2040 LONG RANGE TRANSPORTATION PLAN UPDATE





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Prepared by:

Lima-Allen County Regional Planning Commission
130 West North Street
Lima, Ohio 45801
(419) 228-1836
www.lacrpc.com

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EXECUTIVE SUMMARY

The purpose of the transportation planning process is to ensure that required transportation needs are identified and resources made available to address future demands. The ambition of the 2040 Long Range Transportation Plan (LRTP) Update is the development of an intermodal transportation system that is safe, efficient, resilient, reliable, fiscally sound, environmentally friendly, and provides the regional infrastructure to better compete in the global economy. The 2040 LRTP Update is charged with the responsibility to: (1) identify transportation facilities that function as part of the local, state, and national transportation system; (2) state performance measures that assess transportation system performance; (3) provide a transportation system performance report; (4) discuss potential environmental /mitigation strategies; (5) provide a financial plan that includes resources to carry out the Plan; (6) support operational and management strategies; (7) identify capital investment and to preserve/protect/provide for the transportation infrastructure, including multimodal capacity increases; and (8) ensure the inclusion of transportation and transit enhancement activities.

To thoroughly address the metropolitan area's transportation planning process, the LRTP Update includes several sections. First, Allen County's future transportation needs were considered in light of current federal regulatory requirements that control the delivery of transportation services not only to the nation and state, but to local communities as well. The local transportation planning was developed through a process that included local public involvement as well as the LACRPC/MPO committee structure and input from local government officials. Additional considerations that influenced Plan development included an examination/evaluation of the existing transportation system and demographic/economic characteristics, as well as other pertinent planning considerations.

Federal legislation was the major framework that guided the transportation planning process. The most recent national transportation legislation (or highway bill), the Fixing America's Surface Transportation (FAST) Act, as well as its predecessors collectively established the requisite elements of transportation planning. In addition, other federal legislation taken together mandated the direction of planning and delivering transportation and related services, including the 1990 Clean Air Act Amendments, the National Environmental Policy Act (NEPA), Title VI, the American with Disabilities Act (ADA), and Executive Order 12898/Environmental Justice.

The Allen County highway system is characteristic of many small metropolitan areas across the nation. The system is comprised of interstate, arterials, collectors, and local roads. The administration of these roads is a function designated in whole, or in part, to federal, state, and/or local governmental units. According to ODOT records, in 2016, there were 1,327.0 total roadway miles in Allen County, of which 23.2 miles were classified as interstate miles. Arterial roadways total 103.0 miles and accounted for 7.8% of the total system mileage. Approximately two-thirds (68.6%), or 910.5 miles, were classified as local, and 59.5%, or 789.5 miles, were classified as rural. According to 2016 estimates of daily vehicle miles traveled (VMT), total system mileage exceeded 3.2M miles per day, or 1.18B miles annually.

Just as in other small Midwestern urbanized areas, Allen County, during the last four decades, witnessed a dramatic shift in its population and economic base. The area's population growth has slowed and household size has fallen; the median age is growing older and birth rates are falling. The 2016 Allen Community Survey (ACS) – five year population estimates - reported 104,664 County residents, with 37,836 individuals residing in the City of Lima. The County's population has grown more racially and ethnically diverse; while, educational attainment levels compare unfavorably with the rest of the Nation. In addition, data suggested that income continued to lag behind both State and national trends. However, 2016 ACS data also revealed a decreasing trend since 2011 with respect to individuals and families in poverty, a decrease of 21.9% and 29.4% respectively.

Concerning economic activity, while the County experienced growth in manufacturing, wholesale, trade, transportation and warehousing, finance and real estate, as well as government sectors, the most significant change in recent decades has been a shift from the manufacturing sector to the service sector. The service sector remains the largest sector in the County. Local employment in the manufacturing sector decreased from 16,385 in 1980 to 8,945 in 2010, a reduction of nearly half (-48.2%). However, recent numbers showed a reemergence of growth in the manufacturing sector with 9,101 employees recorded in 2016, an increase of 7.1% since 2010. The number of business establishments increased over the 1980 through 2016 period, increasing from 2,378 firms in 1980 to 3,938 in 2016. Over the 36-year period, there was a 65.6% increase in firms employing workers in Allen County. Data suggested a continuing transition to the service sector along with a gradual increase in retail and construction services.

The association between the process of suburbanization, land use conversion, and urban decentralization is complicated. Over the last 40 years, land use conversion was largely confined to the Lima Urbanized Area. Most residential subdivision developments occurred mainly in American, Bath, and Shawnee townships, and more recently in the villages of Bluffton and Elida. The financial, insurance, real estate (FIRE) industries, coupled with government, remained as anchors in the central business districts (CBDs) of Lima, Delphos, Bluffton, Spencerville, and Elida, while commercial and service activities spread to suburban areas clustered near two of the region's shopping centers. Manufacturing activities were limited to older, more developed tracts within or adjacent to the City of Lima; however, newer more modern industrial sites were developed with ready access to IR-75 as well as along state routes. Furthered by easy access, availability of utilities and developable land, urban sprawl slowly etched its presence across most of Allen County. Although regulatory controls (e.g. zoning, subdivision, and access management regulations) and public infrastructure investments (e.g. utilities and roadways) have the means to control such sprawl, it continued largely unabated due to fragmented legislative control and disjointed or nonexistent policies.

The MPO adopted four succinct goals consistent with MPO planning factors within the 2040 LRTP Update which included input and cooperation of ACRTA and ODOT to ensure consistency with national and State goals/objectives as well as cognizant of national/Ohio performance measures. Goals include: 1) Develop the infrastructure necessary to create regional economic opportunities, support the new economy, and strengthen the community's ability to compete locally and globally. 2) Target infrastructure investments that promote and sustain system level efficiencies, reliability, safety, and security. 3) Preserve and protect both the natural and built environment. 4) Encourage the development of healthy, educated, sustainable, and livable communities through equitable public investments.

To achieve the established goals, the 2040 LRTP enumerates Plan projects by component that reflects the phased-timing of the fiscally constrained Plan. Short-term projects are presented as committed projects, contained in the MPO's most recent Transportation Improvement Program (TIP); while, recommended projects are to be implemented over the life of the 2040 LRTP. The Plan Update offers a profile of the existing transportation system by component, including highway, transit/paratransit, rail, roadway freight, bicycle/pedestrian/trail, and aviation.

With respect to the highway system, the MPO must make effective use of existing transportation funding to preserve the existing infrastructure and reduce congestion. Currently, the highway system must accommodate 1.18B annual VMT; in horizon year 2040, the VMT is projected to reach 1.32B, an increase of 11.9%. Given the increase in VMT, some of the roadway network is projected to operate at an unsatisfactory LOS. The net result is a 267% increase in the number of deficient roadway miles over

existing 2016 traffic conditions. The MPO has recommended projects to preserve the existing system and reduce congestion at locations identified in Tables 7-1 & 7-2.

Since bridges and culverts are essential to the preservation of the existing highway system, the Plan also identified 22 bridges in Allen County considered to be in poor condition, costing an estimated $9.6M to remediate. However only 20% of these bridges in poor condition are located on higher order roadways and eligible for federal funding.

Bike and pedestrian amenities are lacking in Allen County. The bike pedestrian component of the Plan looks to develop a regional system of interconnected pedestrian paths and sidewalks, mixed use trails, as well as on-road bicycle facilities and amenities that improve connectivity, linking together local communities, educational facilities, employment sites, and parks. The 2017 Active Transportation Plan identifies 104 projects for $39.9M that would work to complete the active transportation network in Allen County. The 2040 Plan recommends 53 projects that include an active transportation component. The active components of these projects have a total cost of 33.8M and will add 85.4 miles of active transportation infrastructure to the Allen County Network by 2040.

The Plan makes clear that public transportation remains fiscally tenuous in Allen County. Financial assessments of the ACRTA found inadequate local funding undermining the sustainability of public transportation services. The Plan works to integrate transit by allocating funding for the purchase of necessary transit vehicles, sidewalks to improve accessibility, and an increased commitment to support transit and paratransit operators interested in furthering the coordination of services. The Plan seeks to support fiscal commitments with CMAQ and STP funds to offset the anticipated shortfall in FTA funding. Operating costs for transit estimated over the life of the 2040 Plan Update are projected to reach $77.7M. Costs associated with the maintenance and replacement of rolling stock and facilities require an additional $12.0M over the planning horizon.

The freight component is seen as an integral element of the 2040 LRTP as the economy is wholly dependent on it for the movement of commodities and goods. The Plan recognized the need to support freight and called for improvements to specific roadways on the Federal-aid system in an attempt to produce economic sustainability and development. There were 33 projects on federal, US, and state routes identified in the plan for needed improvements at costs totaling $67.0M.

Since the rail component is inextricably linked to the freight component, the rail component works to promote the further integration of rail infrastructure and related services necessary to expand rail capacity and support economic development. A total of 100.5 miles of rail is documented as passing through Allen County with 11 local at-grade rail crossings falling within the State's top 10 percent of most hazardous crossings. Several major rail projects are discussed within the Plan the Sugar Street interlock project, the Breese/CSX crossing, and the Bluelick Road underpass. The Plan recognizes that at-grade crossing improvements, grade separations, and more restrictive crossing control devices are necessary to address local concerns. Complete engineering costs for improving conditions at 142 at-grade crossings remain to be documented and such costs are not included in the Plan.

The aviation component is a nontraditional component of the community's transportation plan. This component recognizes Federal Aviation Administration design and infrastructure as well as level of service requirements and works to implement specific goals/strategies that collectively support the further development of a safe, accessible, and convenient general aviation facility. Physical improvements to the airport, including ADA compliance, would include ground access to airport as well as terminal location, building amenities, and parking areas. Necessary improvements are estimated at $11.1M through the 2040 planning horizon.

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SECTION 1
INTRODUCTION

On December 4, 2015, President Barack Obama signed into law P.L. 114-94, the Fixing America's Surface Transportation (FAST) Act. The 5-year Bill establishes transportation funding at $305 billion for fiscal years (FY) 2016 through 2020 and is the first law in over a decade to provide long-term funding certainty to transportation programs. The FAST Act maintains a focus on safety, maintains the structure of previous highway-related programs, emphasizes efficiency in project delivery, and includes a dedicated source of funding for freight projects.

Overall, the FAST Act builds on previous legislative initiatives. Such transportation legislation includes the Moving Ahead for Progress in the 21st Century (MAP-21) Act; the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); the Transportation Equity Act for the 21st Century (TEA-21); and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. These historical transportation bills create the framework for local transportation planning when considered with the ramifications of the Clean Air Act Amendments of 1990 (CAAA), the National Environmental Policy Act (NEPA) of 1969, and the Americans with Disabilities Act (ADA) of 1990. Coupled with the required mechanisms for intergovernmental coordination and public input, the aforementioned legislation is the underpinning for the urban transportation planning process.

1.1 Rationale

The FAST Act was adopted to continue in the footsteps of MAP-21 and focuses on a performance-driven, outcome-based approach to achieving national goals. The Act finances and furthers the efficiency of the existing transportation system by continuing to fully integrate existing transportation modes rather than implementing new, expensive, and fragmented infrastructure. FAST Act provisions are to be implemented in conjunction with other federal regulatory acts, its highway predecessors, the CAAA, and the ADA. Collectively these regulations provide a complicated framework to preserve and enhance our nation's transportation infrastructure. This framework provides the direction to build a truly accessible and intermodal transportation system designed to address the needs of industry and commerce. This framework also mandates that community's address the needs of the poor, the elderly, the frail, and the mobility impaired. There is a focus on providing an equitable distribution of infrastructure, investment, services, and modal choice across geographic and socio-economic communities, and on minimizing the environmental impacts and improving the health and well-being within our neighborhoods. Lastly, the framework focuses on a transportation system that serves the needs of the local community into the future.

Today, with public mandates to balance local budgets while increasing the region's economic growth, funding for the maintenance of existing infrastructure and services has become difficult. Latest estimates suggest much of the region's existing transportation infrastructure is in disrepair and in need of rehabilitation. As evidence, this Plan presents cost estimates of $308.7 million needed for local transportation projects, $40.2 million for rail and freight related improvements, $39.8 million for bridges, $13.3 million for active transportation and $11.9 million for public transit/paratransit services.

Historically, transportation planning has emphasized continuing investments targeting increased highway capacity, declines in total trips, declines in vehicle miles of travel (VMT) and a changing demographic. A new course is now warranted due to shrinking available funding and dated strategies. Today's current transportation system was designed in an age when large families and a growing population pushed development outward. Today, the legacy of urban sprawl forces the community to continue its attempts to accommodate the demands of the single occupancy vehicle commuter at the expense of urban residents and alternative transportation modes.

1.2 Purpose

The purpose of the transportation planning process is to ensure that required transportation needs are identified and resources are made available to address future demands. The ambition of the 2040 Long Range Transportation Plan (LRTP) is the development of a truly intermodal transportation system that is safe, efficient, resilient, reliable, fiscally sound, environmentally friendly, and which provides the regional infrastructure to better compete in the global economy. In keeping with the demands of the FAST Act and its predecessors, the CAAA and the ADA, the Plan undertakes a series of actions and strategies to accommodate local travel demands. The 2040 LRTP is charged with the responsibility to: (1) identify transportation facilities that function as part of the transportation system; (2) state the performance measures and targets used in assessing the performance of the transportation system; (3) provide a system performance report evaluating the condition and performance of the transportation system with respect to the performance targets; (4) discuss the types of potential environmental mitigation activities and areas to carry out these activities; (5) provide a financial plan which includes both public and private sources that are reasonably expected to be made available to carry out the plan along with strategy recommendations; (6) support operational and management strategies that improve the performance of existing transportation facilities; (7) identify capital investment and to preserve the existing and future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters; and, (8) ensure the inclusion of transportation and transit enhancement activities.

As required in Section 134 (h) of Title 23 U.S.C of Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA) Section 5303 (h) of Title 49 U.S.C., the 2040 LRTP must recognize the planning factors to adequately address the transportation planning process for all metropolitan areas. These factors were also addressed in the FAST Act. As a result, the following factors were considered in the project prioritization process of the LRTP, including to: (1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency; (2) Increase the safety of the transportation system for motorized and non-motorized users; (3) Increase the security of the transportation system for motorized and non-motorized users; (4) Increase the accessibility and mobility of people and for freight; (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns; (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight; (7) Promote efficient system management and operation; (8) Emphasize the preservation of the existing transportation system; (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and, (10) Enhance travel and tourism. These factors, along with the national goals set forth by FHWA, were reviewed with local stakeholders, including those local officials outside the Lima Urbanized Area and explicitly considered, analyzed, and reflected in the preparation and prioritization of projects considered for inclusion in the 2040 LRTP.

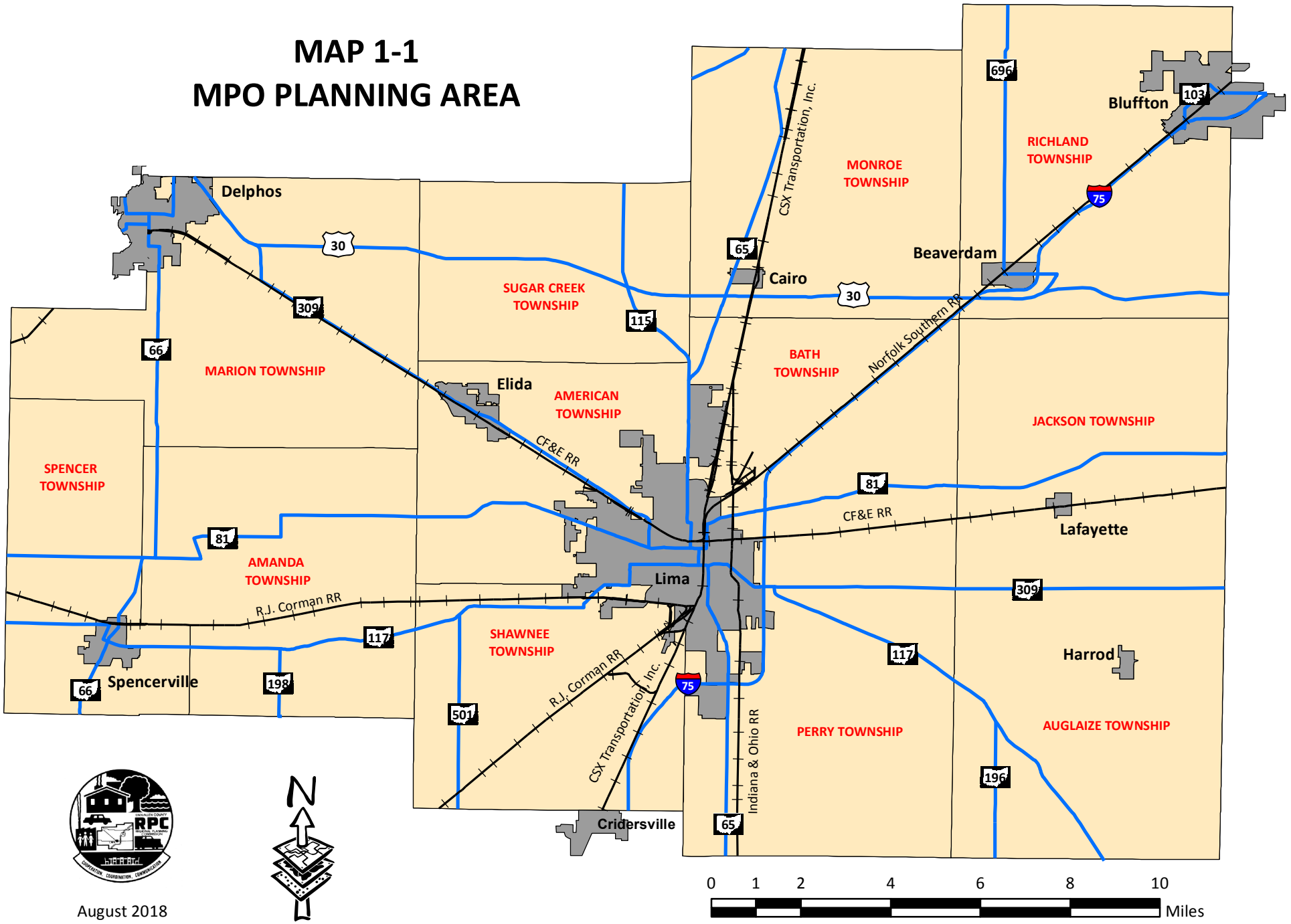
1.3 Overview

The Plan is composed of several sections. The introduction is followed by two sections which address various aspects of federal regulatory requirements. Section 2 highlights the federal transportation planning framework, while Section 3 addresses the local transportation planning process. Section 4 presents an overview of the site and situation of Allen County. Section 4 also provides information on population, land use, and employment trends which affect the transportation system. Based in part on the specific variables discussed in the previous section, Section 5 provides an overview of the existing transportation system and identifies deficient corridors within the Metropolitan Planning Organization's (MPO) study area (Map 1-1) as identified in the 2040 LRTP modeling process. After a section detailing fiscal projections, the Plan concludes with specific recommendations aimed at

addressing the area's transportation deficiencies and meeting the community's future transportation needs.

The LRTP is supported with various appendices to provide a more detailed assessment of particular aspects. Appendix A examines Performance Measures required by federal legislation (MAP-21 and the FAST Act). Appendix B provides an assessment of the LRTP's impact on social, economic, and environmental concerns within the community. Appendix C examines the LRTP's impact on the community's protected classes. Appendix D identifies air quality impacts of the LRTP on the community. Appendix E provides an overview of the MPO's public involvement process.

MAP 1-1
MPO PLANNING AREA



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SECTION 2
TRANSPORTATION PLANNING & THE FEDERAL REGULATORY FRAMEWORK

Federal legislation is a major part of the framework that guides the current transportation planning process. Eight federal acts and an executive order have collectively impacted the design of the transportation planning process and its elements. More specifically, ISTEA, TEA-21, SAFETEA-LU, MAP-21, the FAST Act, the 1990 CAAA, NEPA, ADA, and Executive Order 12898 on Environmental Justice (EJ) have collectively mandated the direction of planning and delivering transportation and transportation related services in the urban areas of the United States.

The legislative initiatives passed by Congress and past presidents have impacted the manner and extent to which transportation projects must address accessibility, safety, and the environment. For example, the ADA built on earlier law and required curb ramps in new, altered, or existing sidewalks and public buildings. The 1990 CAAA required states and MPOs to integrate both air quality and transportation planning in order to effectively reduce automobile emitted pollutants. ISTEA required states and MPOs to fully integrate the larger transportation system with pedestrian walkways and bicycle transportation facilities. TEA-21 required transit, bicycle facilities, and pedestrian walkways be considered in conjunction with all new construction/reconstruction projects. SAFETEA-LU elevated the importance of safety by creating a new core safety program and streamlined the environmental review and project delivery processes. MAP-21 established and required a performance-based approach to transportation decision making and development of transportation plans. It also required local MPOs to develop targets and to conduct annual reporting as to their progress thereby increasing the accountability and transparency of Federally funded transportation investments. The FAST Act streamlines the approval process for new transportation projects, provides new safety tools, and establishes new programs to advance critical freight projects. Reviewed collectively, these Acts have addressed and integrated the needs of all Americans with that of the environment, providing dedicated funding streams. The following summary provides a glimpse into the most important aspects of the federal legislation previously mentioned.

2.1 Intermodal Surface Transportation Efficiency Act (ISTEA)

The ISTEA, signed into law in 1991, established a new direction for the country's surface transportation systems. As stated in the Act, the purpose of ISTEA was "to develop a national intermodal transportation system that is economically efficient, environmentally sound, provides the foundation for the nation to compete in the global economy, and will move people and goods in an energy efficient manner".

The basis for ISTEA's direction was the Act's acknowledgment and response to the impacts of the transportation decisions on environmental, social, and economic concerns. Based on the concept that problems are created and solved by transportation facilities, and that transportation policy must address these problems, ISTEA made fundamental changes in the nation's transportation policy and expanded the scope of transportation planning.

ISTEA shifted the planning emphasis away from expanding the highway system towards one of constructing a truly multimodal system in which transit, ridesharing, bicycling, and pedestrian facilities offer viable travel alternatives to the single-occupancy vehicle commuter. The Act required transportation planners to reduce travel demand, not just manage it. ISTEA also addressed the transportation system's performance, as well as its capacity. Moreover, it called for a financial plan to demonstrate how programmed projects were to be implemented based on available fiscal resources.

Provisions of ISTEA changed transportation planning in many ways. Funding was shifted to encourage multimodal problem solving. It also redistributed authority for planning and

implementing projects while reinforcing clean air objectives. Under previous transportation legislation, categorical program definitions were relatively narrow and program boundaries were generally inflexible. ISTEA expanded the types of projects and activities eligible under the basic transportation funding programs. The metropolitan plan was required to reflect the widest consideration of modal options to most efficiently and effectively serve mobility needs within metropolitan areas.

2.2 Transportation Equity Act for the 21st Century (TEA-21)

The TEA-21 was signed into law on June 9, 1998. TEA-21 attempted to capitalize on the most successful initiatives established under its predecessor ISTEA, while introducing new programming aimed at invigorating the existing transportation system. TEA-21 shifted the focus from concrete, asphalt, and steel to the American people; a shift to developing opportunities for safer, healthier, and more fulfilling lives.

