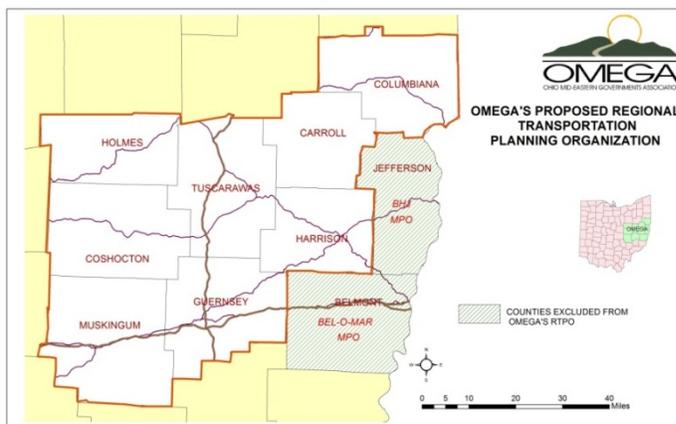




## EXECUTIVE SUMMARY FOR EXISTING CONDITIONS

The Ohio Mid-Eastern Governments Association (OMEGA) is organized as an agency of local governments pursuant to Section 167 of the Ohio Revised Code and is designated by the Appalachian Regional Commission as a Local Development District and by the US Department of Commerce, Economic Development Administration, as an Economic Development District. 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. OMEGA serves ten counties in Ohio: Belmont, Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Jefferson, Muskingum, & Tuscarawas.



On July 1, 2013, the Ohio Department of Transportation authorized OMEGA to participate in a two-year pilot program to develop a Regional Transportation Planning Organization (RTPO) to serve the eight counties in OMEGA's district which are not members of a Metropolitan Planning Organization. These eight counties include: Carroll, Columbiana, Coshocton, Guernsey, Harrison, Holmes, Muskingum, and Tuscarawas.

A regional voice and planning organization is needed to address the major transportation needs that will facilitate economic and community development, address safety and congestion issues, and improve the quality of life for our residents.

Our Regional Transportation Planning Organization will focus on the following planning efforts:

1. Development of a **Five Year** Regional Transportation Plan (RTP) by June 30, 2015.
2. Facilitation of a consultation process which will allow for OMEGA's members to discuss regional transportation issues with ODOT, and where ODOT will provide updates regarding current plans, programs and projects occurring within OMEGA's region.
3. Facilitation of public outreach efforts.

#### 4. Development of transportation expertise amongst OMEGA staff.

The development of the Regional Transportation Plan will be a coordinated effort involving and engaging decision makers and stakeholders to include local elected officials, development agencies, private industry, ODOT, and the general public. We will coordinate with adjacent MPOs as many of our major transportation routes cross multiple jurisdictions. Our RTP will be financially responsible; promote the retention, expansion and redevelopment of regional industrial centers to include the shale industry; develop a public transit and human services transportation system to improve access and mobility; and develop a pedestrian and trail network to improve the quality of life for our residents.

Consistent with the eight planning factors that need to be considered under the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), OMEGA in conjunction with the Transportation Advisory Committee (TAC) and Executive Board have adopted the following the goals for the development of a Regional Transportation Plan:

- **Goal 1:** Preserve, Maintain and Improve Existing Transportation Systems
- **Goal 2:** Address Safety and Congestion Issues
- **Goal 3:** Facilitate Economic and Community Development
- **Goal 4:** Improve Quality of Life
- **Goal 5:** Develop a Financially Responsible Regional Transportation Plan

Specific objectives to meet these goals were also developed and provided in Section 2.0 of the RTP.

Documentation of existing conditions will provide the framework for plan development and will provide the baseline for quantitatively measuring the success of the plan implementation. Once these existing conditions are known, OMEGA in cooperation with the TAC, Citizens Advisory Board, Executive Board, and ODOT, and with guidance from the Eastgate Regional Council of Governments, will be able to identify the transportation needs of the region and focus on the development of specific projects to meet those needs.

