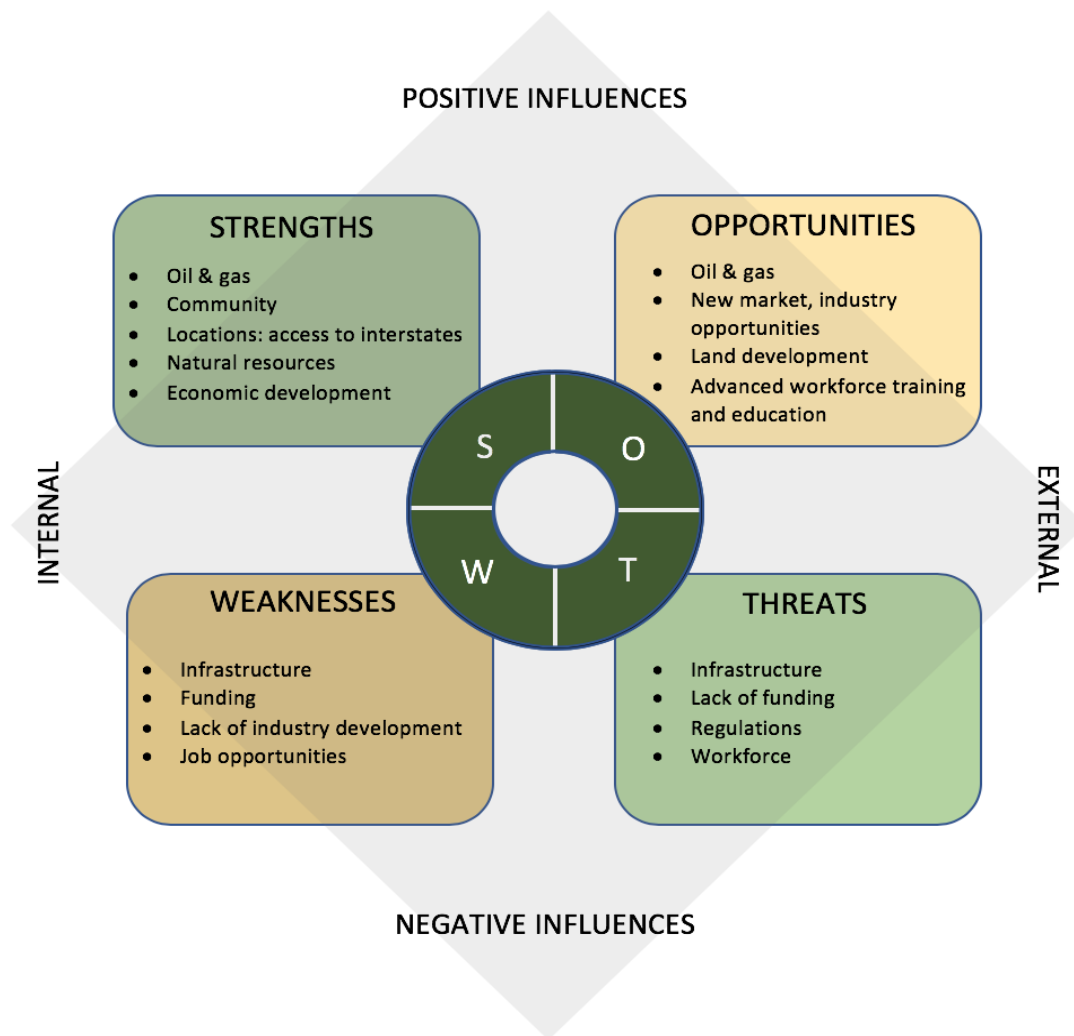


Figure 2-30: OMEGA's CEDS SWOT Analysis (2017)

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.