In addition to rebuilding America's infrastructure, the bill focused upon a wide array of health and safety initiatives by targeting increased seat belt usage, improving truck safety, establishing a blood alcohol of 0.08 as a national standard, reducing the number of vehicle crashes within at-grade rail crossings, and preventing pipeline explosions. TEA-21 also continued to expand provisions to improve the safety of bicycle and pedestrian facilities. In addition, TEA-21 increased federal funding levels and the flexibility within program guidelines in order to allow local governments to meet the National Ambient Air Quality Standards (NAAQS) established by the 1990 CAAA.

For planning and implementing projects, TEA-21 continued a shift from decision-making authority at the federal level to states and localities. State and local governments were given more flexibility in determining transportation solutions. Under the Act, both MPO and state transportation agencies must each compile a 20-year transportation plan and a series of 4-year transportation improvement plans that include a balanced and identifiable funding source. The Act called for increased emphasis on systems management, operation, and efficiency. TEA-21 strengthened the financial aspects of the planning process, as well as improved coordination, cooperation, and public involvement. The Act also required the LRTP to recognize a minimum 20-year planning horizon.

2.3 Safe Affordable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

On August 10, 2005, President George W. Bush signed into law a 6-year $286 billion SAFETEA-LU, the largest investment in surface transportation in the nation's history. For the years 2005 to 2009, SAFETEA-LU (Public Law 109-59) provided $193 billion for highways and bridges, $45.2 billion for public transportation, and $5.8 billion for motor carrier and transportation safety programs. Highway funding grew from $34.4 billion in 2005 to $41.2 billion in 2009, and transit funding rose from $7.6 billion in 2005 to $10.3 billion in 2009. The law expired on September 30, 2009.

SAFETEA-LU increased investment in highway, transit, and safety programs while retaining the basic goals and structure of earlier surface transportation legislation, with its enhanced role for local decision-making and renewed importance placed upon flexibility, suggesting intermodal answers to addressing local and regional transportation needs. SAFETEA-LU elevated the importance of safety, while it continued guaranteed funding for transportation programs, and streamlined the environmental review and project delivery process.

SAFETEA-LU incorporated changes aimed at improving and streamlining the environmental process. These changes however came with some additional steps and requirements for transportation agencies. The process integrates new stakeholders to the review process. The Department of Transportation (DOT) will now define the project's purpose and need and establish a plan for coordinating public and agency participation. As early as practicable in the process, the DOT is to

provide an opportunity for a range of alternatives to be considered for a project. Additional changes include: state assumption of responsibilities for categorical exclusions and environmental responsibilities under NEPA and other environmental laws (excluding the Clean Air Act and transportation planning requirements); as well as, streamlining the traditional Section 4(f) process requirements. The metropolitan planning process establishes a cooperative, continuous, and comprehensive framework for making transportation investment decision in metropolitan areas. Local officials, in cooperation with the state and transit operators, remain responsible for determining the best transportation investments to meet metropolitan transportation needs. Key modifications to metropolitan planning under SAFETEA-LU included: MPOs will be required to consult or coordinate with planning officials responsible for other types of planning activities affected by transportation, including land use, and the metropolitan planning process is to promote consistency between transportation improvements and state and local planned growth and economic development patterns.

2.4 Moving Ahead for Progress in the 21st Century Act (MAP-21)

On July 6, 2012, President Barack Obama signed into law P.L. 112-141, MAP-21. Funding surface transportation programs at over $105 billion for fiscal years (FY) 2013 and 2014, MAP-21 was the first long-term highway authorization enacted since 2005. MAP-21 represents a milestone for the U.S. economy – it provides needed funds and, more importantly, it transforms the policy and programmatic framework for investments to guide the growth and development of the country's vital transportation infrastructure.

MAP-21 created a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

MAP-21 builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established in 1991. This summary reviews the policies and programs administered by FHWA. The Department continued to make progress on transportation options, which it had focused on in the three previous years, and continued working closely with stakeholders to ensure that local communities were able to build multimodal, sustainable projects ranging from passenger rail and transit, to bicycle and pedestrian paths.

One of the most intriguing features of MAP-21 was with performance-based planning as a tool for guiding transportation investments. The Act looked to assess the effectiveness of the performance-based planning process in each MPO. The state is then to assess the extent to which a particular MPO has achieved, or are progressing towards achieving, the performance targets, and/or whether the MPO has developed meaningful performance targets. This assessment of an MPO's technical capacity had implications for those urbanized areas with populations less than 200,000, such as the Lima-Allen County community.

2.5 The Fixing America's Surface Transportation (FAST) Act

On December 4, 2015, President Obama signed Public Law No. 114-94 into law which addressed surface transportation infrastructure planning and investments. The FAST Act maintains a focus on safety, preserves the established structure of various highway-related programs, continues efforts to streamline project delivery, and provides, for the first time, a dedicated source of federal dollars for freight projects. The FAST Act introduced several changes and reforms including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance critical freight projects. With respect to streamlining the transportation project approval process, the FAST Act incorporated a number of proposals to further speed the

permitting processes, while still protecting environmental and historic resources as well as codifying the online system to track projects and interagency coordination processes. The FAST Act also makes a number of changes to the DOT's safety programs, including creating new grant programs and making changes to the departments' authorities to protect the traveling public.

Freight was a major component of the public debate in the development of the FAST Act and both formula and discretionary grant programs were established to fund transportation projects that would benefit freight movements. These programs provide a dedicated source of Federal funding for freight projects, including multimodal projects. The Act emphasizes the importance of Federal coordination to focus local governments on the needs of freight transportation providers. More specifically, the Act requires the development of a National Freight Strategic Plan that will address the conditions and performance of the multimodal freight system to identify strategies and best practices to improve intermodal connectivity. In addition, the Plan will address the conditions and performance of the national freight system to mitigate the impacts of freight movement on communities.

The Act expands the MPO's charge to integrate transit within its LRTP by requiring intercity bus facilities be identified in the transportation plan. Moreover, the FAST Act adds to a section regarding transportation and transit enhancements a requirement that the plan include "consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner. The Act also requires additional stakeholders (public ports, intercity bus operators, and employer-based commuting programs) be included in the planning process.

The FAST Act makes significant funding available for locally owned bridges by preserving the off-system bridge set-aside and by making bridges that are not on the National Highway System eligible for funding under the National Highway Performance Program. The FAST Act also provides funding for local projects through the Surface Transportation Block Grant Program and increases funding for the Transportation Alternatives Program.

2.6 1990 Clean Air Act Amendments (CAAA)

In 1990, the United States Congress adopted the Clean Air Act Amendments (CAAA) to address the country's air pollution problems. The CAAA contains several new provisions that have broader impacts than previous laws. Notable aspects are the CAAA's provisions for controlling transportation sources which contribute to air pollution. Transportation sources are not the only cause of air quality problems, but have been especially difficult to control. The pollutant impact of transportation sources has been addressed in previous clean air legislation with mixed success. Former laws have resulted in lowering emission rates per motor vehicle. The air quality benefits of lowered vehicle emission rates, however, are threatened by emission increases from the growth in motor vehicle travel.

In order to attain national ambient air quality standards, the CAAA requires air quality plans for those metropolitan areas which exceed established pollutant levels. These air quality plans quantify pollution reduction needs and commit to reduction strategies. To maintain air quality, the CAAA employs provisions for transportation planning to control the adverse effects of increased automobile travel. As detailed in the CAAA, transportation planning has expanded to include a process for protecting air quality, as well as meeting future transportation needs. The region's transportation plan must define local commitments to promote alternatives to automobile travel and to enhance mobility while minimizing highway construction. Air quality is now a key issue for making decisions in transportation plans, projects, and programs. Alternative forms of travel are seen as significant considerations in state and national attempts to meet CAAA requirements.

Ongoing development of the CAAA requirements has resulted in a ratcheting down of airborne emissions. In fact, collective actions taken on behalf of the CAAA resulted in a federal non-attainment status for the 1997 8-hour ozone standard being issued for Allen County. Allen County was determined to be in non-attainment with respect to air quality, specifically ground-level ozone. Ground-level ozone reflects Volatile Organic Compounds (VOC) and Nitrogen Oxide (NOX).

Emissions analysis testing required by transportation conformity rules is dependent upon established State Implementation Plan (SIP) budgets for individual pollutants. Emissions testing of the MPO's LRTP and Transportation Improvement Program (TIP) are based upon the SIP budget. Base year and interim year budgets are established as part of the MPO's modeling process and then assessed against the implementation of a proposed project, or service contained in the TIP and LRTP. Resultant emissions must be less than the baseline measure. This ensures that transportation plans will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS. Local air quality issues are addressed in Appendix D of this Plan.

2.7 National Environmental Policy Act (NEPA)

On January 1, 1970, NEPA was signed into law. NEPA established a national environmental policy intentionally focused on federal activities and the desire for a sustainable environment balanced with other essential needs of present and future generations of Americans. NEPA established a mandate for federal agencies to consider the potential environmental consequences of their proposals, document the analysis, and make this information available to the public for comment prior to implementation.

NEPA establishes protection of the environment as a national priority and mandates that environmental impacts must be considered before any federal action likely to significantly affect the environment is undertaken. The Act's primary purposes were to: (1) declare a national environmental policy; (2) promote efforts to protect the environment; and, (3) improve national understanding of environmental issues. NEPA established the basic framework for integrating environmental considerations into the federal decision making process.

Over the years, Congress has refined and strengthened the public planning process, emphasizing public involvement and consideration of environment and other factors. Various federal laws, rules, and regulations now govern the environmental review of federally funded transportation and mass transportation projects. NEPA, as amended, establishes an umbrella process for coordinating compliance with each of the various regulatory directives through the preparation of an Environmental Impact Statement (EIS).

The "action-forcing" provisions of NEPA (as amended) are contained in Sec. 102 (42 U.S.C. 4332). This section includes specific mandates:

1. To the extent possible, policies, regulations, and laws of the federal government must be interpreted and administered in accordance with NEPA;

2. Federal agencies must use an interdisciplinary approach in planning and decision making that impacts the human and natural environment; and,

3. The preparation of an EIS is required on all major federal actions that may significantly affect the human or natural environment.

The application of NEPA to any federally funded transportation project is reinforced in the federal surface transportation statues (23 U.S.C. Highways and 49 U.S.C. Transportation) that require the

Secretary of Transportation to ensure NEPA mandates have been met before approving applications for federal financial assistance.

For 40 years, Congress has directed that federally-funded highway and transit projects must flow from metropolitan and statewide transportation planning processes (pursuant to 23 U.S.C. 134-135 and 49 U.S.C. 5303-5306). Under the FHWA/FTA transportation planning regulations (23 CFR 450.322(b) (6)), metropolitan LRTPs must:

> *"include design concept and scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of the source of funding, in [air quality] nonattainment and maintenance areas to permit conformity determinations under the U.S. Environmental Protection Agency's (EPA's) transportation conformity regulations (40 CFR Part 51). In all [metropolitan] areas, all proposed improvements shall be described in sufficient detain to develop cost estimates."*

Similarly for Statewide Transportation Improvement Programs (STIPs)/TIPs, 23 CFR 450.216(a) (8) and 23 CFR 450.324(g) (1), respectively, requires that the STIP/TIP contain:

> *"Sufficient descriptive material (i.e. type of work, termini, and length) to identify the project or phase." In addition, 23 CFR 450.324(h) requires that "In nonattainment and maintenance areas, projects included shall be specified in sufficient detail (design concept and scope) to permit air quality analysis in accordance with EPA's transportation conformity regulations (40 CFR Part 51)*."

To adequately address NEPA requirements and planning-level information, its subsequent analysis and public involvement is necessary to establish the foundation for decision-making during the project development phase. In order to meet the NEPA process, robust planning and multi-issue environmental screening require input from a wide variety of disciplines, including information technology, transportation planning, and, regulatory permitting, as well as environmental specialty areas (e.g., noise, air quality, and biology). FHWA and FTA, as the lead federal agencies, will have the final say on what processes and consultation techniques are used to determine the transportation planning products that will be incorporated into the NEPA process. However, as part of a rigorous scoping/early coordination process, FHWA and FTA will ensure that the transportation planning results are appropriately documented, shared, and used.

2.8 The Americans with Disabilities Act (ADA)

The ADA passed in 1990 mandates equal opportunity in employment, transportation, telecommunications, and places of public accommodations for individuals with disabilities. The ADA has had a significant impact on the design of public facilities, as well as the level of services local transit providers must offer.

The ADA addresses a broad range of polices, practices, and procedures which state and local governments must assess and incorporate in service, delivery, and infrastructure development, especially in places of public accommodation. Title II of the ADA requires public entities that build sidewalks and trails to provide access to existing facilities and to design and construct new and/or altered facilities to be readily accessible to individuals with disabilities. Title II also addresses public transportation systems and prohibits public operators from denying access to individuals with disabilities if they are unable to use or access their services. A requirement for comparable paratransit service is particularly challenging to meet. The ADA regulations require public entities operating fixed route systems to provide paratransit or other special service to individuals with disabilities which are comparable to the level of service provided to individuals without disabilities

who use the fixed route system. In terms of accessibility, this has the effect of compelling a transit operator to provide expensive paratransit services to an individual who cannot use regular fixed route transportation because of limitations directly associated with his/her ability to navigate sidewalks and street curbing. This LRTP emphasizes the presence and condition of sidewalks and identifies shortcomings of local infrastructure on the functional classification system.

Passage of the ADA changed many aspects of public disability policy previously established under Section 504 of the Rehabilitation Act of 1973. The ADA set clear national goals and a specific and detailed course of action to meet these goals. Compared to Section 504, the ADA requires a much greater level of affirmative action in employment, programs services, and polices. More importantly, the ADA as a civil rights law provides both incentives and penalties to strengthen compliance including not only eligibility for federal funding, but the prospect of legal liability.

A significant portion of Title II of the ADA addresses public transportation systems, and prohibits denying access to persons with disabilities if they are able to use these services. Specific requirements include: (1) all newly leased or purchased vehicles on fixed route service must be accessible; (2) public fixed route systems must offer comparable paratransit service; (3) new facilities must be accessible; and, (4) alterations to existing facilities must meet federal accessibility requirements. The requirement for comparable paratransit service is particularly challenging to meet. The ADA regulations require public entities operating fixed route systems to provide paratransit or other special service to individuals with disabilities which are comparable to the level of service provided to individuals without disabilities who use the fixed route system. A list of criteria has been developed to help define "comparable" paratransit service. The paratransit service must: (1) operate in the same service area as the fixed route system; (2) have a response time that is comparable to the fixed route system; (3) have comparable fares (no more than twice the fare on the fixed route system); (4) have comparable days and hours of service; (5) meet requests for any trip purpose, no prioritization for trip purpose is acceptable; and, (6) not limit service availability due to capacity constraints.

2.9 Executive Order 12898 & Environmental Justice

On February 11, 1994, President Clinton signed Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations. This Order served to amplify the provisions of the three-decade old Title VI of the Civil Rights Act of 1964. Title VI of the 1964 Civil Rights Act states that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Title VI bars intentional discrimination as well as disparate impact discrimination (i.e., a neutral policy or practice that has a disparate impact on low income and minority groups). The Environmental Justice Executive Order amplifies Title VI by providing that each federal agency shall 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 and low-income populations.

The EPA has defined Environmental Justice as: The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socio-economic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. In general this means that for any program or activity for which any federal funds will be used, the agency receiving the federal funds: (1) must make a meaningful effort to involve low

income and minority populations in the processes established to make the decision about the use of the federal funds; and, (2) must evaluate the nature, extent, and incidence of probable favorable and adverse human health or environmental impacts of the programs, policies, and activities upon minority or low-income populations.

In order to adequately serve the community and fully address the planning process, the Lima-Allen County Regional Planning Commission (LACRPC) has identified target populations, initiated tests for disproportionate impacts and developed a public involvement process designed to engage the low income and minority neighborhoods. As part of its ongoing planning activities, the MPO has employed Geographic Information Systems (GIS) applications to facilitate demographic analyses at the regional and neighborhood levels. Analyses identified the concentrations of minorities, low income, the elderly, the disabled and populations without access to vehicles. The MPO has initiated a structured planning program with various neighborhood organizations to facilitate and strengthen the planning process in subareas of the region. Activities have been coordinated with, and undertaken in conjunction with the Allen County Regional Transit Authority (ACRTA). The MPO and ACRTA recognize model limitations and data constraints. The agencies have utilized technical support from the Ohio Department of Transportation (ODOT) Bureau of Technical Services and Ohio Development Services Agency (ODSA) to identify and manipulate data necessary for the Environmental Justice analysis. The agencies also recognize the need to review and adapt its public involvement policy to ensure target populations are involved in the transportation decision making process. This 2040 LRTP specifically addresses the transportation needs of minority populations, the elderly, the mobility challenged, the poverty stricken and those without automobiles. The MPO analysis of disproportionate impacts on the protected class is highlighted in Appendices B and C of this Plan.

SECTION 3
THE TRANSPORTATION PLANNING PROCESS

The previously identified federal legislation established the transportation planning framework for all MPOs and state transportation agencies. Collectively these Acts established specific concerns and criteria necessary to ensure that federal monies are allocated in a manner consistent with legislative intent. Due to the requirements of the legislation, the planning process entails extensive collaboration between various state and local governments while considering public input.

Summarized in this section are various aspects of the local transportation planning process. Addressed in this section are the fundamental roles and organizational structure of the LACRPC, the responsibilities of the MPO, the mechanisms for intergovernmental coordination, the federal planning provisions and the public involvement conducted during plan development. Additional considerations that influenced plan development, such as the region's existing transportation system, demographic and economic characteristics, and planning factors representing various concerns, are discussed in later sections.

3.1 The Lima-Allen County Regional Planning Commission (LACRPC)

The LACRPC was established in September of 1964 and assumed the powers and duties of the Allen County Planning Commission created in 1954. The formation of the Regional Planning Commission was accomplished in conformance with Section 713.21 of the Ohio Revised Code (ORC) and charged with the responsibilities of comprehensive planning and program implementation within Allen County and its various communities.

The LACRPC is a voluntary association of delegates from different political subdivisions, representatives of state and local government, as well as, non-governmental organizations interested in understanding and addressing the needs of the region. The Commission serves as a forum for the discussion and sharing of ideas and information among communities about issues which may affect several communities and regional issues which cross over political boundaries into adjacent counties. The LACRPC serves in an advisory capacity to community decision makers who rely on the data, analyses, and planning recommendations which are provided by the Commission. A 34-member Board of Directors assists the Commission by reviewing and recommending plans and strategies to develop and improve the region. The Commission employs professional staff to provide assistance and advice in carrying out their responsibilities. To accomplish specific goals, the LACRPC also consults with other professionals such as City and County Engineers, City and County Sanitary Engineers, the Allen County Public Health, the Allen Soil and Water Conservation District, and local utilities.

The powers and duties of the Commission are explicitly detailed in Section 713.21 of the ORC. The LACRPC provides a wide array of services to the region and undertakes special studies at the request of member communities. Typically, services include preparing population and housing reports, providing traffic and accident analyses, facilitating the development/release of zoning, land use, soil, and other development related information. The LACRPC also administers the Allen County Subdivision Regulations and the Allen County Floodplain Management Regulations for the unincorporated areas of Allen County. In addition, the LACRPC serves as a repository and has a wide array of historical data and archival maps including aerial photos, census, traffic flow, zoning, and land use maps.

3.2 The Metropolitan Planning Organization (MPO)

The LACRPC is the principal public agency conducting regional transportation studies for Allen County and the Lima Urbanized Area. As such, the LACRPC serves as the designated MPO for Allen County. The MPO is a forum of stakeholders who engage in a cooperative and deliberative

transportation planning process as required by 23 U.S.C. 134 and 49 U.S.C. 5303-5306. MPO's are established by federal law in all urban areas of the nation in order to carry out the "3C" (Continuing, Cooperative, and Comprehensive) transportation planning process. This process is required for the area to continue to receive United States Department of Transportation (USDOT) funding. And, as millions of dollars in USDOT funding are spent annually in Allen County for highway, transit, bikeway, and pedestrian improvements, the process is important.

Under federal law, a principal function of the MPO is to produce a transportation plan for the region. The transportation plan is used as a basis to decide where federal transportation funds should be spent. The transportation plan typically has included various parts or elements, often based on horizon year (long and short range) and functional area (highways, transit, bikeways, etc.). The identification and implementation of highway improvements has historically been the principal focus of the transportation plan.

The MPO's transportation planning area includes all of Allen County, as well as the section of the City of Delphos within Van Wert County, the portion of the Village of Bluffton in Hancock County, and the Village of Cridersville located within Auglaize County. The Lima Urbanized Area's transportation model boundary includes the City of Lima and the four surrounding townships of American, Bath, Shawnee, and Perry. Included within that boundary is the Village of Elida (located within American Township). Although all Allen County political subdivisions including Delphos and Bluffton are active members of the LACRPC, the Village of Cridersville located in Auglaize County is not a member of the LACRPC or the MPO and communications are largely limited to those with the Auglaize County Engineer and ODOT District 7 through ODOT District 1 representatives.

The MPO is governed by a Transportation Coordinating Committee (TCC) that includes members of the transportation planning area plus other members reflective of the function and geographic area of the MPO. Additional members of the TCC include representatives of ODOT and the ACRTA. The TCC acts with the advisement of the Transportation Advisory Committee (TAC), Citizens Advisory Committee (CAC), and other advisory groups.

The TAC is a technical committee that reviews the activities of the MPO and provides recommendations to the TCC. The TAC is comprised of transportation-oriented representatives, surrogates of both public and private concerns that presently include various transportation modes (transit, paratransit, freight), as well as local engineering, utilities, and environmental interests within the area. The CAC is a cross section of the community reflecting local neighborhood associations, civil rights activists, sponsors of social service agencies, housing advocates, and representative environmental groups.

Together these three committees review and provide technical assistance and make recommendations on transportation and transit-related projects and programs planned for the region. The MPO's responsibility to further an integrated transportation plan for the region is a difficult task which requires an informed decision making process involving a diverse cross section of representatives from the community. These representatives review and approve the allocation of millions of dollars for needed capital improvements to the regions infrastructure of roadways and bridges. The MPO is also responsible for ensuring that local residents are afforded the opportunity to utilize alternative commuting modes; therefore, the MPO reviews and ultimately prioritizes expenditures for walkways, bicycle facilities and transit operations.

3.3 Intergovernmental Relations

As stated earlier, the transportation plan's development and implementation depends upon coordination with a number of diverse agencies and organizations. Included are national, state, regional, and local agencies/organizations responsible for the planning and implementation of transportation projects and programs. The coordination of a truly integrated system is ensured when the planning process is designed to maximize the benefits and minimize the overlap, duplication, and potential conflict involved in proposed transportation plans, programs, projects, and services. A system of coordination exists because these agencies and organizations have a mutually agreed upon framework for achieving shared goals and objectives.

3.3.1 Federal Highway Administration (FHWA)

The FHWA has a significant role in local transportation. Through partnerships, policies and the allocation of resources, FHWA facilitates the development and maintenance of our state and local transportation system. FHWA's two primary programs include the Federal Aid Highway Program and the Motor Carrier Safety Program. The Federal Aid Highway Program provides federal financial and technical assistance to the state and MPO to plan, construct, and improve our urban and rural roads and bridges. The Motor Carrier Safety Program promotes safe commercial motor vehicle operations to reduce crashes. The program develops and enforces performance based regulations to protect the nation's traveling public.