Specific baseline data in the Existing Conditions Section includes: demographics, roads, bridges, transit, ports and rivers, aviation, rail, safety, economy, bicycle routes, and environmental concerns. Data contained in the Existing Conditions Section is summarized herein.

## Demographics

According to the 2010 Census, the population of the OMEGA RTPo region is 450,551 which accounts for just under 4% of the state's population. The population of the RTPo region is expected to decline by 2.64% over the next 30 years; however, the population of Holmes County is projected to increase by almost 7%. Approximately 4.67% of the population is designated as minority with minority population centered in the more urbanized areas. Almost 17% of the population is age 65 or older and is also centered in the more urbanized areas. Harrison County has a higher elderly population than the entire region.

The OMEGA region is also the epicenter of shale development in the State of Ohio. The impact of this development especially in Carroll, Columbiana, Guernsey, and Harrison Counties on population and employment is currently unknown. However, population and employment may actually increase as shale development continues to expand in the area.

Historically, income levels, unemployment rates, and poverty rates for the region have been higher than state and national levels. However, with shale development and the improved state economy, current unemployment rates (June 2014) in six of the eight counties are less than national unemployment rates.

Poverty levels in the eight-county planning area are generally higher than the state poverty rate. Based upon the 2012 5-year ACS estimates, Harrison County has the highest poverty rate, 19.4%, in the planning area.

The highest concentration of households without cars, over 400 households per census tract, is located in Holmes County which is likely attributable to the high Amish population in Holmes County. Higher concentrations of households without cars are also located in the more urbanized areas. The average travel time to work in the OMEGA RTPo is 25 minutes and 50% of the residents have a travel time of less than 20 minutes.

## Roads

Two interstates, I-70 and I-77, a major east-west and a major north-south corridor, respectively are located in the OMEGA RTPo region. Both have been identified as part of the Strategic Transportation System (STS) in Access 2040 and are important to the national economy as they carry large volumes of freight both inside and outside Ohio. I-70 extends through Guernsey and Muskingum Counties and I-77 extends through Guernsey and Tuscarawas Counties. Other routes on the STS include: US 30 Ohio's Energy Corridor in Columbiana County, US 36 and SR 16 in Coshocton and Muskingum Counties, US 250 in Harrison and Tuscarawas Counties, SR 7 in Columbiana County, and US 22 in Harrison County have been identified as Statewide Primary Corridors.

There are approximately 10,346 lane miles of roads in the OMEGA RTPO, over 70% of which are classified as local. Percentage of the remaining roads by functional class is as follows:

- Interstate 1.1%
- Freeway and Expressway 0.2%
- Other Principal Arterial 2.3%
- Minor Arterial 4.4%
- Major Collector 12.4%
- Minor Collector 9.2%

Carroll and Holmes Counties are the only two counties in the OMEGA RTPO that do not have any four-lane roads.

Annual Average Daily Traffic (AADT) for all state and federal routes within the planning area were reviewed. With the exception of the interstates, SR 60 (Maple Avenue in Zanesville) and US 250 between New Philadelphia and Uhrichsville, the AADT of all state and federal routes within the planning area is less than 20,000. With the exception of Harrison County, all counties in the RTPO area have at least one segment of a state or national route with an AADT greater than 10,000.

Traffic counts prior to the onset of shale development in Carroll, Columbiana, and Harrison Counties were reviewed to data collected in 2013 and 2014. Dramatic increases in truck and the total volume of vehicles were observed in Carroll and Harrison Counties. The volume of truck traffic on SR 9, SR 212, SR 332, and SR 542 in Carroll County has more than doubled between 2011 and 2013. During this same period in Carroll County, the total volume has increased by at least 20% on SR 9, SR 164, SR 212, SR 332, SR 542, and SR 644.

The impact of shale development on AADT in Columbiana County does not appear to be as significant as that for Carroll County. Only modest increases in total volume were observed on SR 39 (4% increase) and SR 644 (8% increase). On all other state routes, the total volume of traffic has either stayed the same as previous years or decreased. However, the total volume of trucks on SR 267 almost doubled and the total truck volume on SR 45, SR 165, SR 344, and SR 518 increased by more than 50% while the truck volumes on SR 9 and SR 14 increased by over 30%.