3.3.2 Federal Transit Administration (FTA)

The FTA is an administration in the USDOT. The purpose of the FTA is to assist in developing improved mass transportation equipment, facilities, techniques, and funding such development. More specifically, FTA attempts to encourage the planning and establishment of area wide urban mass transportation systems, which are necessary to support economical and/or desirable urban development patterns. FTA assists states, local governments and their transit operators in financing area wide systems who provide the necessary mobility services to the elderly individuals, which are disabled, and the economically disadvantaged.

3.3.3 Ohio Department of Transportation (ODOT)

ODOT has responsibility for the statewide coordination of the highway system and is charged with maintaining and improving the infrastructure and operations of the system. This excludes the highway system lying inside the municipal corporation limits. In addition, ODOT monitors the MPO's compliance with state and federal policies, as well as those planning and programming activities undertaken and supported with federal and state funding. ODOT passes Federal Aid Highway System Program funding to the MPO for systems planning, maintenance, and construction purposes. ODOT continues to provide technical support to the MPO providing surveillance activity assistance, traffic monitoring, travel demand modeling, and modeling for air quality compliance.

3.3.4 Ohio Rail Development Commission (ORDC)

The ORDC participates in various rail related activities including: railroad acquisition programs; rail rehabilitation programs; rail (re)construction programs; grade crossing upgrades; and, crossing consolidation programs. The ORDC works closely with a number of state agencies to help stimulate economic development by providing incentives for business to locate and expand in local communities. The ORDC provides funding assistance to help construct and/or rehabilitate needed industrial tracks and rail spurs. The ORDC also works with local communities to preserve branch lines threatened with the potential loss of service through acquisition and rehabilitation assistance. The ORDC

can also provide loans to help smaller Class I railroads in order to improve branch line safety and efficiency.

3.3.5 Ohio Department of Public Safety (ODPS)

The mission of ODPS is to save lives, to reduce injuries and economic loss, to administer Ohio's motor vehicle laws, and to preserve the safety and well-being of all citizens. Given that, ODPS has been charged with various responsibilities, including but not limited to the management of the Motor Carrier Enforcement program, state Emergency Management and Hazardous Materials planning and response, the Selective Traffic Enforcement Program, the Traffic Project and Operation Lifesaver, as well as management of the Integrated Traffic Crash Records. ODPS has supplied the LACRPC with financial support for programming and deployed technical assistance to the community to assess various existing traffic problems and should be considered an important advocate of transportation safety.

3.3.6 Public Utilities Commission of Ohio (PUCO)

The PUCO participates with a number of other state agencies (ORDC, ODOT, ODPS, etc.) to develop and implement various traffic safety strategies and implement specific initiatives to achieve quantifiable improvements in overall safety and system performance. While other state agencies have missions related to economic development, construction, or enforcement, the PUCO has a broader role of creating the regulatory framework that governs commercial transportation in Ohio. One of these many tasks is the administration of state and federal monies for grade crossing safety improvements and commercial vehicle safety activities. The PUCO enforces Federal Railroad Administration (FRA) regulations and has certified inspectors in the disciplines of track, locomotive power and equipment, operating practices, and hazardous materials. The PUCO is an active safety player in Allen County and routinely reviews local railroad grade crossing safety reports prepared by the LACRPC. Local governments have increasingly found the PUCO a willing partner in financially supporting local grade crossing improvement initiatives, especially in the more rural areas. In addition, the PUCO also makes funds available for various educational awareness programs which Allen County has been the beneficiary of.

3.3.7 Ohio Environmental Protection Agency (OEPA)

The Ohio Environmental Protection Agency (OEPA) is specifically charged with the responsibility of regulating air, water, noise, pesticides, and hazardous waste. From a transportation planning perspective, the OEPA oversees several important functions including: information gathering activities related to the documentation of hazardous spills, the location of hazardous sites and the clean-up of such sites, especially identified CERCLA sites; the identification of endangered species and their habitats, ensuring interagency cooperation to protect such wildlife and their associated habitat; as well as the identification, prevention, and prosecution of polluting waters of the state. But perhaps the most important MPO related function is the monitoring and subsequent documentation of air quality standards in urban areas and their subsequent involvement in the development and approval of the State Implementation Plan, which is predicated upon specific regulations and other materials for meeting clean air standards associated with the Clean Air Act requirements. The LACRPC works with ODOT and OEPA to ensure that projects within Allen County work to support and meet the requirements of the Clean Air Act.

3.3.8 Ohio Department of Natural Resources (ODNR)

ODNR has broad discretionary powers in the State of Ohio. Since 1973, ODNR's responsibilities have increased to reflect law enforcement, parks and recreation program management, fish and wildlife management, wildlife propagation, stream improvement, and pollution investigation. ODNR is also responsible for the identification, management, and protection of all 200 endangered species in Ohio. Due to their mandated charge and the roles and responsibilities of the MPO under federal legislation, the LACRPC routinely shares information and coordinates project level details with representatives of ODNR to ensure appropriate stewardship and preservation of the community's natural resources. The LACRPC has worked with ODNR as well as local conservation and environmental groups to document potential wildlife habitats in an attempt to minimize any encroachment, especially upon the habitats of threatened or endangered species. Also of concern are floodplains. The LACRPC works with ODNR to ensure that all bridge projects are carefully coordinated to meet the engineering requirements in any special flood hazard areas requiring all local and state projects to submit hydraulic and hydrologic engineering analyses in order to document and assess any potential rise in base flood elevations due to bridge design. Such coordination is considered important in identifying any potential mitigation strategies which might include managing stormwater runoff, alteration of project plans and/or the construction practices incorporating new design, strategic mowing practices, and invasive species control, among other areas.

3.3.9 Allen County Regional Transit Authority (ACRTA)

The ACRTA is the local Transit Authority responsible for providing effective public transportation services to Allen County residents. Charged with supporting a safe, accessible and equitable system, the ACRTA maintains fixed route and demand response services. As the ACRTA receives federal, state, and local funding, the agency strives to comply with planning and operational regulatory requirements as established under contractual arrangements. The ACRTA maintains a strong relationship with FTA, ODOT, and local jurisdictions. The LACRPC provides technical assistance to the ACRTA under contract as outlined in the agency's annual Unified Planning Work Program (UPWP).

3.3.10 Allen County Airport Authority

The Allen County Airport Authority is entrusted with the operations and maintenance of the Allen County Airport and related public facilities, including the provision of accommodations to comfort and sustain pilots and passengers, storage facilities, and fuel operations. The Airport Authority receives certification and funding from the Federal Aviation Administration (FAA) through ODOT. Local financial support is provided by Allen County and local operations. The MPO works to assure a strong relationship exists between those governments responsible for local land use and roadway access to the airport as its relative position has become pivotal for local economic development initiatives.

3.3.11 Local Units of Government

There are 20 units of local government that participate in the input and development of the region's long range transportation planning activities and short range Transportation Improvement Programs (TIP). Local units of government provide the required local match for funding the transportation planning process and associated transportation improvements. Communication between representatives of the local jurisdictions, with ODOT, FHWA, and FTA is facilitated by the LACRPC and the ACRTA. The local jurisdictions receive Federal-Aid Urban System Funds through the transportation policy

committee of the LACRPC. Local units of government also provide the maintenance on the bulk of the roadways and related infrastructure in Allen County. In fact, some 839.8 miles or 57.4% of the entire roadway system is underwritten by local governments.

3.4 Transportation Planning: Plan, Planning Provisions & Factors

Federal policy[1] established it to be in the national interest to: (1) encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight, foster economic growth and development within and between States and urbanized areas, and take into consideration resiliency needs while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes; and, (2) to encourage the continued improvement and evolution of the metropolitan and statewide transportation planning processes by MPOs, state DOTs, and public transit operators as guided by the planning factors.

The metropolitan transportation planning process responsibility lies with the LACRPC and its community stakeholders. The LACRPC is responsible for preparing and updating a transportation plan defining a minimum 20-year forecast period for the respective planning area that is reflective of a continuous, comprehensive, and cooperative (3C) approach. The transportation plan shall include a discussion of types of potential environmental mitigation activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan; and, in consultation with federal and state agencies, along with wildlife, land management, and regulatory agencies reflective of CAAA state implementation plans. The transportation plan also requires a financial section that demonstrates how the plan is to be implemented, and indicates those resources that are reasonably expected to be made available to carry out the plan, with any additional financing strategies for needed projects and programs identified. The MPO shall prepare and update the transportation plan every 4 years in areas of CAAA nonattainment.

To affect the transportation plan the MPO shall publish a TIP. The MPO will develop the TIP in cooperation with the state and local public Transit Authority, and provide opportunities for parties interested in the development of the TIP to participate. The TIP shall include a priority list of proposed, federally supported projects and strategies to be carried out within each 4-year period after the initial adoption of the TIP. The TIP shall include a financial plan that demonstrates how the program can be implemented and indicate the fiscal resources expected to be available to carry out the program. The TIP shall be updated at least once every 4 years by the MPO. Moreover, an annual listing of projects, including investments in pedestrian walkways and bicycle transportation facilities, for which Federal funds have been obligated in the preceding year shall be published for public review.

In addition and as referenced earlier in Section 2, the transportation planning process is subject to a number of interrelated regulatory requirements and planning mandates established under previous Highway Acts. Under SAFETEA-LU and the FAST Act, several federal planning factors were established for states and MPOs to address[2] in developing transportation plans and TIPs. Specifically these planning factors require that the metropolitan planning process for a metropolitan planning area shall provide for consideration of projects and strategies that will:

[1] 23 U.S.C §134 (a) Metropolitan Transportation Planning.
[2] 23 U.S.C §134 (h) (1) Metropolitan Transportation Planning - Planning Process.

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility of people and for freight; protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and,
- Enhance travel and tourism.

As a corollary, the FAST Act reemphasized the federal planning factors for statewide and metropolitan transportation plans and programs, as well as the underlying planning processes. MAP-21[3] established a performance-based approach to transportation decision making to support national goals. Whereby performance measures and standards developed in consultation with state departments of transportation and local stakeholders, will provide the most efficient use and investment of federal funds by focusing on stated goals, and thereby improving project decision making by increasing the accountability and transparency of the process as it relates to plan/project outcomes which shall be assessed at least biannually.

3.5 Transportation Planning: Partners, Public Outreach & Involvement Record

MPOs are, by statute, to be inclusive of elected officials, representatives of public transportation and private paratransit service providers, freight transportation services, representatives of public transportation clients, representatives of pedestrian walkway users and bicycle transportation facility users, representatives of the disabled, and other interested parties. Locally, the LACRPC has reached out and developed an expanded committee structure representative of community health interests, law enforcement and traffic safety concerns, local neighborhood associations, advocates for the elderly and disabled, environmental organizations, and civil rights groups. These individuals, reflective of their respective personal and professional philosophies and commitments, are provided direct and ongoing opportunities to shape and develop the transportation plan and its corollary, the TIP.

In preparation of this transportation plan update, the LACRPC has made a concentrated effort to: (1) identify existing deficiencies in the transportation system;[4] (2) present a range of issues and alternative strategies to address those concerns;[5] and, (3) provide opportunity for public

[3] 23 U.S.C. §134 (h) (2) Metropolitan Transportation Planning Scope of Planning Process - Performance-based approach.

[4] The LACRPC has annually published various reports on the existing transportation system including a Traffic Incident Summary Report, and an Intersection Accident Summary Report since 1994. In cooperation with the ACRTA, the LACRPC has also documented public transportation ridership concerns/issues since 1994 on an annual basis.

[5] The LACRPC publishes a publicly adopted 4-year listing of warranted capital improvements known as the agency's Transportation Improvement Program (TIP).The document has been typically developed on a bi-annual basis which identifies priority roadway, transit, bicycle and pedestrian improvements, as well as, planning projects. The FY 2018-2021 TIP was most recently approved in April 2017. The LACRPC, in cooperation with the ACRTA, annually publish an analysis of key transit concerns in various documents including ridership survey reports for fixed route and paratransit services and a Transit Development Plan.

input during project/plan development.[6] The MPO followed its adopted public participation plan to guide the planning process. Although the LACRPC has historically relied on its broad based membership and committee structure to provide the technical reviews, public input was determined advantageous and necessary to develop the LRTP. The local media has also played a role in the dissemination of information. Local media have been invited to the various LACRPC committee meetings and regularly provide extensive coverage of local transportation issues including capital improvement schedules and transit services, as well as roadway deficiencies. The LACRPC committee structure and employment of the 3C planning process furthered the identification of transportation issues/concerns to be considered or addressed during the planning process and provided the opportunity for media coverage and public input and education.

Table 3-1 is provided to document the various political entities involved in the transportation planning process and the extent of involvement to which the political subdivision was engaged. In addition to the demographic indices which are provided by political subdivision, each community's accessibility to public transportation services is documented. Project development reflects two distinct planning phases. Project identification is separated from project selection which is based on the existing voting representation of the transportation policy committee.

However, in the spirit of MAP-21, the LACRPC has attempted to increase the level of public involvement over the course of preparing the transportation plan update by identifying affected members of the public typically underserved by the existing transportation facilities and services.[7] The effort enabled the LACRPC to target geographic areas for inclusion and increased participation in the planning process.[8] And although the extent and degree of participation varied, the process has begun and will establish a foundation from which to further expand future public involvement within the transportation planning process.

Map 3-1 details the location of various neighborhood groups who accepted the invitation of the LACRPC to participate in the planning process. The participating neighborhood groups represented 22,492 residents of the Lima Urbanized Area population. The neighborhoods were diverse socioeconomically and geographically. The neighborhood groups were located in, and represented by, transportation policy committee members of Allen County and the City of Lima, as well as American, Bath, Perry, and Shawnee Townships. Table 3-2 attempts to document the extent of public involvement of those neighborhood organizations who responded to LACRPC requests for input and participation in the process. The table highlights various socioeconomic and demographic indices of the population residing within the respective neighborhoods, as well as, their access to public transportation services. Neighborhood participation was limited to land use planning, transportation project identification, and project development. Although project selection is restricted to the transportation policy committee, neighborhood concerns were considered and are documented herein.

[6]The LACRPC solicited comments identifying needed improvements and/or services to the transportation system from area stakeholders including: neighborhood groups; law enforcement, fire and emergency service agencies; and, local transportation professionals. Public involvement reflects membership representation, survey analyses, public meetings, and focus groups. To support its Policy and Technical committees, the MPO sought and received input from its the Manufacturer's Council (Freight) and Citizen Advisory committees, as well as the Environmental Advisory Council and the Sustainability Committee and other organizations which the MPO saw as stakeholders in the transportation system. The final draft was made available for public review at various locations including public libraries, government buildings, and ODOT District One office.

[7]The LACRPC utilized census data, various transportation system databases, and GIS operations to analyze and identify the potential transportation dependent and underserved populations.

[8]The LACRPC sought and received support from a not-for-profit umbrella organization, the Lima-Allen County Neighborhoods in Partnership (LACNIP), to address some 22 different neighborhood organizations. Interested neighborhoods undertook various activities to assess population, land use and transportation issues in their respective neighborhoods.

TABLE 3-1
POLITICAL SUBDIVISIONS INVOLVED IN THE LONG RANGE TRANSPORTATION PLANNING PROCESS
BY DEMOGRAPHICS, ACCESSIBILITY & PARTICIPATION

Political Subdivision	Demographics					Transit Accessibility		Participation In			
	Total Population	Total Minority	Total Elderly	Poverty	Total Mobility Impaired	Demand Response Accessibility	Fixed Route Accessibility	Land Use Planning	Transit Planning	Project Development	
										ID	Selection
Allen County	104,664	17,415 (16.6%)	16,636 (15.9%)	16,228 (16.1%)	7,366 (7.7%)	77,547	57,158	✓	✓	✓	✓
City of Delphos (Part)	3,952	253 (6.4%)	725 (18.3%)	431 (11.2%)	299 (8.4%)	6,820	3,387	✓	✓	✓	✓
City of Lima	37,836	12,430 (32.9%)	4,228 (11.2%)	9,992 (28.5%)	3,005 (9.1%)	38,771	38,771	✓	✓	✓	✓
Village of Beaverdam	466	4 (0.9%)	61 (13.1%)	68 (14.6%)	26 (6.5%)	0	0	✓	✓	✓	
Village of Bluffton (Part)	4,279	196 (4.6%)	896 (20.9%)	236 (6.1%)	242 (6.1%)	0	0	✓	✓	✓	✓
Village of Cairo	470	7 (1.5%)	96 (20.4%)	46 (10.0%)	67 (15.1%)	0	0	✓	✓	✓	
Village of Elida	1,935	142 (7.3%)	246 (12.7%)	35 (1.8%)	73 (4.0%)	1,905	1,905	✓	✓	✓	
Village of Harrod	425	11 (2.6%)	47 (11.1%)	76 (17.9%)	13 (3.3%)	0	0	✓		✓	
Village of Lafayette	384	0 (0.0%)	56 (14.6%)	65 (17.2%)	33 (8.8%)	0	0	✓		✓	
Village of Spencerville	2,339	71 (3.0%)	341 (14.6%)	557 (24.4%)	169 (8.2%)	2,223	0	✓	✓	✓	
Amanda Township	1,833	94 (5.1%)	295 (16.1%)	100 (5.5%)	99 (5.5%)	0	0	✓	✓	✓	
American Township	12,268	1,618 (13.2%)	2,756 (22.5%)	1,291 (10.7%)	937 (8.1%)	12,476	6,225	✓	✓	✓	✓
Auglaize Township	2,300	132 (5.7%)	269 (11.7%)	215 (9.4%)	96 (4.4%)	0	0	✓	✓	✓	
Bath Township	9,616	768 (8.0%)	1,667 (17.3%)	1,171 (12.4%)	528 (5.8%)	9,725	7,449	✓	✓	✓	✓
Jackson Township	2,589	12 (0.5%)	491 (19.0%)	176 (6.9%)	141 (5.7%)	0	0	✓	✓	✓	
Marion Township	2,854	144 (5.0%)	463 (16.2%)	130 (4.6%)	129 (4.8%)	1,697	0	✓	✓	✓	
Monroe Township	1,937	8 (0.4%)	257 (13.3%)	184 (9.5%)	158 (8.6%)	0	0			✓	
Perry Township	3,446	200 (5.8%)	664 (19.3%)	281 (8.3%)	377 (11.6%)	3,531	1,129	✓	✓	✓	✓
Richland Township	1,548	13 (0.8%)	301 (19.4%)	79 (5.4%)	107 (7.5%)	0	0	✓		✓	
Shawnee Township	12,243	1,271 (10.4%)	2,438 (19.9%)	996 (8.2%)	799 (6.9%)	3,826	90	✓	✓	✓	✓
Spencer Township	699	41 (5.9%)	128 (18.3%)	37 (5.3%)	36 (5.3%)	0	0	✓			
Sugar Creek Township	1,245	0 (0.0%)	211 (16.9%)	62 (5.0%)	32 (2.8%)	7	0	✓	✓	✓	
Total	**104,664**	**17,415 (16.6%)**	**16,636 (15.9%)**	**16,228 (16.1%)**	**7,366 (7.7%)**	**77,547**	**62,343**	**21**	**17**	**21**	**8**

Source: ACS 2016 5-Year Estimates: S0101 Total Population.

MAP 3-1
NEIGHBORHOOD ASSOCIATIONS INVOLVED IN THE PLANNING PROCESS

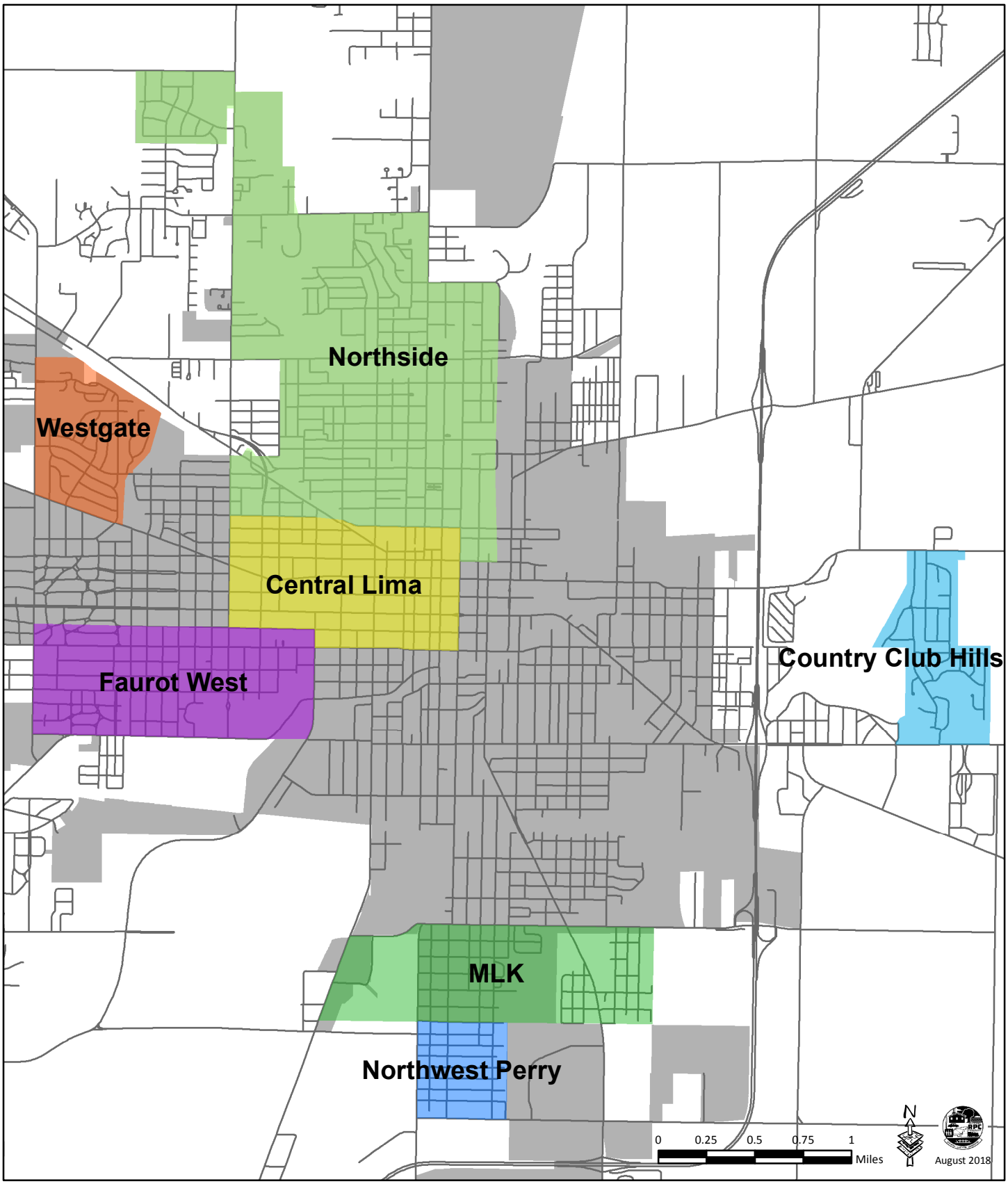


TABLE 3-2
NEIGHBORHOOD ASSOCIATIONS INVOLVEMENT IN THE LONG RANGE TRANSPORTATION PLANNING PROCESS BY DEMOGRAPHICS, ACCESSIBILITY & PARTICIPATION

Neighborhood Associations	Demographics							Area Accessibility		Participation			
	Total Area	Total Population	Total Households	Total Minority	Pop Under 200% Poverty	HH w/ Elderly Resident	HH w/ Disabled Resident	Fixed Route Services	Demand Response	Land Use Planning	Project Identification	Project Review	Comments
Boulevard	83.2 acres	456	187	113 24.70%	212 46.50%	54 28.90%	34 18.20%	100%	100%	✓		✓	Urban residential neighborhood new to MPO planning process.
Country Club Hills	249.6 acres	1,234	387	72 5.80%	138 14.20%	113 29.20%	78 20.20%	100%	100%	✓		✓	Suburban neighborhood fully engaged in MPO planning process.
Dr. Martin Luther King Jr.	515.9 acres	1,544	615	827 53.56%	888 57.5%	155 25.20%	189 30.70%	100%	100%	✓	✓	✓	Urban mixed use neighborhood completed land use planning process. Further outreach required.
Southside	2,007 acres	2,007	799	1,462 72.80%	1,204 60.10%	152 19.00%	224 28.10%	100%	100%			✓	
Northside	1,478.0 acres	10,686	4,040	2,981 27.90%	6,137 57.60%	785 19.40%	1,216 30.10%	100%	100%	✓	✓	✓	Urban residential neighborhood newly expanded its boundaries reflect mixed use. Further involvement is suspect.
Northwest Perry	147.2 acres	279	100	168 60.20%	152 54.50%	20 20.00%	25 25.00%	100%	100%	✓	✓	✓	Urban residential neighborhood is actively represented on CAC.
Central Lima	499.2 acres	3,213	1,240	1,353 42.10%	2,120 68.90%	209 16.90%	394 31.80%	100%	100%	✓	✓	✓	
Faurot West	505.6 acres	3,602	1,339	991 27.50%	1,250 35.10%	260 19.40%	320 23.90%	100%	100%			✓	
City View Terrace	44.8 acres	109	39	11 10.40%	21 19.80%	15 38.50%	9 23.10%	100%	100%	✓	✓	✓	Recently reorganized residential neighborhood; increased outreach required.
Westgate	256.0 acres	1,791	846	317 17.70%	755 43.50%	360 42.60%	259 30.60%	100%	100%	✓	✓	✓	Urban residential neighborhood is actively represented on CAC.
Total	**3,545.2 acres**	**22,492**	**8,624**	**6,624 29.45%**	**11,435 50.84%**	**1,929 22.37%**	**2,473 28.68%**	**100%**	**100%**				**Neighborhood Associations differ in their composition and abilities. The MPO is actively soliciting increased involvement in planning process.**

SECTION 4
TREND ANALYSIS

The purpose of this section is to provide an overview of the factors and issues which effect Allen County's transportation infrastructure needs. Trends, both social and economic, are presented and analyzed. Analyses herein necessarily focuses upon population, housing, employment, and land use. Such variables help identify changing demographics, the expanse of the urbanizing area, the extent of increasing demands upon the current roadway system, the potential for public transportation, and issues affecting freight, both rail and over-the-road.