The AADT on almost all state routes in Harrison County increased between 2011 and 2014. One of the most significant increases occurred on SR 151 where the total volume of traffic increased by 50% and the volume of trucks almost doubled. The total volume of traffic on SR 519 almost doubled. Truck volume significantly increased on SR 799 (125% increase), SR 646 (153% increase), and SR 800 (248% increase). These significant increases are primarily attributable to the shale development that is occurring in the area to include the construction of the processing facilities near Scio and Cadiz.

Pavement Condition Ratings (PCRs) were also reviewed for state routes and limited local roads. PCRs were available for approximately 2,848 miles of roads. Approximately 70% of the state routes are in good to very good condition and approximately 14% of the roads for which PCR data is available are in fair to poor or poor condition.

Level of Service (LOS) and Volume to Capacity Ratios (V/C) were also reviewed to assess the level of congestion within the OMEGA RTPO. Several routes were identified throughout the region as having a LOS of D. SR 83 south of Millersburg in Holmes County and a section of SR 146 west of Zanesville in Falls Township have a LOS of E. There are no routes within the RTPO that have a LOS of F.

Based upon normalized AADT data for 2012, the V/C ratio for all state and national routes within the planning area is generally less than 0.55. Exceptions are noted along certain segments of I-70 in Guernsey and Muskingum Counties (ranging from 0.58 to 0.90), SR 209 in Cambridge (0.59 to 0.75), SR 83 in Millersburg (0.68), and SR 60 in Zanesville (0.62 to 0.64).

### Bridges

In the OMEGA RTPO region, there are 2,964 bridges, 61% of which are under local jurisdiction and the remaining 39% under state jurisdiction. There are 138 bridges under local jurisdiction that have a General Appraisal Rating of 4 or less. Muskingum County has the highest number of bridges under local jurisdiction as well as the highest number of local bridges with a general appraisal rating of 4 or less.

### Transit

The eight-county RTPO is served by four transit organizations and two coordinated transportation agencies:

- Carroll County Transit
- Community Action Rural Transit System (CART) serving Columbiana County
- Coshocton County Coordinated Transportation Agency (CCCTA)
- South East Area Transit (SEAT) serving Guernsey and Muskingum Counties
- Harrison County Rural Transit
- Tuscarawas Coordinated Public Transportation

Holmes County is the only county within the planning area that is not served by a transit or coordinated transportation organization.

In 2013, over 368,100 passengers, 56% of which are elderly and/or disabled were served by these organizations. All of these organizations provide demand services and only one, SEAT, provides fixed routes as well as demand services. A limited fixed route or shuttle service is also provided by CCCTA. An operational summary of each of these agencies is provided in Section 3.5.

## Rivers and Ports

There are three major rivers that run through the OMEGA study area: the Ohio River, the Muskingum River, and the Tuscarawas River. The Ohio River is a primary shipping channel for the region, state, and nation, and is also used for recreation; whereas, the Muskingum and Tuscarawas Rivers are used primarily for recreation. Of critical importance to the region is the intermodal facility at Wellsville in Columbiana County that provides access to road, rail, and the river. This facility is located within a one day drive of five of the six largest population markets in Ohio, has a 3,500 foot expandable rail siding that connects to the Norfolk Southern main line, and a 60 ton overhead river crane and bulk cargo handling system. Sixteen private river terminals are also located along the Ohio River in Columbiana County within the New Cumberland pool.

## Aviation

All counties with the RTPO are served by a general service airport. Of these airports, two, the Richard Downing Airport in Coshocton County and the Zanesville Municipal Airport are classified as Level 1 Airports. The Zanesville Municipal Airport and the Richard Downing Airport have runways that are 5,000 feet long which enables the airports to handle turbine powered and corporate jet aircraft. Currently, Cambridge Municipal, Carroll County – Tolson, and Harry Clever Field are exploring options to increase the runway length in order to accommodate corporate aircraft. Holmes County is currently in the process of extending the runway at the Holmes County airport to 4,400 feet in order to meet the demand for air services in the area.

## Rail

Over 1,260 miles of rail lines and ten railroad owners are within the RTPO. With shale development, access to rail is becoming critical. The processing plants in Harrison County have installed several rail sidings in order to be able to ship products by rail. Harrison County is served by the Columbus and Ohio River Railroad and the Wheeling Lake Erie Railroad. Connectivity of these rail lines to product destinations will be a key component in the viability of shipping product by rail.

Although freight data for these rail lines is not currently available, volume is available. Railroad volumes show how much traffic is actually on the rail systems. The segment densities are calculated by the Federal Railroad Administration with the scale of 1-7, with 1 being less dense and 7 being the most dense. In general, the railroads throughout the region are fairly open and not congested. The most congested line (rating of 4) in the rail system that serves the OMEGA RTPO region is a Norfolk Southern line that connects Salem to Cleveland in the North, Pittsburgh in the East and Canton in the West. In the more urbanized areas, the congestion or density level increases to a 3. The rest of the lines in the area have a 1 or 2 level of congestion.

## Safety

One of the most critical goals established for the OMEGA RTPO is to improve the safety of the transportation systems. To identify and document existing safety issues or areas of concern in the eight-county planning area, OMEGA used the GIS Crash Analysis Tool (GCAT). For the purposes of this study, a three period, 2011 to 2013 was selected for analysis.

For the period between 2011 and 2013, there were 30,113 crashes in the eight-county planning area, an increase of almost 2% (190 more crashes). The total number of crashes in Guernsey, Harrison, and Tuscarawas Counties increased significantly over this period. The number of crashes increased by 5.75% (65 more crashes) in Guernsey County, over 24% (72 more crashes) in Harrison County, and by over 10% (227 more crashes) in Tuscarawas County. Coshocton County experienced a dramatic decrease in the total number of crashes by almost 35% (176 fewer crashes). Crashes in Holmes County decreased by almost 5% and the total number of crashes in Muskingum County showed a modest decrease of 0.5%. The total number of crashes in Carroll and Columbiana Counties increased by approximately 2%.

Of the 30,113 crashes in the OMEGA District, 7,502 resulted in injuries and 171 resulted in fatalities. The average rate of injury for all crashes is 24.9% and the average rate of fatality for all crashes is 0.56%. Although the highest number of fatalities was in Columbiana County, the rate of fatality in that county is 0.61%. While only 3.26% of all crashes occur in Harrison County, 1.52% of those crashes resulted in fatalities.

The five most common types of accidents in the OMEGA RTPO are:

- Fixed Object: 29%
- Rear End: 17%
- Animal: 15%
- Angle: 11.5%
- Sideswipe: 9.5%

ODOT has identified 100 segments of local roads with the highest risk and 100 segments of state routes with the highest risk. This designation is based upon number of injuries, fatalities, ADT, and length of road segment. ODOT, using crash data for the period of 2008 to 2012, has identified the following as high risk rural roads in the OMEGA RTPO planning area:

### **Carroll County**

- 40<sup>th</sup> Highest State System, SR 542 between Holly Road NW and Magnolia Corporation Line
- 46<sup>th</sup> Highest Local System, SR 171 between Avalon Rd and SR 43

### **Columbiana County**

- 11<sup>th</sup> Highest State System, SR 172 between the Stark County Line and US 30
- 16<sup>th</sup> Highest State System, SR 558 between SR 45 and Fairfield School Road