The section begins with a brief review of Allen County's historical underpinnings in order to provide the reader with an understanding of issues which have had serious implications on the region's development patterns. After an overview, Section 4.2 provides data on the current site and situation of the County with respect to trade and markets; examining accessibility to major highways, as well as to other metropolitan regions. Demographic trends and projections within Allen County are addressed in Section 4.3. Population data including age, race, educational attainment, income, and poverty are assessed as are household size and composition. Section 4.4 addresses employment trends within Allen County wherein the County's economic base is explored by sector. Land use change is addressed in Section 4.5. Land use is examined by sector, acreage, and density and subsequently mapped through the horizon year 2040. Section 4.6 attempts to illustrate the growing dependency upon motor vehicles with ever increasing VMT placing greater demands upon our roadway system. The section concludes with a succinct summary based on the implications of the aforementioned sections.

4.1 Historical Underpinnings

Allen County, situated within the Black Swamp region, was formally organized by the Ohio General Assembly on February 9, 1831. Lima, designated as the County seat, was platted in 1831, and incorporated in 1842. The first real commercial activity came to the area in 1845 with the construction of the Miami-Erie Canal. In 1854 the first railroad was built through Lima. The addition of four more steam railroads and five electric inter-urban lines enabled Lima to became a major transportation hub with lines to Chicago and New York. By the 1860's, with access to large expanses of lumber and the newly built railroads, Lima became a major lumber center and eventually came to manufacture sawmill equipment. The manufacturing of sawmill equipment proved to be the forerunner of the locomotive industry and the world famous Lima Locomotive Works, one of the largest producers of locomotives in the world. In 1885, the discovery of oil spurred an already healthy economy into boomtown like conditions for Lima. By the time of the 1910 Census, there were over 20,000 residents in Lima.

World War I gave added impetus to the industrial growth of the region. The Liberty Truck was designed and built in Lima. Other wartime demands caused local increases in the oil production and the expanded production of locomotives. Supporting this movement was the Superior Coach Company operating in Lima, soon to become the world’s largest manufacturer of school buses, passenger coaches, and ambulances. During the period between 1920 and 1930, however, the inter-urban lines perished and the railroads closed branch lines. The age of the automobile and the bus had arrived. These new forms of transportation demanded improved and expanded roadways. World War II helped usher in the location of a national tank modification center, as well as locations established for the production of special turbine blades, and various electric motors and controls for the U.S. Navy. Continued demand for these and other related products spurred a local economy heavily dependent upon the manufacturing sector as a whole, and the military industrial complex, specifically.

However, in the early 1980's, related military demand was lost and Allen County was hard hit with employee layoffs and plant shutdowns. Over the last several decades has developed a

strong service and retail base as well as a sizable and diversified manufacturing base. Manufacturers continue to produce a wide variety of products including military tanks, automobile engines, electrical generators, petroleum products, chemicals, universal joints, drive shafts, soap products, and miscellaneous plastics.

4.2 Compositions & Locational Attributes

As revealed earlier in Map 1-1, Allen County is composed of two cities (Lima and Delphos) and 12 townships (Amanda, American, Auglaize, Bath, Jackson, Marion, Monroe, Perry, Richland, Shawnee, Spencer, and Sugar Creek). Within the townships are 7 incorporated villages of Beaverdam, Bluffton, Cairo, Elida, Harrod, Lafayette, and Spencerville; as well as 6 unincorporated villages of Gomer, Hume, Rockport, Westminster, Kemp, and Conant. Their forms of government are representative of the following types: Allen County - County Commissioners and Administrator; Cities and Villages - Mayor and Council; and, Townships - Trustees and Finance Officers.

As illustrated in Map 4-1, Allen County is located in the western portion of the State of Ohio. Allen County is 406.9 square miles in total area, with 13.7 square miles situated within the municipal limits of Lima. The City of Lima, the County seat of Allen County, is located adjacent to IR 75, 8.5 miles south of the junction of US 30. Lima is the largest inland metropolitan area in West Central Ohio and, therefore, acts as the center for a 10 county trading area (see Map 4-1) including the adjacent counties of Hancock, Van Wert, Hardin, Putnam, and Auglaize. Map 4-2 suggests Lima is located within 500 miles of the 10 largest cities of the Central States. Midway between Detroit/Cincinnati, Toledo/Dayton, Cleveland/Indianapolis, and Columbus/Fort Wayne, Lima is strategically placed in relation to raw materials, transportation facilities, labor supply, and trade markets.

In addition to IR 75 and US 30, Allen County is served by five major state routes: SR 309, SR 117, SR 81, SR 65, and SR 66. The area's rail freight service is provided by two Class I rail carriers including CSX and Norfolk Southern (NS). In addition, the area is serviced by three Short Line railroads; the Chicago, Fort Wayne and Erie Railroad (CF&E), the Indiana and Ohio (I&O) railroads, and the RJ Corman railroad. Allen County is also serviced by two small airports. The Allen County Regional Airport (KAOH) has a fixed operator, an instrument landing system, and a 6,000-foot lighted runway. The Bluffton Airport, privately owned and operated, has a 4,130-foot lighted runway and an instrument approved system. Commercial air service is also available at Dayton International and Toledo Express airports, each approximately 75 miles North and South of Allen County.

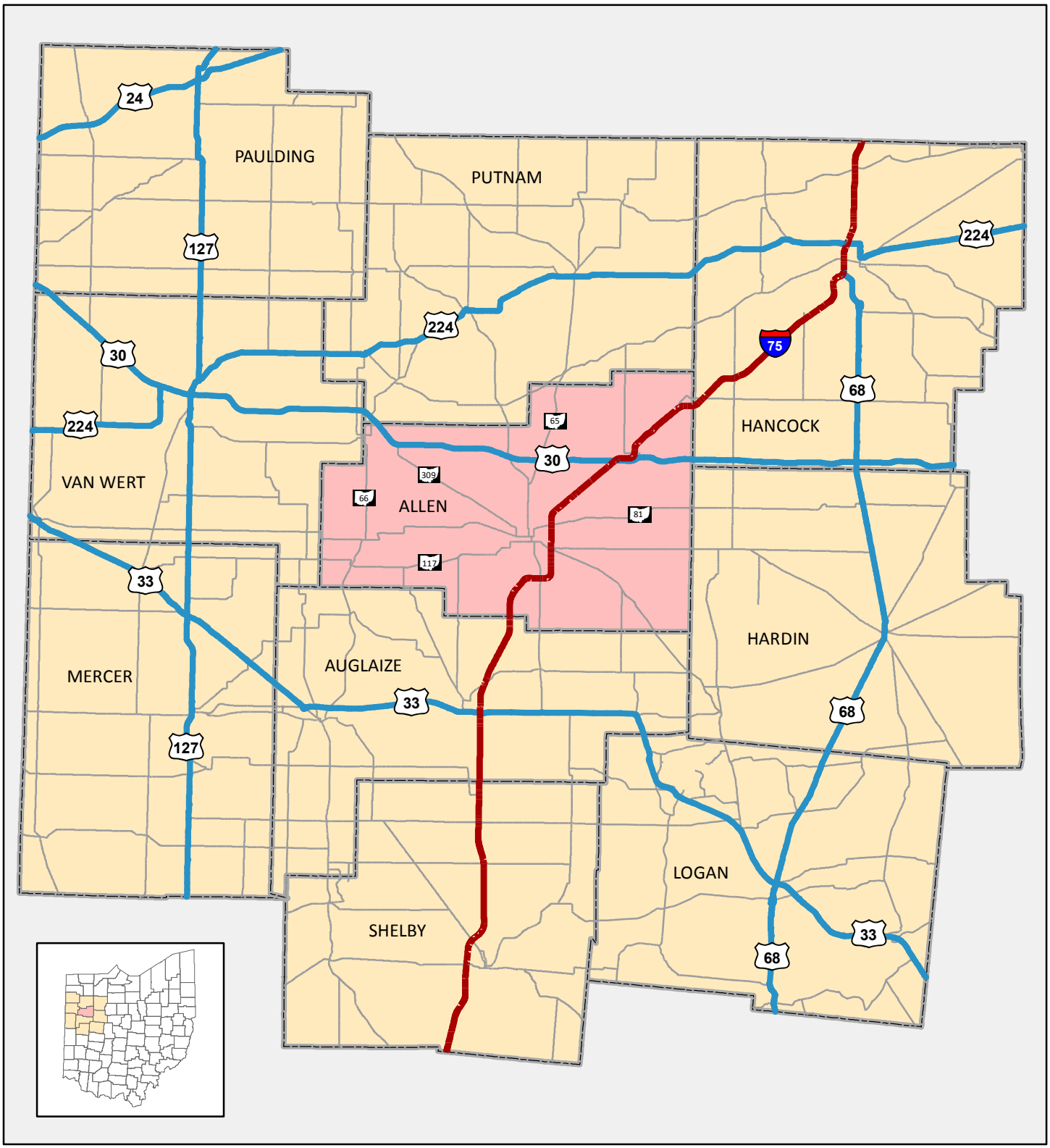
4.3 Demographic Overview

Allen County is similar to other small urbanized areas of the Midwest. The area's population growth has slowed and household size has fallen. The median age is growing older and birth rates are falling. Total population figures released by the Census Bureau[9] report the 2016 Allen County population estimates at 104,664 residents and 37,836 individuals residing within the City of Lima.

Such figures reflect population losses of 1.6 percent and 2.4 percent respectively when compared to 2010 data. Minority population experienced growth (5.0%) over the same period, concentrated in the City of Lima (68.7%).

[9] U.S. Census Bureau, 1960-2010 Censuses, DP-1.

MAP 4-1
TEN COUNTY TRADE AREA



August 2018

MAP 4-2
PROXIMITY TO MAJOR MARKETS

August 2018

Distance From Lima to Other Major Cities

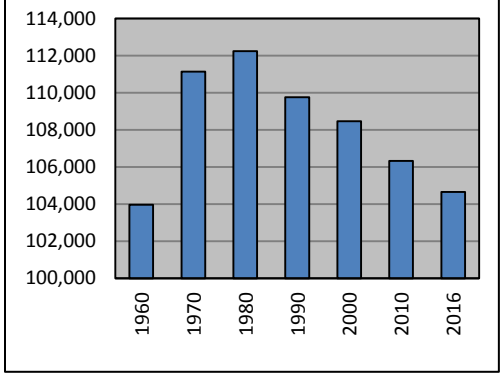
City, State	Mileage	Kilometers
Akron, OH	151	243
Buffalo, NY	336	541
Canton, OH	151	243
Chicago, IL	218	351
Cincinnati, OH	128	206
Cleveland, OH	149	240
Columbus, OH	94	151
Detroit, MI	139	224
Fort Wayne, IN	65	105
New York, NY	611	983
St. Louis, MO	380	612
Toledo, OH	80	129
Washington D.C.	464	747
Wheeling, WV	211	340
Youngstown, OH	199	211

Assessing a community's population and its respective demographic measures is important to understanding the demand for transportation infrastructure and services. Such an understanding is necessary to broaden the community's economic base and support the local labor force. Moreover, population data and demographic characteristics provide good indicators of future population growth and decline, and allow communities to better assess policy development, decisions, and the wise expenditures of public funds. This section attempts to highlight specific characteristics of the community's population and provide broad generalizations that will further the strategic planning process.

4.3.1 Population Change

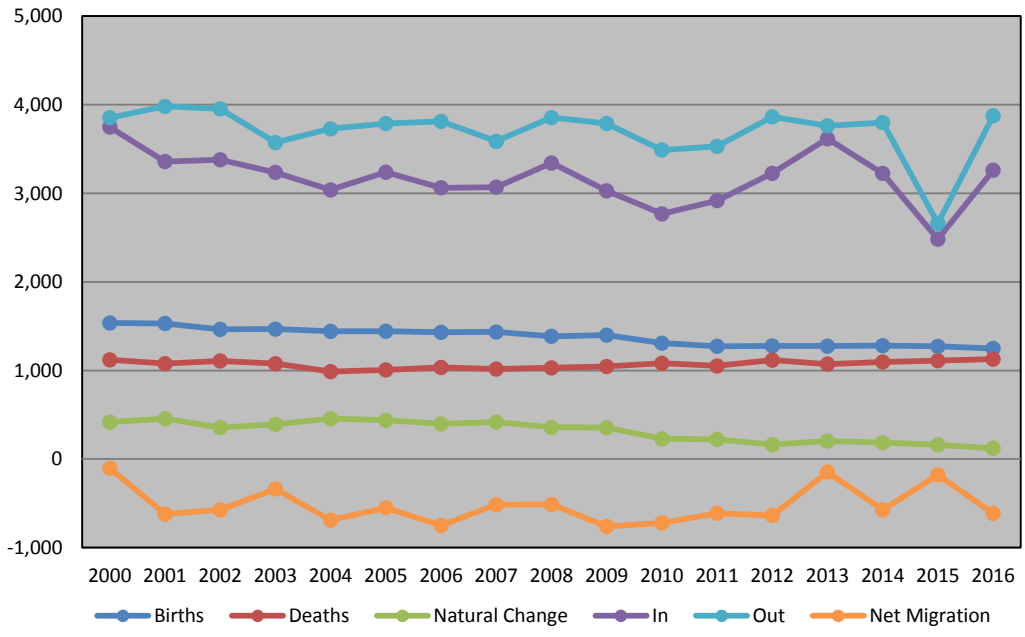
As demonstrated in Table 4-1, the population of Allen County has continued to experience a general decline since 1980 when it reached a population plateau of 112,241 persons. Comparison to the 1980 population reveals the current population has decreased by 7,577, or -6.7%. The population growth rate over the same period for the State of Ohio was 7.3%.

FIGURE 4-1: ALLEN COUNTY POPULATION TRENDS



Population change is the net result of the relationship between the number of births and the number of deaths in a population and the gross migration rate within the community. Examining 2010 Census data, Allen County has lost 2,142 residents since the 2000 Census, a loss in population of -2.0% (primarily from out-migration as indicated in Figure 4-2[10]). For comparison purposes, the State of Ohio grew by only 1.7% during this same period.

FIGURE 4-2: POPULATION CHANGE BY COMPONENT

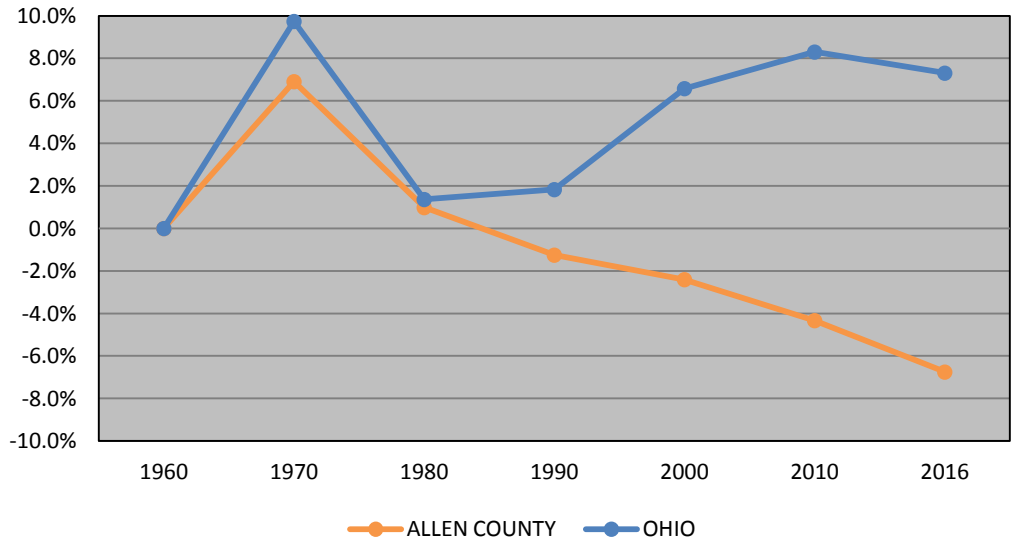


[10] https://www.irs.gov/uac/soi-tax-stats-migration-data.

Population change, whether growth or decline, is neither static nor uniform. For example, with the decline since 1980 noted, the County has actually experienced an overall population increase of 0.9% when extending the period from 1960 to 2016; this compares to 19.4% for the State of Ohio. In fact, over half of the political subdivisions within Allen County have experienced an extended period of continued growth while eight have experienced growth in cyclical spurts since 1960.

Figure 4-3 reveals Allen County population change from 1970 through 2016 by for Allen County and the State of Ohio. Table 4-1 reveals growth patterns among political subdivisions varied between 1960 and 2016. As total County population has increased only marginally over the 56-year period, data suggests that internal migration is supporting shifting population growth in the County's outlying area. Upon examining the County's more urbanized area, the City of Lima, combined with the four surrounding townships of Shawnee, American, Perry, and Bath, comprise 72.0% of the County's 2016 population.

FIGURE 4-3: POPULATION CHANGE 1960-2010



4.3.2 Households & Household Size

Another population related factor to recognize is change in the total number and size of households. This measure is important since each household requires a dwelling unit, and in most cases the size of the household will determine specific housing components such as age, number of bedrooms, bathrooms, square footage, play area, etc. Therefore, as the number of households change in number or character, housing consumption changes. If the number of units increases then the housing supply must reflect the growth. As the characteristics of the household change, new residency patterns are established. From a public policy perspective, it is important to balance the available housing supply with the housing demand. Otherwise, voids develop whereby housing remains unoccupied/vacant and household needs go unmet. It is also important to balance the location of residency with accessibility needs to ensure that households encountering/embracing particular economic or disability characteristics have adequate transportation services within reasonable proximity to their residency.

TABLE 4-1 POPULATION 1960-2010								
Political Subdivision	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2016**	**Percent Change**
Allen County	103,691	111,144	112,241	109,755	108,473	106,331	104,664	0.9
Village of Beaverdam	514	525	492	467	356	382	466	-9.3
Village of Bluffton	2,591	2,935	3,310	3,367	3,896	4,125	4,376	68.9
Village of Cairo	566	587	596	473	499	524	470	-17.0
City of Delphos	6,961	7,608	7,314	7,093	6,944	7,101	7,216	3.7
Village of Elida	1,215	1,211	1,349	1,486	1,917	1,905	1,935	59.3
Village of Harrod	563	533	506	537	491	417	425	-24.5
Village of Lafayette	476	486	488	449	304	445	384	-19.3
City of Lima	51,037	53,734	47,817	45,549	41,578	38,771	37,836	-25.9
Village of Spencerville	2,061	2,241	2,184	2,288	2,235	2,223	2,339	13.5
Amanda Twp	1,217	1,498	1,769	1,773	1,913	2,071	1,833	50.6
American Twp	9,184	8,766	11,476	10,921	13,599	12,476	12,268	33.6
Auglaize Twp	1,740	2,245	2,042	1,936	2,359	2,366	2,300	32.2
Bath Twp	8,307	9,323	9,997	10,105	9,819	9,725	9,616	15.8
Jackson Twp	1,523	1,761	2,214	2,288	2,632	2,611	2,589	70.0
Marion Twp	2,222	2,644	2,734	2,775	2,872	2,777	-410	-118.5
Monroe Twp	1,386	1,490	1,621	1,622	1,720	1,702	1,937	39.8
Perry Twp	5,045	3,751	3,586	3,577	3,620	3,531	3,446	-31.7
Richland Twp	1,530	1,515	1,628	1,821	2,015	1,955	1,451	-5.2
Shawnee Twp*	9,658	9,734	12,344	12,133	12,220	12,433	12,243	26.8
Spencer Twp	863	960	925	832	871	844	699	-19.0
Sugar Creek Twp	1,166	1,209	1,242	1,311	1,330	1,283	1,245	6.8

*As of November 2012 Ft. Shawnee ceased to exist
U.S. Census Bureau, 1960-2010 Censuses, DP-1
American Community Survey 5-Year Estimate, 2016, B01003

Census data reveals the total number of households, and that the rate of change in the total households reported between 2000 and 2016 is changing. Table 4-2 indicates that the total number of Allen County households in 2016 was 40,039, a decrease of 1.4% over the 2010 figure of 40,619 households.