- 33<sup>rd</sup> Highest State System, SR 172 between Rochester Road and US 30
- 56<sup>th</sup> Highest State System, SR 517 between Lisbon Corporation Line and SR 7
- 5<sup>th</sup> Highest State System, Cameron Rd between County Airport Road and McIntosh Road
- 29<sup>th</sup> Highest State System, Lower Elkton Road between half a mile south of Crestview Road and half a mile north of Kelly Park Road
- 49<sup>th</sup> Highest State System, Scotts Mill Road between Taylor Road and SR 154
- 66<sup>th</sup> Highest State System, Dyke Road between Yeagar Road and one half mile west of Jackson Street
- 70<sup>th</sup> Highest State System, Roller Coaster Road between Lincoln Highway and one half mile northwest of Guy Road

### Coshocton County

- 13<sup>th</sup> Highest Local System, CR 271 between one half mile south of Township 278 Road and one half mile north of County 429 Road
- 38<sup>th</sup> Highest Local System, Welker Drive

### Harrison County

- 10<sup>th</sup> Highest Local System, Toot Road between Mattern Road and SR 9
- 27<sup>th</sup> Highest Local System, Rose Valley Road between Lamborn Road and Unionvale Kenwood Road
- 53<sup>rd</sup> Highest Local System, Dennison Avenue between US 250 and Sheridan Avenue
- 83<sup>rd</sup> Highest Local System, Old Jewett Road between New Rumley Road and Scott Road

### Holmes County

- 96<sup>th</sup> Highest State System, SR 241 between Millersburg Corporation Line and CR 616
- 52<sup>nd</sup> Highest Local System, School Street between S Railroad Street and Bucy Drive
- 80<sup>th</sup> Highest Local System, TR 454 between TR 452 and SR 60

### Tuscarawas County

- 96<sup>th</sup> Highest Local System, Pleasant Valley Drive between Reeds Run Road NE and 0.5 miles south of Reeds Run Road NE

Neither Guernsey County nor Muskingum County had any roads on either the top 100 local or top 100 state lists.

OMEGA also created heat maps of accidents to identify additional roads of concern. These heat maps were based upon crash data from 2011 through 2013. Based upon these maps, OMEGA identified the following areas of concern:

### Carroll County

- In Carrollton, 41 crashes have occurred within two blocks of the intersection of Lisbon Street and Main Street with 13 crashes occurring within the intersection.
- In Minerva, 39 crashes have occurred along SR 183, a section of road 1.25 miles long; 5 of the crashes were at the intersection of SR 183 and Grant Boulevard.
- In Brown Township at the intersection of SR 43 and SR 183, 26 crashes have occurred within a block of the intersection and 9 crashes occurred in the intersection.

### Columbiana County

- In Saint Clair Township along one mile of SR 170 between Dresden Avenue and Saint Clair Avenue, approximately 150 crashes have occurred. Thirty-three of these accidents occurred at the intersection of SR 170 and Dresden Avenue and 19 occurred at the SR 170 and Saint Clair Avenue intersection.
- In Hanover Township, 29 crashes have occurred with one half mile of the intersection of SR 9 and SR 172.
- In Salem Township, 55 crashes have occurred along SR 45 between St. Jacob Logtown Road and SR 558.

### Coshocton County

- In the City of Coshocton, 80 accidents have occurred along 2<sup>nd</sup> Street between Chestnut Street and Vine Street, a section of road only half a mile long.
- In Lafayette Township, 10 accidents have occurred at the intersection of SR 93 and US 36.
- In Bethlehem Township, 18 crashes have occurred within one mile of the intersection of US 36 and SR 60.

### Guernsey County

- Approximately 85 crashes have occurred in the vicinity of the I-70 and SR 209 interchange (Exit 178). Thirty-three of these accidents occurred on I-70.
- In Oxford Township, 34 crashes have occurred along I-70 between Batesville Road and Pisgah Road.
- In Valley Township, 83 crashes have occurred along SR 313 within the township boundaries.

### Harrison County

- In Cadiz, 30 crashes near a 500 foot section of Main Street between Warren Street and Market Street have occurred.
- In Monroe Township, 26 crashes have occurred along Cadiz Dennison Road between the Tuscarawas County line and Plum Run Road.
- In Green Township, 9 crashes have occurred along the half mile section of Cadiz-Steubenville Road between Hopedale and the Jefferson County Line.