Household size is also a factor. Table 4-2 also presents information relative to the current status of household size. In 2016, the average household size in Allen County was 2.51 persons per household. This is higher than the state average (2.45) and lower than the nation average at 2.64. Notice also that household size varies by political subdivision across Allen County varying from 2.33 in American Township to 2.98 in Auglaize Township. Table 4-3 looks at the overall trend in household size as documented in decennial census data since 1970. This data shows Allen County's average household size dropping 22.8% since 1970. In the same time period the state of Ohio only saw a 12.9% decrease. While some variations are seen in non-decennial census years, like 2016, the overall trend is moving towards smaller households. This may very well indicate that the historical trend of families with two parents and children is changing to more two-person households, single-parent households with children under the age of 18 years, and households comprised of retirees. The implications of smaller size households should be monitored as household and demographic characteristics will affect travel characteristics and land use patterns.

TABLE 4-2 TOTAL HOUSEHOLDS & AVERAGE HOUSEHOLD SIZE BY POLITICAL SUBDIVISION 2016		
Political Subdivision	**Total Number of Households**	**Average Household Size**
Allen County	40,039	2.51
Village of Beaverdam	191	2.44
Village of Bluffton	1,687	2.37
Village of Cairo	186	2.53
City of Delphos	2,968	2.38
Village of Elida	687	2.82
Village of Harrod	153	2.78
Village of Lafayette	147	2.61
City of Lima	14,051	2.48
Village of Spencerville	897	2.55
Amanda Township	716	2.56
American Township	5,191	2.33
Auglaize Township	771	2.98
Bath Township	3,630	2.60
Jackson Township	966	2.68
Marion Township	1,072	2.66
Monroe Township	678	2.86
Perry Township	1,377	2.46
Richland Township	565	2.61
Shawnee Township	4,760	2.56
Spencer Township	263	2.66
Sugar Creek Township	480	2.59
ACS 5-Year Estimate, 2016		

TABLE 4-3 AVERAGE HOUSEHOLD SIZE BY CENSUS PERIOD 1970-2010						
Political Subdivision	**1970**	**1980**	**1990**	**2000**	**2010**	**PCT Change**
Allen County	3.20	2.42	2.33	2.52	2.47	-22.8
Ohio	2.80	2.40	2.29	2.49	2.44	-12.9

4.3.3 Age & Age Cohorts

Age is a critical characteristic of a community's population. Age reflects certain attitudes and beliefs. Age also reflects demands for education, employment, housing, and services, especially transportation services. Age cohorts identify a specific population within a certain particular age grouping, and are important when identifying specific needs or the degree to which specific services will be required by a particular age group. The construction of a population pyramid (see Figure 4-4) furthers an analysis of age cohorts by gender differences. Such a construct not only provides valuable insights as to fertility and morbidity issues, but also provides data on workforce availability by age and gender.

Consistent with national trends, the County's population is aging. The median age of the population is 38.2 years in Allen County. That compares with a median of 39.3 and 37.7 years with the State of Ohio and the U.S., respectively. Table 4-4 provides a breakdown

of age cohorts by gender for the County. Age data reveals that one in five of the County's population (19.8%) is below the age of 15 and another seventh (14.8%) past the age of retirement. Data suggests that simply due to age of the population, more than a third of the population is not able to fully contribute to the economic growth and earning power of the community. Also, an additional 5.7% of the population is categorized in the pre-retirement age group (60-64) and may be readying for retirement.

An examination of the community's population reveals an increasing senior population. Concerns center on the availability of a younger workforce and the need for appropriate senior housing and services to accommodate pre/post-retirement households. The following construct, Figure 4-4, depicts an age/gender profile of Allen County's population as documented in 2010 against the State of Ohio for the same period.

TABLE 4-4
ALLEN COUNTY 2016 POPULATION BY AGE COHORT & GENDER

Cohort	Male	Percent	Female	Percent	Total	% Total
< 5	3,501	6.5%	3,260	6.2%	6,761	6.4%
5 to 9	3,602	6.7%	3,481	6.6%	7,083	6.7%
10 to 14	3,645	6.8%	3,515	6.7%	7,160	6.7%
15 to 19	4,719	8.8%	3,675	7.0%	8,394	7.9%
20 to 24	4,226	7.9%	3,245	6.2%	7,471	7.0%
25 to 29	3,345	6.2%	2,938	5.6%	6,283	5.9%
30 to 34	3,095	5.8%	3,065	5.8%	6,160	5.8%
35 to 39	3,136	5.8%	2,960	5.6%	6,096	5.7%
40 to 44	3,241	6.0%	3,075	5.8%	6,316	5.9%
45 to 49	3,619	6.7%	3,746	7.1%	7,365	6.9%
50 to 54	4,185	7.8%	3,929	7.5%	8,114	7.6%
55 to 59	3,701	6.9%	3,635	6.9%	7,336	6.9%
60 to 64	3,027	5.6%	3,068	5.8%	6,095	5.7%
65 to 69	2,061	3.8%	2,362	4.5%	4,423	4.2%
70 to 74	1,609	3.0%	1,896	3.6%	3,505	3.3%
75 to 79	1,225	2.3%	1,641	3.1%	2,866	2.7%
80 to 84	950	1.8%	1,482	2.8%	2,432	2.3%
> 85	743	1.4%	1,728	3.3%	2,471	2.3%
Total	**53,630**	**100.0%**	**52,701**	**100.0%**	**106,331**	**100.0%**

ACS 5-Year Estimate, 2016

4.3.4 Race & Ethnic Diversity

The County's population has grown more racially and ethnically diverse during the past decade. Racially, whites comprise the largest percentage of the population at 82.5%. The largest minority group within Allen County is African American, totaling 11.8% of the population. All other minority groups comprise approximately 5.9% of the total County population. Although dispersed across the County, the African American population is primarily concentrated in the City of Lima where it constitutes one-quarter (26.2%) of the City's population. Table 4-5 reveals the extent of racial diversity across Allen County.

FIGURE 4-4: 2010 POPULATION PYRAMID

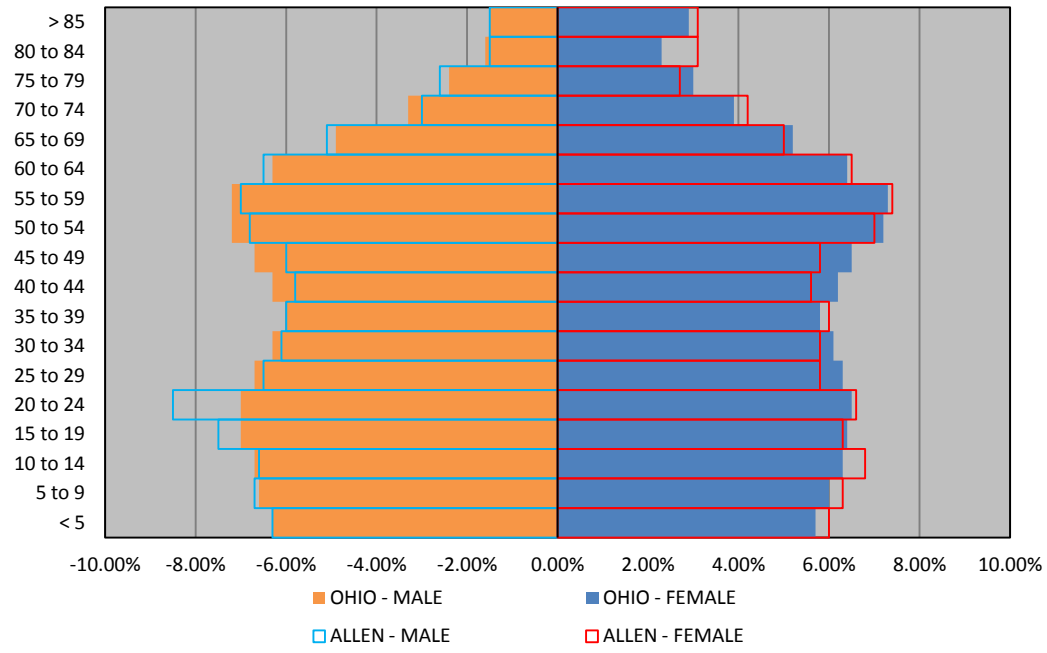


TABLE 4-5
POPULATION BY RACE

Race	Allen	Percent	Ohio	Percent
Total	106,331	100.00%	11,586,941	100.00%
White alone	87,249	82.05%	9,519,506	82.16%
Black or African American alone	12,448	11.71%	1,421,943	12.27%
American Indian or Alaskan Native alone	239	0.22%	21,459	0.19%
Asian alone	759	0.71%	224,520	1.94%
Native Hawaiian or Other Pacific Islander alone	0	0.00%	3,248	0.03%
Some other race alone	703	0.66%	98,088	0.85%
Two or more races	3266	3.07%	298,177	2.57%
Hispanic	2,874	2.70%	400,932	3.46%

ACS 5-Year Estimate, 2016

4.3.5 Educational Attainment

Many factors affect employment rates among adults. None, however, may be as important as educational attainment levels. Higher levels of educational attainment have repeatedly demonstrated higher income earnings regardless of gender. In addition, positions that require higher educational attainment levels tend to correlate to higher job satisfaction. Moreover, individuals with no high school diploma or GED, experience higher rates of unemployment (nearly three times the rate for those that have completed a bachelor degree) and less income when they are employed. Therefore, it is extremely important to support local school initiatives, post-secondary advancement, and continuing educational programs to strengthen the skill sets of the local labor force.

Table 4-6 presents data summarizing the educational attainment levels of the Allen County population aged 25 years or more. This data shows that there are more than 7,400 individuals or 10.7 percent of all individuals 25 years of age or older that have not completed a high school education. This statistic compares favorably against national

attainment levels where high school diplomas fail to be earned by 13.0 percent of the respective populations. However, given that there are a number of very reputable post-secondary schools locally accessible, it is somewhat disappointing that only 12,048 adult residents have completed a 4-year collage and/or master degree programs (17.4%) when compared to State and national data (26.7% and 30.3% respectively).

TABLE 4-6
EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS & OVER

Educational Attainment	White Population		African-American Population		Total Population	
	Persons	Percent	Persons	Percent	Persons	Percent
Less than High School Diploma	5,507	9.2%	1,589	21.0%	7,426	10.7%
High School Graduate / GED	23,701	39.8%	2,670	35.3%	26,925	38.9%
Some college / Associates Degree	19,417	32.6%	2,644	35.0%	22,895	33.0%
Bachelor's degree or higher	10,987	18.4%	658	8.7%	12,048	17.4%
Totals	**59,612**	**100.0%**	**7,561**	**100.0%**	**69,294**	**100.0%**

*ACS 2016 5-Year Estimates, S1501, C15002A & C15002B

4.3.6 Income: Household, Family & Per Capita

Data for the three most widely used indices of personal income, including per capita income; household income and family income are displayed in Table 4-7. The data suggests Allen County income has continued to lag behind that of state and national income trend lines.

As a comparative measure the median household income within Allen County grew at a slower rate between 2011 and 2016 than that of the State of Ohio but faster than that of the United States. The income gap has increased slightly from -9.9% in 2011 to -10.1% in 2016 when comparing median household incomes from Allen County to the State. The gap narrowed when compared to the United States; the gap decreased from -17.9% in 2011 to -17.6% in 2016.

TABLE 4-7
COMPARATIVE INCOME MEASURES

Income: By Type & Year	Allen County	Ohio	United States	Allen County as % of Ohio	Allen County as % of U.S.
2016					
Median Household	$45,575	$50,674	$55,322	89.9%	82.4%
Median Family	$57,101	$64,433	$67,871	88.6%	84.1%
Per Capita	$23,600	$27,800	$29,829	84.9%	79.1%
2011					
Median Household	$43,323	$48,071	$52,762	90.1%	82.1%
Median Family	$55,259	$60,762	$64,293	90.9%	85.9%
Per Capita	$21,878	$25,618	$27,915	85.4%	78.4%

ACS 2011 & 2016 5-Year Estimates

Examining family median income, a similar pattern exists. Median family incomes across the County slipped over the last 5-year period when comparing them to state and national trend lines. Median family income in Allen County slipped to 84.1% of the Nation's median family income in 2016, a decrease of 1.8% when compared to the 2011

level (85.9%). When comparing Allen County's median family income against the State there was a decrease of 2.3% between 2011 (90.9%) and 2016 (88.6%). Per capita income for Allen County in 2016 was $23,600, a jump of 7.9% from 2011 figures. In 2016 Allen County per capita income was 84.9% of that of the State and 79.1% of the national figure.

Table 4-8 provides a detailed breakdown of household income by type and income levels for 2016. Households with incomes less than $15,000 in 2016 totaled 14.9% of all households in Allen County. An examination of family and non-family households provides greater detail. Data suggests that 8.6% of all families and 28.2% of all non-family households earned less than $15,000 in 2016.

TABLE 4-8
INCOME IN 2016 BY ALLEN COUNTY HOUSEHOLD TYPE

Income Range	Household		Families		Non Family Household	
	Number	Percent	Number	Percent	Number	Percent
Less than $10,000	3,344	8.4%	1,300	5.0%	2,259	16.1%
$10,000 - $14,999	2,595	6.5%	936	3.6%	1,698	12.1%
$15,000 - $24,999	5,320	13.3%	2,367	9.1%	3,143	22.4%
$25,000 - $34,999	4,465	11.2%	2,549	9.8%	1,950	13.9%
$35,000 - $49,999	5,658	14.1%	3,797	14.6%	1,964	14.0%
$50,000 - $74,999	8,377	20.9%	6,190	23.8%	1,936	13.8%
$75,000 - $99,999	4,796	12.0%	4,083	15.7%	561	4.0%
$100,000 - $149,999	3,498	8.7%	3,017	11.6%	365	2.6%
$150,000 - $199,999	1,105	2.8%	988	3.8%	70	0.5%
$200,000 or more	881	2.2%	780	3.0%	84	0.6%
Totals	**40,039**	**100.0%**	**26,008**	**100.0%**	**14,031**	**100.0%**

*ACS 2016 5-Year Estimates, S1901

Examination of income by household type reveals that the largest concentration of households and family incomes were found in the $50,000 to $74,999 income bracket with 20.9% and 23.8% respectively; while half (50.6%) of non-family household incomes were concentrated below $25,000.

4.3.7 Poverty Status: Persons & Families below Poverty Level

The 2016 ACS provides information for the number of individuals and families whose incomes fall below the established poverty level. ACS 2016 5-year estimates revealed, 16,228 individuals or 16.1% of all individuals, 6,472 households or 16.2% of all households and 3,022 families or 8.5% of all families were below the established poverty level based on income and household size.

Families with children were more likely to encounter poverty status than those families without children. In fact, of all families suffering poverty conditions, 81.3% had children. For purposes of comparison, data indicates that 14.7% of all households and 11.2% of all families within the State of Ohio were below the established poverty level.

An examination of income data from the 2016 ACS 5-year estimates reveals a decreasing trend in the proportion of individuals and families in poverty. In fact, 3,553 fewer individuals and 889 fewer families were in poverty in 2016 than there were in 2011; representing a decrease of 21.9% and 29.4% respectively. Households with public assistance decreased slightly from 3.5% in 2011 to 3.1% in 2016. For comparison

purposes, the percentage of households receiving public assistance in the State of Ohio in 2016 was 3.2%.

Relevant information on family households and poverty status is presented in Table 4-9. Table 4-10 provides an overview of poverty as a percentage of income for all individuals 18 years of age or older.

TABLE 4-9 2016 POVERTY STATUS BY FAMILY STATUS		
Total Family Types in Allen County		
Families	26,008	100.0%
Married - Related Children	7,164	27.5%
Male Alone - Related Children	1,242	4.8%
Female Alone - Related children	3,981	15.3%
Family - No Children	13,621	52.4%
Impoverished Family Types in Allen County		
Families	3,022	100.0%
Married - Related Children	461	15.2%
Male Alone - Related Children	283	9.4%
Female Alone - Related children	1,712	56.7%
Family - No Children	566	18.7%
*ACS 2016 5-Year Estimates, B17010		

TABLE 4-10 2016 RATIO OF INCOME TO POVERTY LEVEL AMONG INDIVIDUALS		
Poverty Level	**Population**	**Percentage**
50% or Below of Poverty Level	7,008	6.9%
51% to 100% of Poverty Level	9,220	9.2%
101% to 125% of Poverty Level	6,027	6.0%
126% to 150% of Poverty Level	4,994	5.0%
151% to 200% of Poverty Level	10,200	10.1%
200% or More of Poverty Level	63,234	62.8%
*ACS 2016 5-Year Estimates, S1701		

4.3.8 Mobility Limited Population

Census data for 2010 fails to identify the mobility limited populations. Census 2000 provided the information necessary to identify the mobility limited population residing in Allen County. The nature of the mobility-limited populations is divergent based on geography, demographics, and economics. The mobility limited population is targeted in the 2040 LRTP because of the variety in needs due to personal limitations, environmental constraints and/or weather conditions. The mobility limited are also a protected class pursuant to specific federal regulations.

As eluded to in Section 2, there are a number of federal regulations passed over the last 50 years that pose a broad range of alternative transportation service requirements intended to meet the needs of special population groups. For instance, language in Title VI of the Civil Rights Act of 1964 (42 U.S.C. Title VI Section 601) states that “No person shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to, discrimination under any program or activity receiving Federal financial assistance;” while, Section 16(a) of the Urban Mass

Transportation Act (UMTA) of 1964 mandates "special efforts shall be made in the planning and design of mass transportation facilities and services so that the availability to elderly and handicapped persons of mass transportation, which they can effectively utilize, will be assured." Also related is Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112, Title V, Sec. 504, Sept. 26, 87 Stat. 394), prohibited discrimination against people with disabilities and states "No otherwise qualified handicapped individual in the United States… shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive agency."

Nearly 20 years later, the ADA of 1990 identified specific populations who routinely face discrimination in our society. The goal of the ADA was to assure that persons with disabilities have equality of opportunity, a chance to fully participate in society, are able to live independently and can be economically self-sufficient. Executive Order 12898 prevents the denial of, or reduction in, benefits to minority and low-income populations, and the avoidance of adverse impacts on minority or low-income populations. Taken collectively these federal regulations construct a special protected population that is often referred to as the mobility limited or the transportationally disadvantaged.

Today, it is recognized that those without ready access to a private motor vehicle or public transportation services, for any reason, are living in relative isolation, both social and economic. Given such, it has become widely accepted that certain segments of the population are more likely to need and make use of public transportation services than the general public as a whole. In general, persons more likely to need and utilize public transit services are those who demonstrate one or more of the following characteristics: over 65 years of age; earn below the local average income; suffer from a transportation disability; are of a minority status; and/or, have a private automobile less readily available to them. Members of these populations constitute the community's mobility limited.

This 2040 LRTP recognizes the mobility limited populations in Allen County at the political subdivision and census tract levels. The populations are difficult to quantify in absolute terms because many suffer from multiple afflictions/characteristics and some of these populations tend to be mobile with respect to residency. Table 4-11 identifies the extent of the mobility limited populations by political subdivisions as documented in the 2000 Census. Pursuant to the requirements of Executive Order 12898, this Plan considered: (1) the geographic/socio-economic characteristics of the mobility limited populations; (2) variances in the mean travel time to work; and, (3) accessibility of the mobility limited to public transportation services, the service area(s) provided, and the timeliness of public transportation services. A detailed assessment of these factors is contained in Appendix C of this report.

TABLE 4-11
2016 DEMOGRAPHIC SUMMARY OF POLITICAL SUBDIVISIONS

Political Subdivision	Population	Total Minority	Total Elderly 65+	Total Mobility Impaired[2]	Households with No Cars Available	Persons Below Poverty Level
State of Ohio	11,586,941	2,067,435 17.8%	1,796,337 15.5%	816,211 7.6%	387,532 8.4%	1,732,839 15.0%
Allen County	104,664	17,415 16.6%	16,636 15.9%	7,366 7.7%	2,983 7.5%	16,228 16.1%
Amanda Township	1,833	94 5.1%	295 16.1%	99 5.5%	16 2.2%	100 5.5%
American Township[1]	12,268	1,618 13.2%	2,756 22.5%	937 8.1%	280 4.8%	1,291 10.7%
Auglaize Township[1]	2,300	132 5.7%	269 11.7%	96 4.4%	31 3.4%	215 9.4%
Bath Township	9,616	768 8.0%	1,667 17.3%	528 5.8%	130 3.6%	1,171 12.4%
Jackson Township[1]	2,589	12 0.5%	491 19.0%	141 5.7%	0 0.0%	176 6.9%
Lima City	37,836	12,430 32.9%	4,228 11.2%	3,005 9.1%	2,065 14.7%	9,992 28.5%
Marion Township[1]	2,854	144 5.0%	463 16.2%	129 4.8%	6 0.2%	130 4.6%
Monroe Township[1]	1,937	8 0.4%	257 13.3%	158 8.6%	13 1.5%	184 9.5%
Perry Township	3,446	200 5.8%	664 19.3%	377 11.6%	86 6.2%	281 8.3%
Richland Township[1]	1,548	13 0.8%	301 19.4%	107 7.5%	0 0.0%	79 5.4%
Shawnee Township	12,243	1,271 10.4%	2,438 19.9%	799 6.9%	123 2.6%	996 8.2%
Spencer Township[1]	699	41 5.9%	128 18.3%	36 5.3%	20 1.7%	37 5.3%
Sugar Creek Township	1,245	0 0.0%	211 16.9%	32 2.8%	0 0.0%	62 5.0%
Beaverdam	466	4 0.9%	61 13.1%	26 6.5%	2 1.0%	68 14.6%
Bluffton	4,376	202 4.6%	904 20.7%	242 6.0%	78 4.6%	236 6.0%
Cairo	470	7 1.5%	96 20.4%	67 15.1%	3 1.6%	46 10.0%
Delphos	7,216	436 6.0%	1,282 17.8%	604 9.1%	151 5.1%	663 9.4%
Elida	1,935	142 7.3%	246 12.7%	73 4.0%	2 0.3%	35 1.8%
Harrod	425	11 2.6%	47 11.1%	13 3.3%	4 2.6%	76 17.9%
Lafayette	384	0 0.0%	56 14.6%	33 8.8%	5 3.4%	65 17.2%
Spencerville	2,339	71 3.0%	341 14.6%	169 8.2%	20 2.2%	557 24.4%

[1]Township excludes demographics of incorporated villages
[2]Total Mobility Impaired percentages based against non-institutionalized population 16 years and older.
ACS 2016 5-Year Estimates

4.3.9 Population Projections

In order to address future population demands, data was assessed at different levels and a regressive analysis was applied. Demographic data was obtained from the 1970 through 2010 Census data. Population projections were provided by ODSA and Woods & Poole, Inc. through the year 2040.

Although there is some variance, the projections identified in Figure 4-5 agree that the population is slowly declining with periods where decline slows. ODSA projections have been accepted as baseline data as it is recognized as the government population baseline. The Woods & Poole projection indicates a slow decline, with more rapid decline after 2030. Table 4-12 reveals the various population projections from ODSA by interim periods.

FIGURE 4-5: POPULATION PROJECTIONS THROUGH 2040

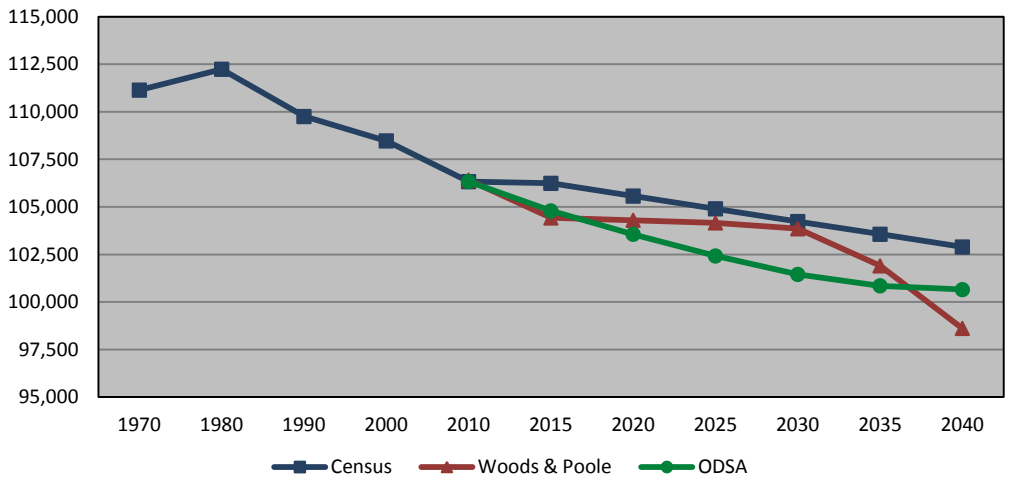


TABLE 4-12
ALLEN COUNTY POPULATION PROJECTIONS BY PERIOD

	2015	2020	2025	2030	2035	2040
Census	106,240	105,571	104,901	104,231	103,562	102,892
Woods & Poole	104,420	104,300	104,160	103,850	101,900	98,610
ODSA	104,790	103,560	102,420	101,450	100,850	100,650

https://development.ohio.gov/files/research/P6090.pdf

Based on data presented earlier, projections suggest an aging population, more female in orientation and smaller in household size giving rise to new demands placed on the housing and public service sectors, including public transportation. Projections for the individual political subdivisions are not readily available. However, based on existing trends and available infrastructure, internal migration patterns are expected to further growth in the unincorporated areas of the County at the expense of the City of Lima and area villages.

4.4 Labor Force Profile & Trends

The total labor force in Allen County, reflecting those 16 years of age and over, numbered 83,065 persons according to the ACS 2016 5-year estimates; the labor force participation rate was 62.7% indicating about 52,0074 individuals who are active in the workforce. In Allen County,

as documented by the ACS 2016 5-year estimates, the unemployment rate fell to 7.6% which represents a low for this decade.

A perspective on the labor force can be gained by examining the number of employed persons by type of occupation. Table 4-13 uses ACS 2016 5-year estimates to identify the dominant occupations in the county. Data contained in Table 4-13 reflects Allen County residents 16 years of age or older by sector of employment.

TABLE 4-13
2016 ALLEN COUNTY EMPLOYMENT BY SECTOR

Sector	NAICS	Employees	Percent
Agricultural, Forestry, Fishing, Hunting, and Mining	11-21	396	0.8%
Construction	23	2,536	5.3%
Manufacturing	31-33	10,310	21.4%
Wholesale Trade	42	1,439	3.0%
Retail Trade	44-45	5,054	10.5%
Transportation & Warehousing, and Utilities	48-49, 22	1,931	4.0%
Information	51	512	1.1%
Finance & Insurance, Real Estate Rental & Leasing	52-53	2,110	4.4%
Professional, Scientific & Technical Services, Management, and Administrative and Waste Management Services	54-56	3,053	6.3%
Education Services, and Health Care & Social Assistance	61-62	11,834	24.6%
Arts, Entertainment & Recreation, and Accommodation & Food Services	71-72	4,685	9.7%
Non-Public Other Services	81	2,529	5.3%
Public Administration	92	1,728	3.6%
Total		**48,117**	**100.0%**

*ACS 2016 5-Year Estimates, DP03

In Allen County, the employment-population ratio, the proportion of the population 16 years of age and over in the workforce, has slightly decreased over the last 5 years, down from 62.9% in 2011 to 62.7% in 2016. This trend can be explained by the increasing number of baby boomers leaving the workforce. In comparison, the rate for the State of Ohio has decreased minimally from 64.6% in 2011 to 63.3% in 2016.

The unemployment rates over the past 16 years reflect the impact of major employers relocating or instituting major cutbacks in response to market events or economic trends. Figure 4-6 suggests that Allen County historically experienced higher unemployment rates than that experienced by the State of Ohio or the nation as a whole. After severe stress from 2008, Allen County, the State of Ohio, and the nation as a whole have been recovering from the recession, and unemployment rates are finally back to rates seen in the early to mid-2000s.

The County is currently experiencing growth in the manufacturing, wholesale trade, transportation & warehousing, finance & real estate and government sectors, while the service sector remains the largest sector in the county (29,402). While the number of Allen County residents participating in the workforce has declined the actual workforce active in Allen County despite residency has been increasing since 1980. Table 4-14 reveals employment of 48,693 in 1980, with jobs increasing to 64,978 in 2016, an increase of 33.4%. The number of business establishments has also increased over the 1980 through 2016 period, increasing from 2,378 firms in 1980 to 3,938 in 2016. Over the 36-year period, there was a 65.6% increase in firms

employing workers in Allen County. Figures 4-7 and 4-8 reveal change by sector over the 1980 through 2016 period.

FIGURE 4-6: UNEMPLOYMENT RATES 2000-2016

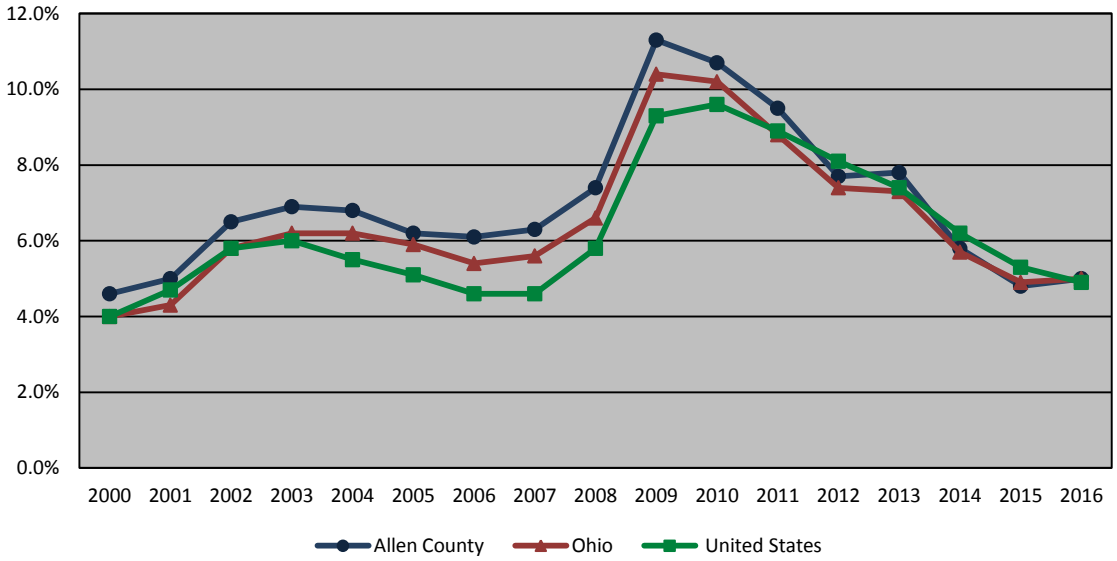


TABLE 4-14
EMPLOYMENT & BUSINESS ESTABLISHMENTS IN ALLEN COUNTY

Type of Business	1980		1990		2010		2016	
	Workers	Firms	Workers	Firms	Workers	Firms	Workers	Firms
Manufacturing	16,385	142	13,134	161	8,495	145	9,101	178
Service	9,027	664	14,042	907	30,505	984	29,402	1,517
Retail Trade	8,792	716	10,624	781	7,809	454	7,786	562
Wholesale Trade	2,823	207	3,669	213	2,847	139	3,598	155
Construction	2,393	243	1,713	252	3,065	239	2,122	309
Finance, Insurance & Real Estate	1,844	213	1,720	222	2,043	243	2,109	339
Transportation & Warehousing	1,737	85	1,928	102	1,912	102	2,003	128
Agricultural Services, Forestry & Fishing	90	18	200	36	300	13	184	58
Mining & Utilities	83	10	55	7	408	9	232	11
Government	5,337	--	6,239	--	3,511	83	4,347	140
Others	182	80	79	80	2,907	233	4,094	541
Total	**48,693**	**2,378**	**53,403**	**2,761**	**63,802**	**2,644**	**64,978**	**3,938**

As depicted in Figures 4-7 and 4-8, the most significant change in the last decade in terms of employment has been a shift from the manufacturing sector to the service sector. Local employment in the manufacturing sector decreased from 16,385 in 1980 to 8,495 in 2010, a reduction of nearly half (-48.2%), although recent numbers show a reemergence of growth in this sector with 9,101 employees recorded in 2016, an increase of 7.1% over the 2010 numbers. Even though persons employed within the service sector decreased slightly from the 2010 high the current rate of employment in the sector is 225.7% between 1980 and 2016; while the number of service related establishments more than doubled over the same period.

FIGURE 4-7: ESTABLISHMENTS IN ALLEN COUNTY

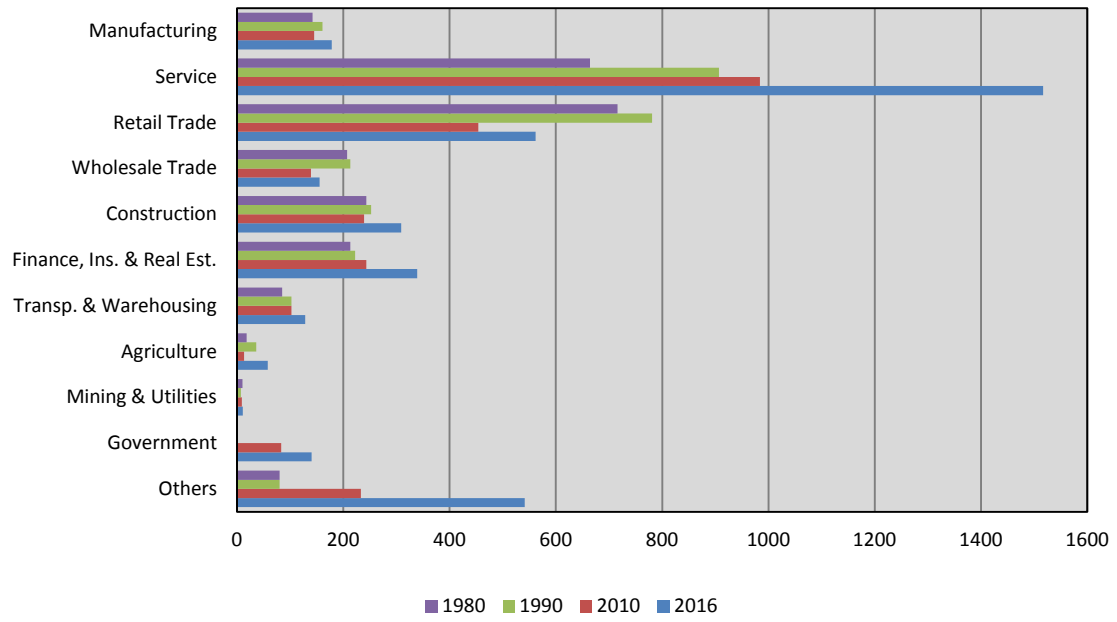


FIGURE 4-8: EMPLOYEES IN ALLEN COUNTY

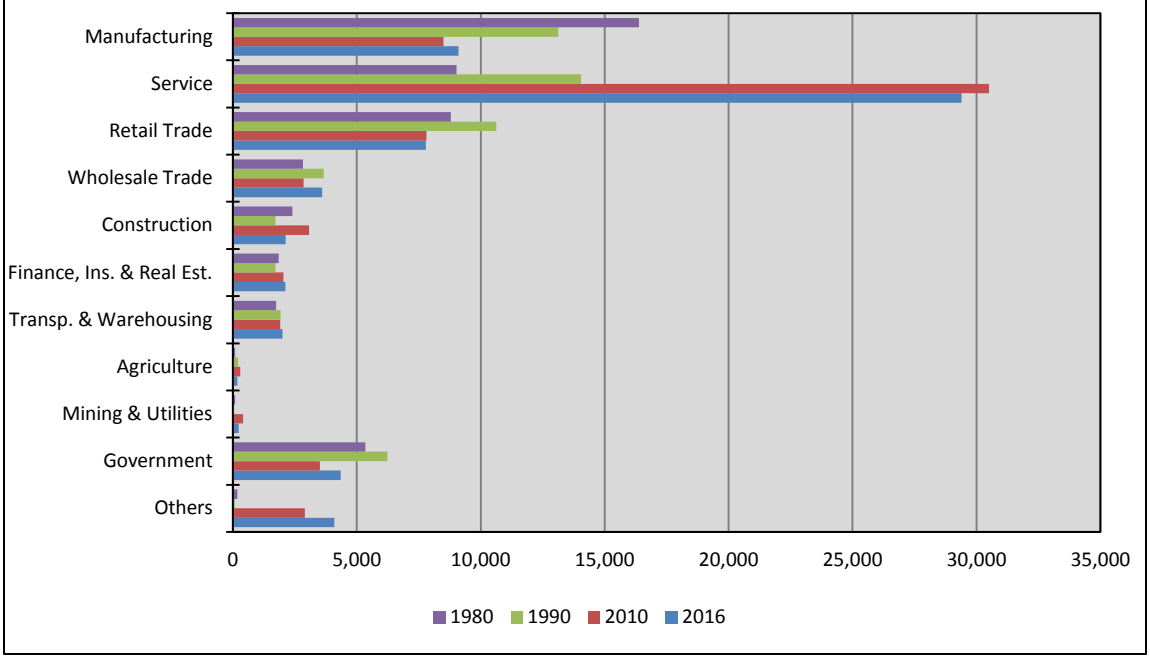


Table 4-15 establishes employment projections through 2040. Employment data for base year 2016 was developed using local data sources. This forecast was by industry type (manufacturing, retail, service, etc.). Validation was achieved by comparing the results of a QCEW based geocoding exercise against the County Employment Directory along with local data sources that include employers by address, employees and NAICS codes. Using regression analysis, employment was extrapolated to the year 2040. Data suggest a continuing transition to the service sector along with a gradual increases in the presence of retail and construction services.

TABLE 4-15 2040 EMPLOYMENT BY SECTOR			
	2020	**2030**	**2040**
Manufacturing	9,101	9,101	9,101
Service	33,992	40,301	46,610
Retail Trade	7,658	7,137	6,616
Wholesale Trade	3,378	3,446	3,515
Construction	2,543	2,647	2,752
Finance, Insurance & Real Estate	2,122	2,213	2,305
Transportation & Warehousing	2,012	2,067	2,123

4.5 Land Use: Patterns & Conversion

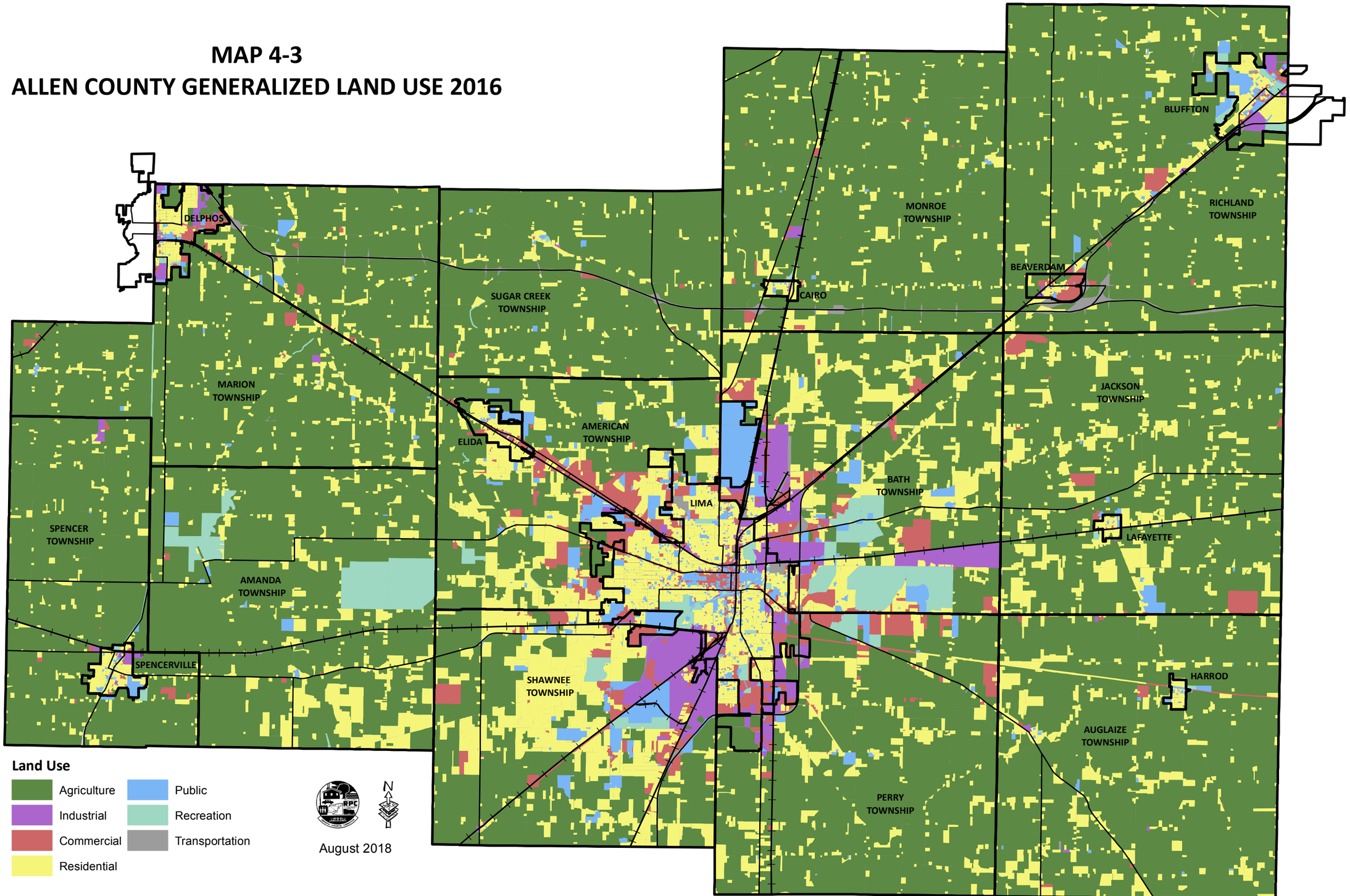
The use of land is dependent upon, or the result of, particular attributes including its size, shape and its relative location. The use of land is affected by a parcel's access or proximity to utilities, roadways, waterways, services and markets. Environmental attributes and constraints, such as the presence of minerals, topography, scenic attributes, flooding, poor soils, etc., can also influence the use of land.

An analysis of the manner and extent to which land is used or employed over a period of time results in distinct patterns of use. General classifications of economic uses typically reflect agricultural, commercial, industrial, residential, recreational, transportation, and public/quasi-public land use patterns. Table 4-16 identifies the extent of specific land use activities by type and acreage. Map 4-3 identifies general patterns of land use in Allen County.

TABLE 4-16 2016 LAND USE BY TYPE, ACRES & PARCEL					
Land Use Type	**Total Acres**	**Percent of Total Area**	**Total Parcels**	**Percent Total Parcels**	**Mean Parcel Size**
Agricultural Uses	191,310	73.5	4,719	8.9	40.5
Industrial Uses	4,698	1.8	549	1.0	8.6
Commercial Uses	7,534	2.9	4,218	8.0	1.8
Residential Uses	34,779	13.4	40,925	77.2	0.8
Public/Quasi Public Uses	17,187	6.6	2,505	4.7	6.8
Recreational Uses	4,788	1.8	102	0.2	46.9
Note: Land use, acreage and parcel data is reflective of 2016 data. Such data incorporates acreage consumed by land supporting transportation activities, some overlap also exists between industrial and utility acreage and between agricultural and residential due to residential and farming uses occurring on the same parcels.					

Over the last 40 years, land use conversion in Allen County has largely been confined to the Lima Urbanized Area. However, low-density residential strip developments are evident throughout the County. Major residential subdivision developments have occurred mainly within American, Bath, and Shawnee townships and more recently the Villages of Bluffton and Elida. The FIRE industries, coupled with Government, have remained anchors within Central Business Districts of Lima, Delphos, Bluffton, Spencerville, and Elida. Commercial and service activities, although once exclusively limited to urban confines have spread to suburban areas. Clustered retail activities have migrated almost exclusively to two of the region's shopping centers located on the fringe of municipal utility service areas. Aging shopping centers more centrally located are currently in a state of decline and vacancy. And, although manufacturing activities have largely

MAP 4-3
ALLEN COUNTY GENERALIZED LAND USE 2016



been limited to older, more developed tracts within or adjacent to the City of Lima, newer more modern industrial sites have been developed with ready access to IR-75 and along the community's state routes.

Furthered by easy access, availability of utilities and developable land, urban sprawl has slowly etched its presence across most of Allen County. Residential land use has been responsible for the bulk of rural to urban conversion. Between 1970 and 1999, platted residential subdivision developments consumed 1,693 acres outside of municipal boundaries. Such developments provided land for 3,945 residential units, using an average 0.43 acres per lot. During the same period 1,975.7 acres of undeveloped property was consumed for residential using the minor subdivision process. This process facilitates uncontrolled "shot gun" type development provided 816 parcels and resulted in an average residential parcel size of 2.39 acres.

When reviewing data for the 2000 through 2012 period, platted residential subdivision developments consumed 347.4 acres outside of municipal boundaries. Such developments provided land for 685 residential lots, using an average of 0.51 acres per lot. Over the same time period 1,887 acres of undeveloped property was consumed for residential use using the minor subdivision process. Another 795 parcels were created at an average size of 2.37 acres each.

A more recent analysis of land use change across all of Allen County was conducted over the 2012 through 2016 period. The 4-year analysis found industrial uses dropped 177 acres while commercial dropped 1,178 acres. The total acreage dedicated to residential uses also dropped 9.2% and now comprise only 34,779 acres, due in fact to commodity prices farmland increased 2.3%. Table 4-17 identifies components of change over the study period.

TABLE 4-17
ALLEN COUNTY LAND USE CHANGE 2012-2016

Year	Land Use by Type and Acreage			
	Residential	Commercial	Industrial	Agricultural
2012	38,286	8,712	4,875	187,079
2016	34,779	7,534	4,698	191,310
Net Gain/Loss	**-3,507**	**-1,178**	**-177**	**+4,231**

The relationship between the process of suburbanization, urban decentralization and land use conversion is complicated at best. Although regulatory controls, such as zoning and subdivision codes and policies, developed to control access management and infrastructure investments have the means to control such sprawl, sprawl continues largely unabated due to fragmented legislative control and disjointed or nonexistent land use policies.