### Holmes County

- Along a 1.5 mile curved section of SR 83 in Mechanic Township, 24 accidents have occurred.
- Between Berlin and Walnut Creek, 100 crashes have occurred along the 4 mile stretch of SR 39 between US 62 and SR 515.
- In Berlin Township, 39 crashes have occurred along a 700 foot section of US 62 / SR 39 between the west end of Oak Street and the east end of Oak Street.

### Muskingum County

- In Zanesville, approximately 700 crashes have occurred along Maple Avenue between Brandywine Avenue and SR 146.
- In Zanesville along SR 60 between Linden Avenue and Elm Street, approximately 180 crashes have occurred including 47 at the SR 60 and Linden Avenue intersection and 36 at the Elm Street and SR 60 intersection.

- In Wayne Township, 41 crashes have occurred along SR 60 between Millers Lane and Cutler Lake Road.

### **Tuscarawas County**

- In New Philadelphia, 141 crashes have occurred within one quarter mile of the intersection of SR 39 and High Avenue with 45 crashes occurring in the intersection.
- Along a 3.5 mile section of US 250 between Dennison and the Harrison County Line, 64 crashes have occurred.
- In Goshen Township, 123 crashes have occurred on SR 39 between New Philadelphia and Roswell.

OMEGA also identified those areas where road geometrics may have contributed to the accident and high crash areas along US 30 Ohio’s Energy Corridor. Specific details concerning these incidents are provided in Section 3.9.

### **Economy**

Development of the shale energy industry has dominated the local economy in the OMEGA district. Core shale-related employment includes well drilling and development, pipeline construction, and construction of processing facilities. Employment and facilities related to the transportation of materials, pipeline, and products have also increased. In addition several oil and gas service related businesses are being developed throughout the region to support shale development activities. The ripple effect on non-shale industries, such as food, lodging, and retail businesses has also been significant.

As of May 15, 2015, 1,456 wells in the Utica shale have been permitted, drilled, being drilled, or are in in OMEGA ten-county region. Carroll County leads the state with 481 wells, 358 of which are in production. Second is Harrison County with 343 wells, 149 of which are in production. Guernsey County has 84 wells in production and Columbiana County has 56 wells in production. Six processing plants are also located in the area: four in Harrison County, one in Columbiana County, and one in Carroll County.

Forty-one deep wells for the injection of brine and spent drilling fluids have also been installed in the OMEGA RTPO. OMEGA will monitor the volume of truck traffic associated with the operation of these wells and the impact on the local community.

In addition, to shale development, five other industry clusters have been identified in the Comprehensive Economic Development Strategy for OMEGA. These include food, wood, plastics, metals, and steel. Improvements to the transportation systems to support the continued development of these clusters will be identified.

Thirty-seven major industrial parks or business centers are located in the OMEGA RTPO. These industrial or business centers are in various stages of development from initial planning to completely occupied

without any available space. Improvements (such as access to rail, interstate access, logistics, etc.) to the transportation systems needed to support or expand these centers will be considered.

### **Bike Trails**

Ten major bike trails and the US 50 Bike Route extend through the OMEGA RTPO planning area. Excluding the US 50 Bike Route and small recreational loop trails, the total length of these trails is approximately 82 miles. Potential connection to other statewide trails as well as connectivity to other points of interest and communities will be considered.

### **Environmental**

Any project that will be considered for federal funding needs to follow the National Environmental Policy Act (NEPA) in order to assess the potential impact of the project on the environment. Key components that are always included in that review process are floodplains, wetlands, historic places, and threatened or endangered species. To provide a basis for initiating that environmental process, OMEGA has included a review of the flood plains, wetlands, and historic places in this plan. For any project that will be receiving federal funds, a more in depth analysis will be required which may include wetlands delineation, ecological surveys, archaeological surveys, and other more detailed environmental investigations. Knowledge of flood prone areas is also important when planning transportation improvements so that the cost effectiveness of elevating a roadway or relocating a road outside of the flood plain can be considered.