For planning purposes it was necessary to develop existing and future land use by type. Existing land use was documented using GIS applications and parcel level data made available by the Allen County Auditor's Office. Land use codes used by the County Auditor's GIS system reflected current and historical development land use patterns by acreage and square footage. Data and subsequent analyses reflect CY 2016 data as baseline. Future land use activities were projected using linear regression techniques from historical established baseline data over the 2040 planning horizon year. To assess the transportation implications of new development, the various projections were allocated within the Travel Demand Model area which reflects all of Allen County inclusive of those portions of Delphos and Bluffton located in Van Wert and Hancock counties. Tables 4-18 through 4-20 reveal future demands by square footage for their respective land use type. Square footage requirements are then assessed against historical land

use consumption patterns for each of the various land uses to develop estimates of the acreage necessary for future developments. Map 4-4 depicts the projected generalized land use in 2040 within the model area.

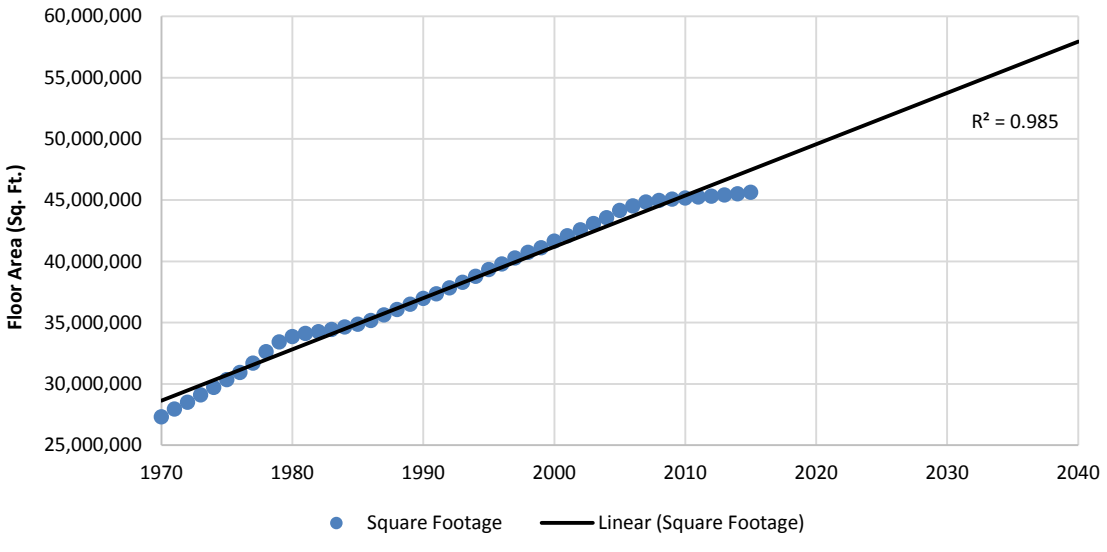
Residential growth was allocated on a dwelling unit basis. Dwelling units were assigned based on several factors including: (1) perceived demand based on current/future residential subdivision development/plans; (2) the availability (or planned extension) of public water and public sanitary sewer services; (3) availability of vacant, residentially zoned acreage; (4) the absence of major physical or environmental constraints; (5) condition of the housing stock; and, (6) the aesthetics of the environment for development or redevelopment. Growth was balanced against countywide population estimates established by ODSA and local zoning as tests for reasonableness.

Residential land use includes single family through multi-family dwellings. Included in this classification would be apartments, condominiums, duplexes, trailer parks, as well as any associated secondary uses such as parking, storage, open space/recreational areas and/or stormwater detention facilities. Over the planning horizon, square footage is expected to increase 12.8 million square feet or 28.2%. Based on established residential development patterns, residential land use within the model area will consume an additional 10,316 acres by 2040 if current trends continue. As there are currently 4,244 acres of vacant residential land, the future 2040 Land Use Plan will reflect 6,072 additional acres of primarily open space and farmland consumed in residential use, an increase of 20.1% over the planning period. Table 4-18 summarizes the growth in square footage over the period. Figure 4-9 depicts the historical growth in residential development since 1970 with the projected demand depicted through 2040. Note the confidence level of the linear regression analysis.

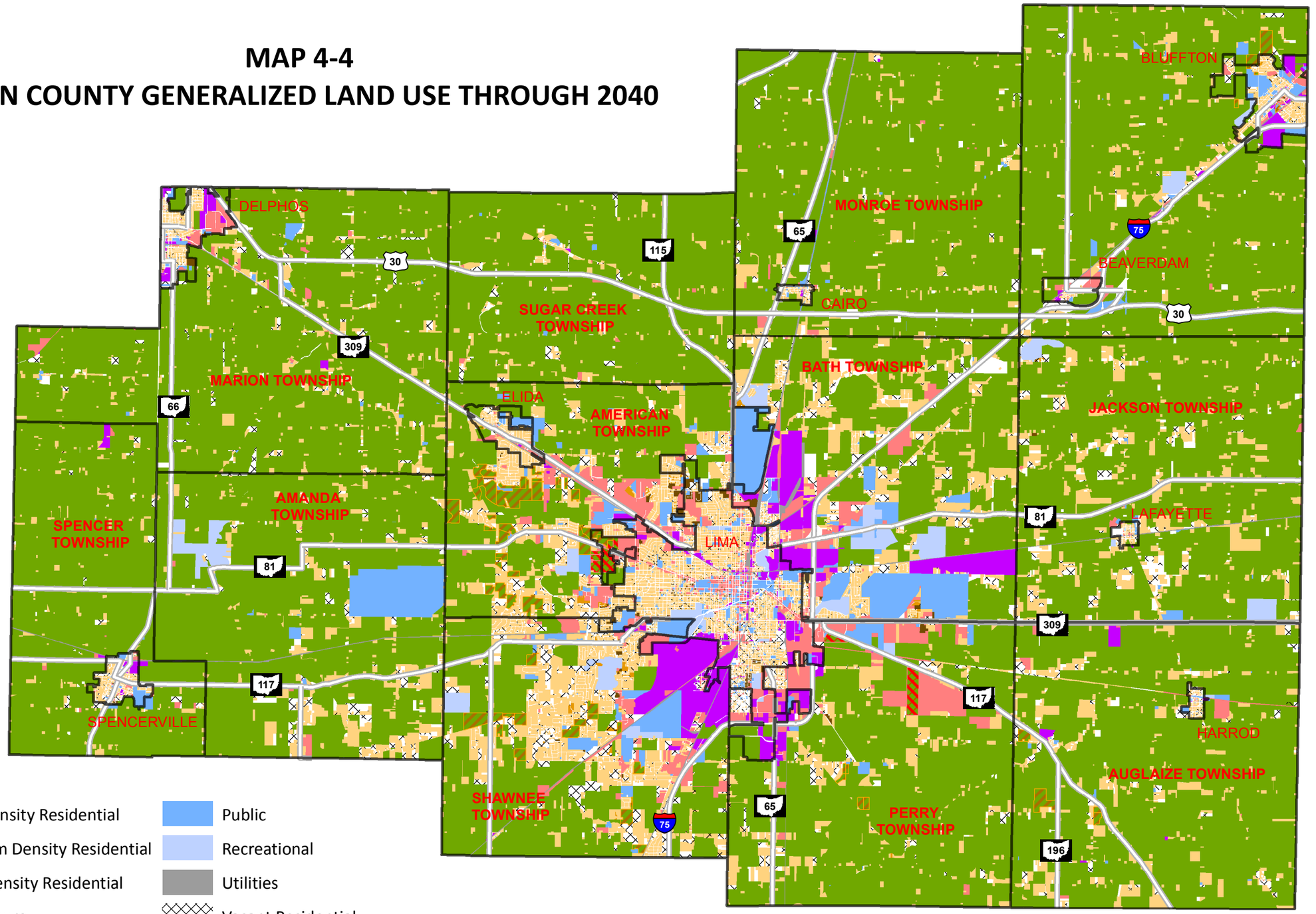
TABLE 4-18
FUTURE LAND USE TREND FOR RESIDENTIAL

Year	Square Footage	Acres
2015	45,639,133	30,145
2020	49,563,288	33,148
2025	51,655,519	34,976
2030	53,747,750	36,804
2035	55,839,980	38,633
2040	57,932,211	40,461
Change	**12,760,432**	**10,316**
% Change	**28.2%**	**34.2%**

FIGURE 4-9: RESIDENTIAL LAND USE PROJECTIONS THRU 2040



MAP 4-4
ALLEN COUNTY GENERALIZED LAND USE THROUGH 2040



Land Use

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Agriculture
- Commercial
- Industrial
- Public
- Recreational
- Utilities
- Vacant Residential
- Additional Residential
- Additional Commercial

0 2.5 5 10 Miles

N

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Nonresidential land use is typically disaggregated into commercial and industrial land use types. Commercial represents those activities related to services and retail activities. However, as services are the regions fastest growing sector of the economy, this subcategory of the classification is addressed and projected separately. The Manufacturing classification represents fabrication and wholesaling activities. The acreage consumption of non-residential activities necessarily reflects the relative demands of showrooms, offices and floor space as well as parking, deliveries and inventory.

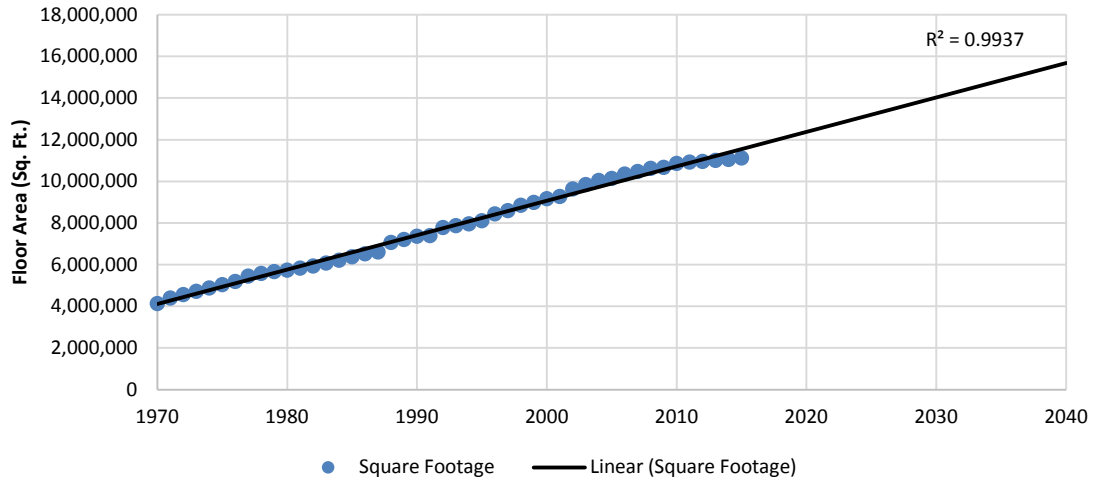
Non-residential land use was allocated by sector based on: (1) perceived demand based on current/future commercial/industrial subdivision development/plans; (2) the availability of vacant, appropriately zoned acreage; (3) existing or proposed arterial roadways; (4) existing/proposed land use plans; (5) the absence of major physical or environmental constraints; and, (6) the availability (or planned extension) of public water and public sanitary sewer services.

Current activities occupy just slightly more than 12.3 million square feet and reflect a diverse range of wholesale and retail trade and other commercial activities. Typical economic activities in this sector include such economic pursuits as supermarkets, discount retail, junior department stores, neighborhood shopping centers, regional shopping centers, auto sales and services, theaters, bowling alleys, and other commercial activities. Current estimates to support an additional 4.6 million square feet of development by 2040 will require an additional 2,040 acres of land (Table 4-19). There are already some 1,100 acres of land identified as vacant commercial. However, locational decisions for such development will vary by use; most is expected to locate on roadways identified on the Federal Functional Classification System. Care was taken to use existing land with supporting infrastructure rather than supporting further sprawl and increased vehicle miles of travel (VMT). Figure 4-10 depicts historical growth with respect to the projected demand over the 2040 period.

TABLE 4-19
FUTURE LAND USE TREND FOR COMMERCIAL

Year	Square Footage	Acres
2015	11,108,358	4,772
2020	11,711,177	5,388
2025	11,876,464	5,744
2030	12,041,750	6,100
2035	12,207,036	6,456
2040	12,372,323	6,812
Change	**4,569,692**	**2,040**
% Change	**41.1%**	**42.7%**

FIGURE 4-10: COMMERCIAL LAND USE PROJECTIONS THRU 2040

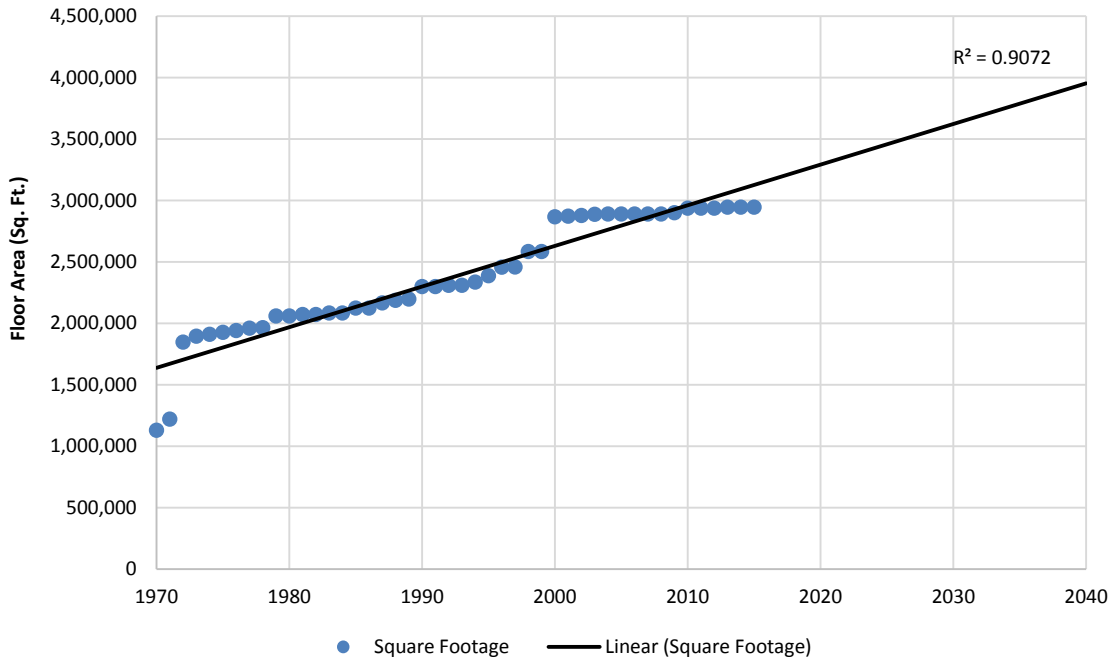


Industrial land use activities include foundries and heavy manufacturing, medium manufacturing and light assembly, industrial warehouses, industrial truck terminals fabricating facilities, and other supporting activities. Within the model area, 1,955 acres support more than 2.9 million square feet of industrial activities. Recognizing future employment trends, but cognizant of the industrial base and the historical consumption of land for such uses, projections estimate the need for an additional 524 acres. That being said, 788 acres of industrial land is currently sitting vacant and idle. Although some acres of this acreage is currently engaged in open space and agriculture, its proximity to existing infrastructure and active manufacturing sites support this allocation of land. Table 4-20 reveals a demand for land exceeding 40%; Figure 4-11 depicts the estimated growth.

TABLE 4-20
FUTURE LAND USE TREND FOR INDUSTRIAL

Year	Square Footage	Acres
2015	2,945,476	1,955
2020	3,158,855	2,151
2025	3,191,932	2,233
2030	3,225,008	2,316
2035	3,258,084	2,398
2040	3,291,160	2,480
Change	**1,007,211**	**524**
% Change	**34.2%**	**26.8%**

FIGURE 4-11: INDUSTRIAL LAND USE PROJECTIONS THRU 2040



4.6 Vehicle Registrations & Vehicle Miles of Travel

Motor vehicle registrations in Allen County indicate a stagnant motor vehicle registration rate from 112,569 vehicles in 1995 to 112,378 vehicles in 2016. However, after a peak of 122,177 registrations in 2003, there was a rapid decline with the lowest registrations in 2009 of 105,639 (Table 4-21). Registrations have gradually increased since then.

The total number of trips per day made by each household increased dramatically over the past four decades. This is mainly due to an increase in the number of vehicles per household coupled with other factors such as an increase in the number of individuals working within a household, and the suburbanization of employment. Based on National Transportation Survey statistics, VMT is increasing at an accelerated rate (Table 4-22).

TABLE 4-21
MOTOR VEHICLE REGISTRATIONS ALLEN COUNTY 1995-2016

Year	Passenger Cars	Commercial	Non-Commercial	Others	Total
1995	77,058	9,715	14,360	11,436	112,569
1996	77,867	10,199	14,890	11,387	114,343
1997	77,865	10,777	15,307	11,094	115,043
1998	78,620	11,481	15,842	11,670	117,613
1999	79,379	11,563	16,720	11,841	119,503
2000	78,640	11,975	18,303*	11,417*	120,335
2001	79,384	10,728	23,998	5,733	119,843
2002	79,481	11,500	23,764	5,992	120,737
2003	79,645	12,026	24,534	5,972	122,177
2004	78,938	13,020	24,266	5,607	121,831
2005	77,352	12,759	24,066	5,865	120,042
2006	76,928	12,752	23,967	5,933	119,580
2007	75,318	12,391	23,572	6,093	117,374
2008	74,401	12,309	22,028	6,422	115,160
2009	68,342	9,896	21,153	6,248	105,639
2010	69,129	10,983	21,744	6,665	108,521
2011	68,877	10,953	21,849	6,660	108,339
2012	69,508	10,906	21,981	6,688	109,083
2013	70,375	10,733	22,315	6,777	110,200
2014	70,366	10,708	22,632	6,692	110,398
2015	70,830	10,646	22,961	6,704	111,141
2016	71,499	10,663	23,361	6,855	112,378

Source: Ohio Bureau of Motor Vehicle Registrations
* - Estimated

TABLE 4-22
TRAVEL SURVEY DATA (IN MILLIONS)

Type	1969[1]	1977[1]	1983[1]	1990[1]	1995[1]	2001[2]	2009[2]	% Change 1969-2009
Household Vehicle Trips	87,284	108,826	126,911	191,682	229,745	233,040	233,849	167.9%
Household Vehicle Miles of Travel	775,940	907,603	1,002,519	1,700,087	2,068,433	2,274,797	2,245,112	189.3%
Person Trips	145,146	211,769	224,459	300,997	378,930	384,484	392,023	170.1%
Person Miles of Travel	1,404,137	1,879,215	1,947,481	2,792,451	3,411,451	3,783,775	3,732,791	165.8%

4.7 Implications

Over the course of the last several decades, changes in the public's general travel behavior have occurred. Such change is not merely the result of shifting residential and commercial centers, but fundamental social and economic change. Decentralization, accelerated growth in the rural areas, an increase in the labor force, and increasing vehicle ownership, has resulted in more VMT and trips to more dispersed sites resulting in changes to the overall efficiency of the transportation system. Change has occurred so fast that transportation infrastructure has not been able to continue to keep pace with the rate of changes. Moreover, state and local policy makers must make decisions with respect to curbing urban sprawl if the transportation system is expected to function properly.

SECTION 5
TRANSPORTATION SYSTEM PROFILE

The local transportation system has evolved over an extended period of time with the basic purpose of providing a means to accommodate local travel demands. The development of the system has been dependent upon local conditions, both site and situation, and available technologies. To a large degree the historical development and current accessibility of available transportation facilities and/or services established the foundation and skeleton of the region's urban and industrial development.

The development and evolution of the region's transportation system, its modes, and technological advances, have been embraced and celebrated locally.[11] Local residents understand the historical consequences of the various modes to the region's urban morphology, including the construction of Miami-Erie Canal;[12] the evolution of the region's main line railroads[13] and sighting of the Lima Locomotive Works facility;[14] the development of the electric trolley's, the inter-urban lines, and later public transit services;[15] the building of US 30 and later IR 75; and, finally the development of the Allen County Airport.[16] Recent studies focus on developing the infrastructure necessary to support the community's existing economic base and the capacity to provide additional development opportunities. Freight constraints and the need for at-grade rail separations, possibilities of intermodal freight facilities between rail and truck, and high-speed rail, have remained topics of local discussions.

Today, local residents and community leaders recognize and understand transportation's role in the region. They are aware that transportation facilities and related services are dynamic in nature, fluctuating with population and associated development patterns, roadway capacity, and changes in technologies. Their understanding of the system's historical underpinnings allows them to consider the safety and efficiency of the existing system and the needs for future development. They are also very much aware of the transportation system's economic impact on the region and respect the need to maintain the delicate fiscal and environmental balance exacerbated by urban sprawl and unabated VMT.

5.1 Systems Overview

This section offers a profile of the existing transportation system by component, including the highway system, transit/paratransit system, rail system, roadway freight system, bicycle/pedestrian/trail system, and aviation facilities. The subsections highlighting the various transportation modes also address any actions being taken by the MPO/ACRTA or other appropriate agency as they pertain to the federally mandated regulatory requirements presented in Section 2. This overview is offered in order to serve as reference for pending policy and programming alternatives discussion.

[11] An industrial development site in Lima was named the Liberty Commons Industrial Park in recognition of the Liberty Truck, built locally and first deployed in Europe during World War I. Canal Days festivals are celebrated annually in the City of Delphos and Village of Spencerville annually, recognize the historical significance of canal development across the region. The Heritage Day Festival celebrates the history of vintage automobile technologies. Placards have been placed across Northwest Ohio identifying the path of the Lincoln Highway (Old US 30) as a historic Highway of National Significance.

[12] The construction of the Miami-Erie Canal was completed in 1849. The canal facilitated transportation of persons and freight between Cincinnati and Toledo. In Allen County, the canal fostered the development of the City of Delphos (1834) and the Village of Spencerville (1844).

[13] The historical development of the region's railroad system began with the establishment of several major railroads including the Baltimore & Ohio (1827), the Erie Railroad (1832), the Chesapeake & Ohio (1836) and the Pennsylvania Railroad (1846).

[14] The Lima Locomotive Works was a major employer in the City of Lima employing some 4,300 workers through the 1940s. The facility operated under various names between 1873 and 1951 and played a major role in the region's industrial development. The facility was the world's third largest producer of steam locomotives. The site was situated at a central hub in the national railroad system.

[15] Lima's electric trolley service began operation on July 4, 1887, less than three years after being introduced in Cleveland, Ohio (1884). The inter-urban lines operated between 1902 and 1937 and provided easy access from Lima to such regional centers as Dayton, Toledo and Ft. Wayne. Private transit services in the City of Lima were begun in 1938. The ACRTA introduced public transportation in 1976.

[16] The first regularly scheduled air service began in 1929. The present Allen County Airport was dedicated in 1962.

5.1.1 Highway System

The highway system which services the Allen County community is characteristic of small metropolitan areas in the United States. The highway system is comprised of interstate, arterials, collectors, and local roads. The administration of these roads is a governmental function, responsibility for which is delegated, in whole or in part, to appropriate agencies of the federal government, state government, or local governmental units. The state government occupies a key position in the development of highway systems in the United States. Federal-aid programs are undertaken at the option of the individual states which are responsible for the planning, design, construction, operation, and maintenance of routes constructed with federal participation, subject to review and approval by FHWA. The County Engineer is responsible for the maintenance/repair of pavement and bridges on the County Highway System and serves as the engineer to township trustees for the maintenance, widening, and repair of township roads and bridges. In the State of Ohio, the municipalities are also responsible for the roadways of the state system which pass within their corporation limits. Non-State local roadways that are not within the municipal boundaries are maintained by county or township governmental units.

The IR 75 corridor is a major north-south interstate that passes through Allen County. To the north, IR 75 links the community to cities such as Toledo and Detroit while to the south Dayton, Lexington, Atlanta, and Miami can all be directly reached via IR 75. Another major roadway located just north of the City of Lima is US 30. This east-west route links the Lima Urbanized Area with Chicago to the west and Pittsburgh and Philadelphia to the east. In addition to IR 75 and US 30, Allen County is serviced by five major state routes: SR 309, SR 117, SR 81, SR 66, and SR 65. The aforementioned highway system supplies a solid network for the movement of goods and people within the region.

In an attempt to discuss overall travel patterns within the region, Maps 5-1 and 5-2 are presented to illustrate the functional classification of the Lima Urbanized Area, Delphos Urban Area, and Village of Bluffton roadways. Major roadways are classified according to their function and usage, including (and in descending order of magnitude) interstate, freeway, principal arterial, minor arterial, major collector, minor collector and local streets. According to figures obtained from ODOT in 2016, total roadway system mileage within Allen County entailed 1,327.0 miles, of which 23.2 miles are classified as interstate mileage. Arterial roadways total 103.0 miles and account for 7.8% of total system mileage. Approximately two-thirds (68.6%) of the roadway system (910.5 miles) is classified as local in nature, and 59.5% of total system mileage classified as rural (789.5 miles). According to 2016 estimates of daily VMT, total system mileage exceeds 3.2 million miles per day in Allen County or 1.2 billion miles annually (See Table 5-1, Figure 5-1, and Figure 5-2). Map 5-3 depicts traffic flow within Allen County on the federal functional classification system.

The volume of traffic on area roadways varies by season, day, hour, and by roadway type. For example, the heaviest percent of average daily traffic (ADT) is typically experienced during the summer months of June, July, and August. While urban interstates experienced the heaviest percent of ADT in August, urban minor local and collector streets experienced their highest percentage of traffic volume in May, and urban principal arterials recorded their heaviest ADT in August. In comparison, rural interstates experienced their heaviest percentage of ADT in July, while rural collectors

MAP 5-1
ALLEN COUNTY ROADS BY FUNCTIONAL CLASSIFICATION

Functional Classification

- Interstate
- Principal Arterial
- Minor Arterial
- Urbanized Area
- Major Collector
- Minor Collector
- Local

0 0.5 1 2 3 4 5 Miles

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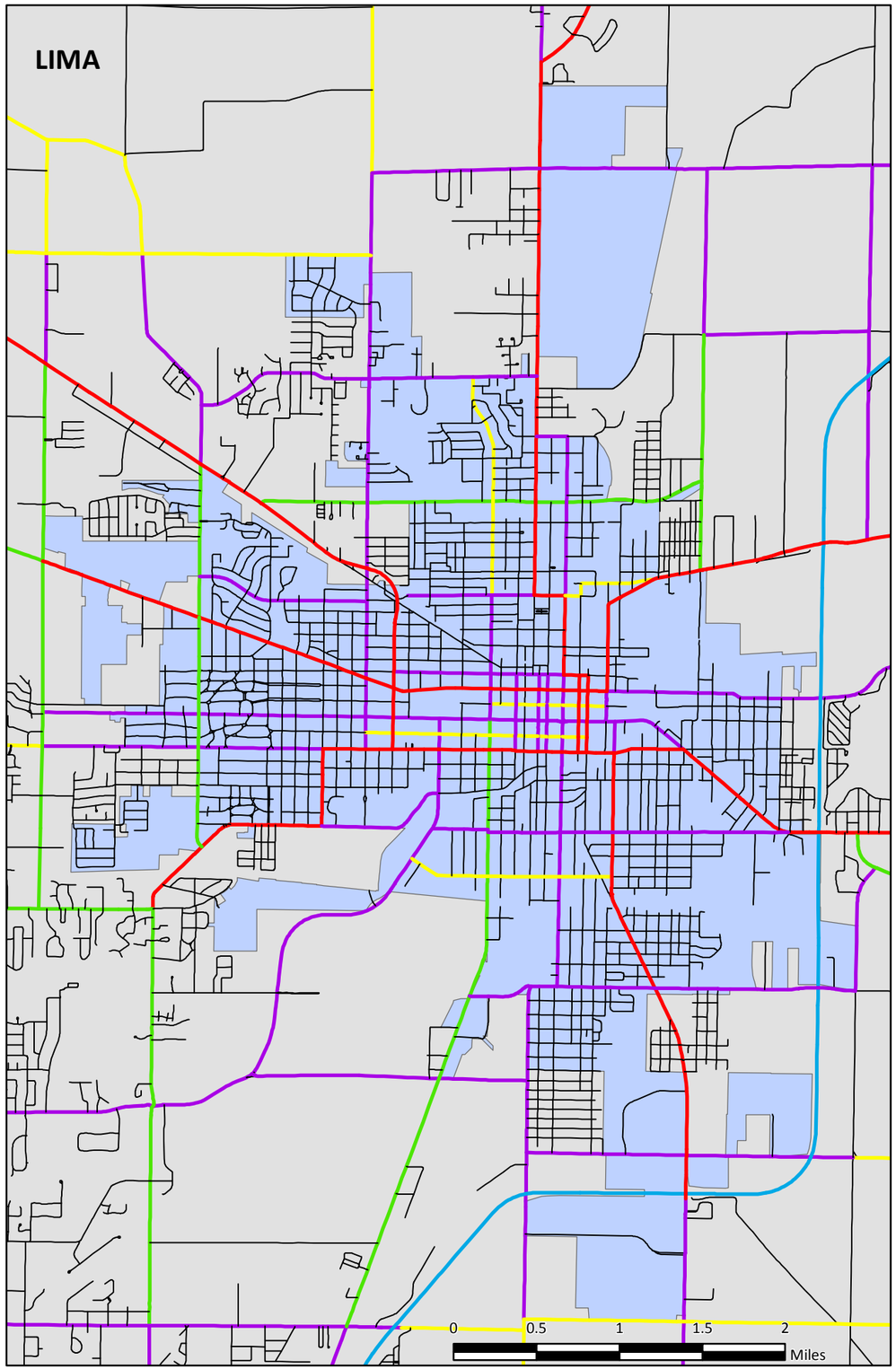
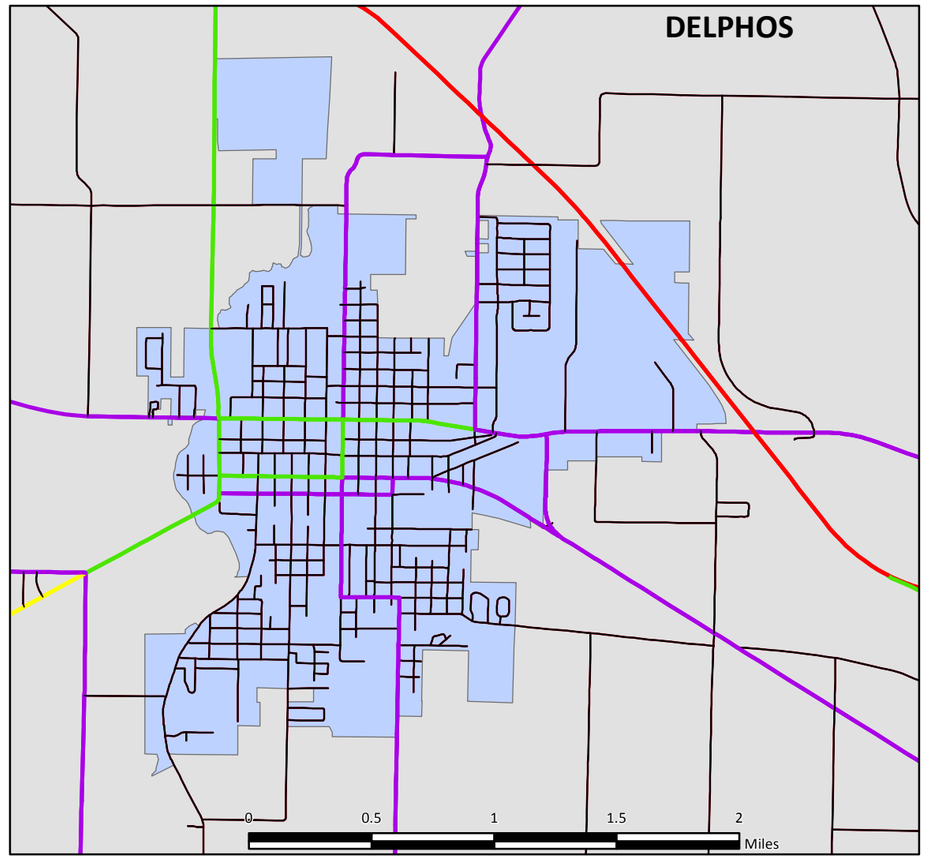
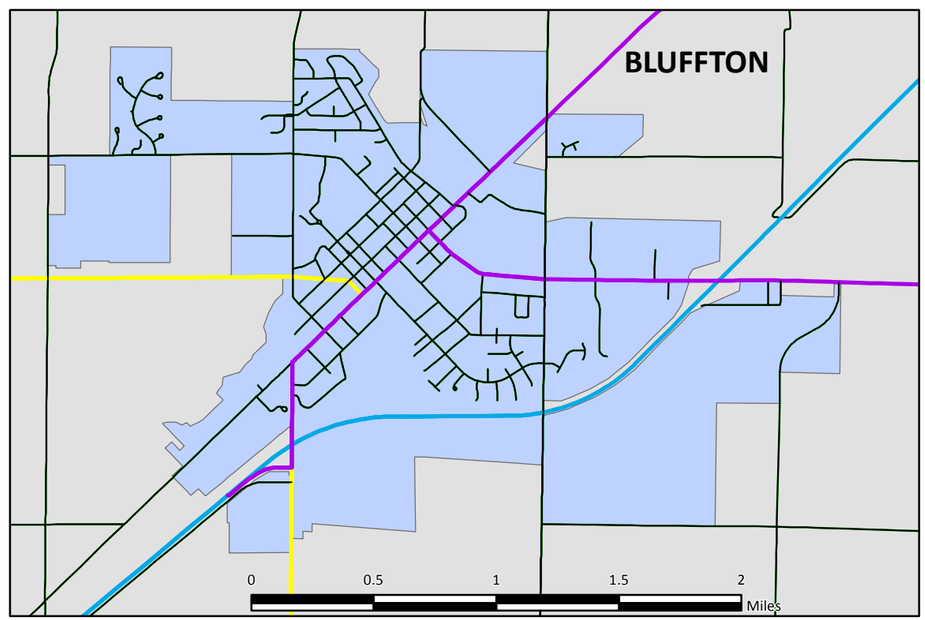
MAP 5-2
FUNCTIONAL CLASSIFICATION OF POPULATION CENTERS IN ALLEN COUNTY

Functional Classification

- Interstate
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Jurisdiction







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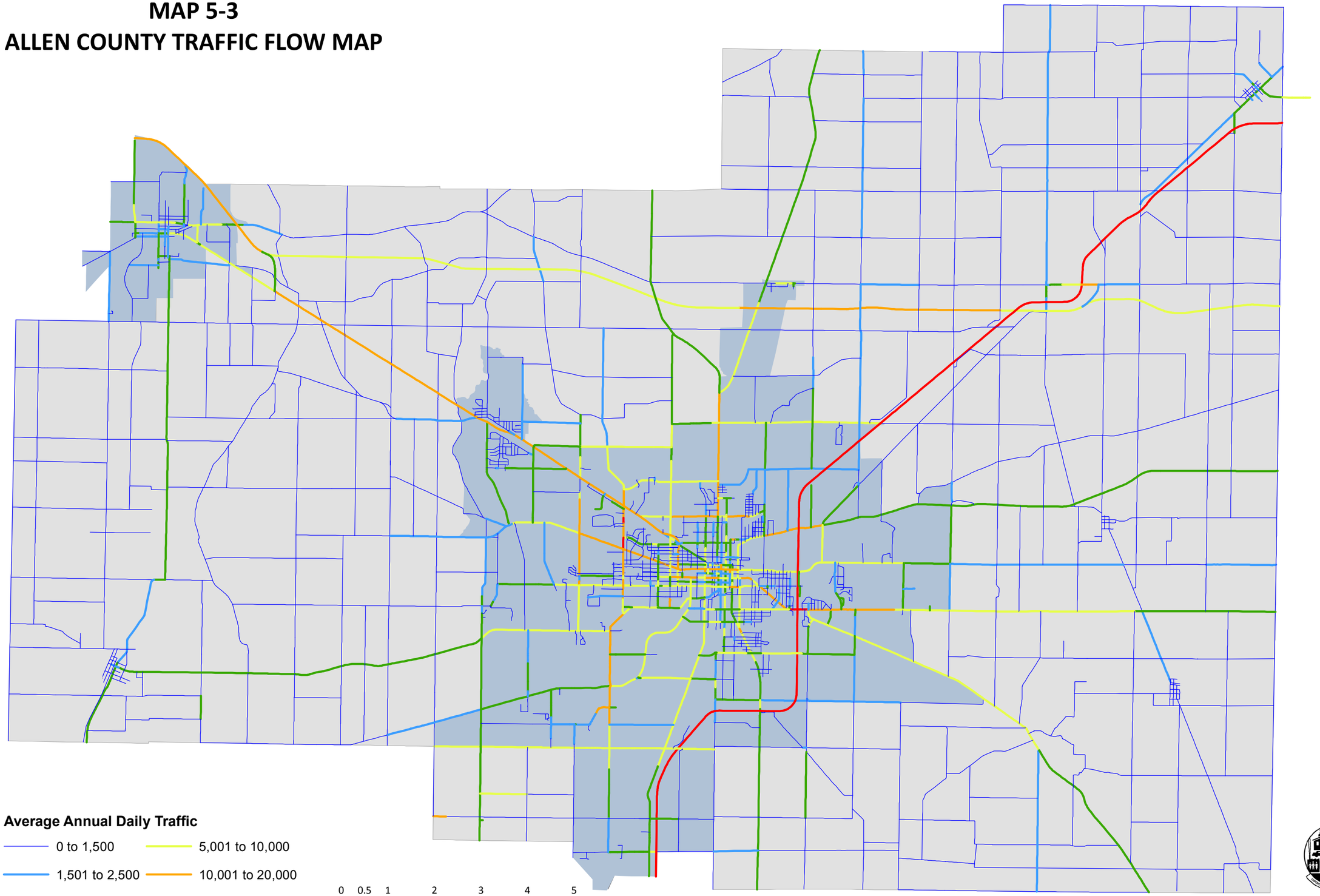
MAP 5-3
ALLEN COUNTY TRAFFIC FLOW MAP



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and local streets experienced their heaviest ADT in June rather than May. On a collective basis, roadways carried their heaviest traffic volume on Fridays followed by Thursdays (See Figures 5-3 through 5-7).

TABLE 5-1
ESTIMATES OF VMT BY FUNCTIONAL CLASSIFICATION
IN MPO PLANNING AREA

Functional Classification		Total Mileage 2016	2016 VMT in Millions of Miles per Year
Rural			
1	Interstate	10.99	128.07
3	Principal Arterial	21.65	76.88
4	Minor Arterial	19.42	47.52
5	Major Collector	118.34	91.97
6	Minor Collector	56.68	24.37
7	Local	562.45	80.07
Total Rural		**789.53**	**448.88**
Urban			
1	Interstate	12.16	158.47
3	Principal Arterial	31.64	121.14
4	Minor Arterial	30.28	97.82
5	Major Collector	83.81	158.51
6	Minor Collector	31.55	31.85
7	Local	348.06	164.78
Total Urban		**537.51**	**732.57**

FIGURE 5-1: ESTIMATED ANNUAL VMT WITHIN RURAL AREAS

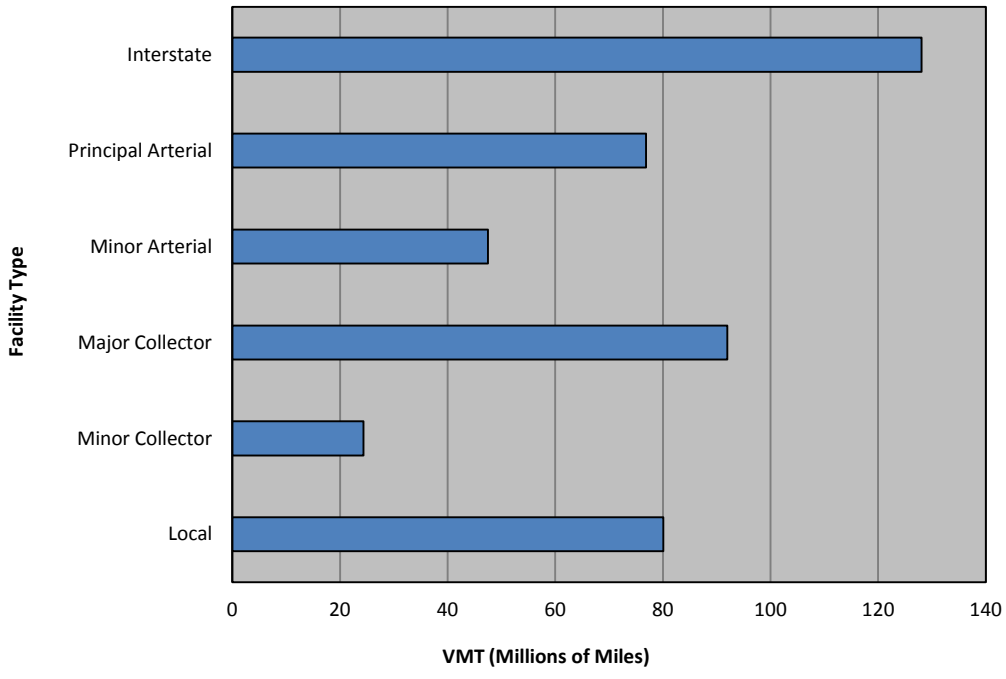


FIGURE 5-2: ESTIMATED ANNUAL VMT WITHIN URBAN AREAS

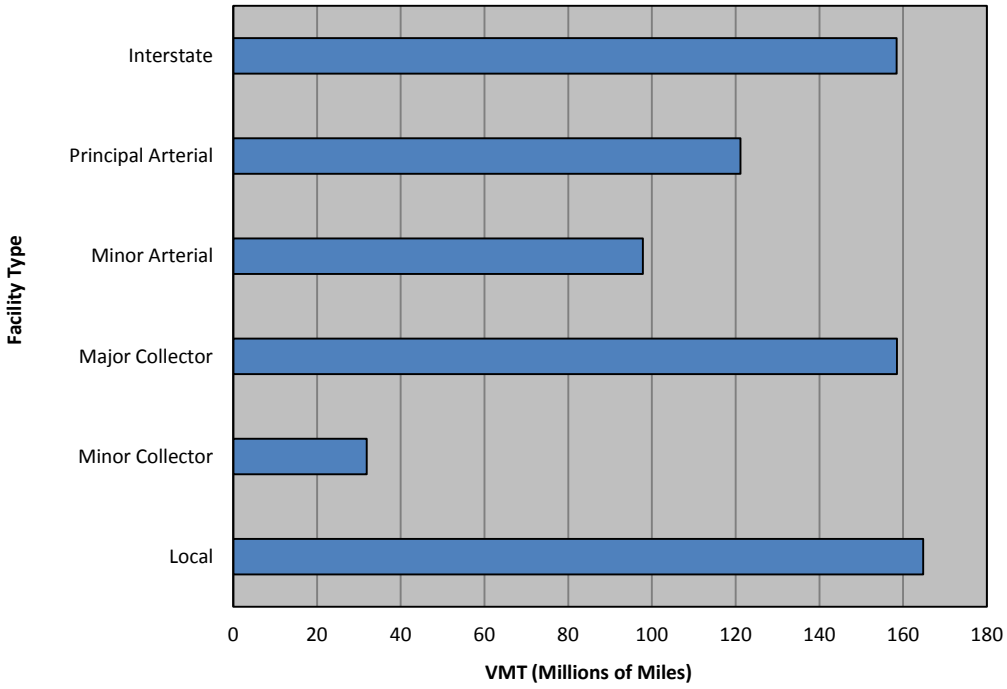


FIGURE 5-3: MONTHLY VARIATIONS ON URBAN ROADS

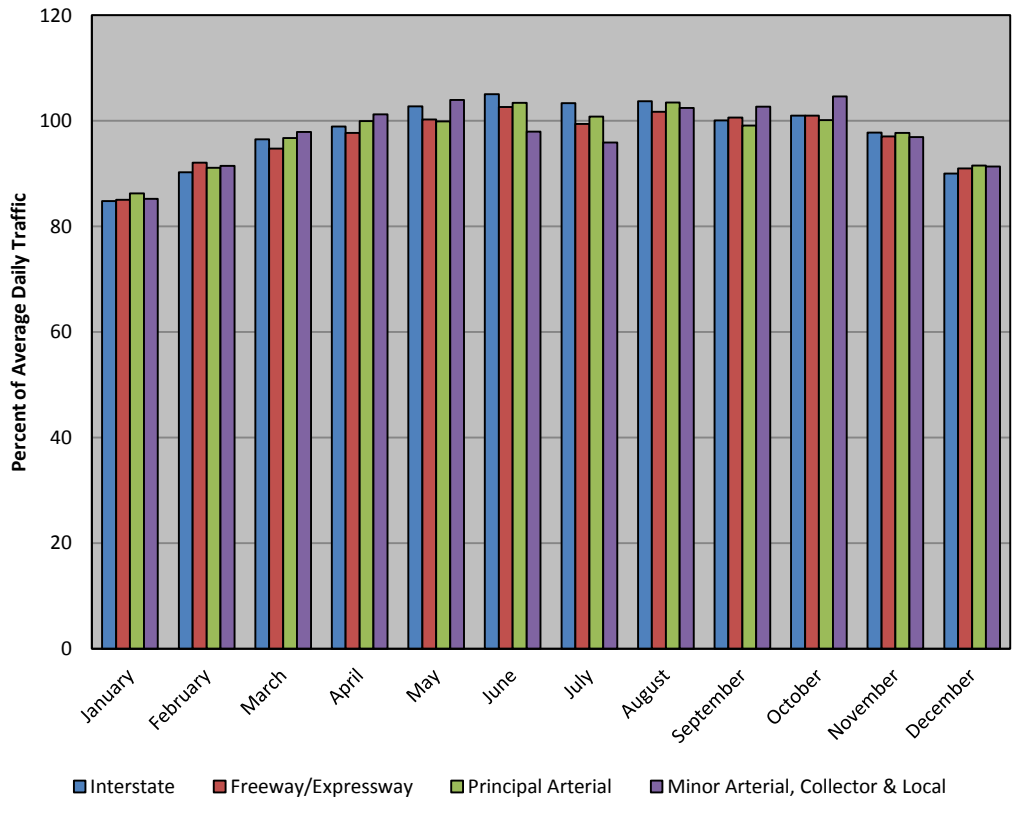


FIGURE 5-4: DAILY VARIATIONS ON URBAN ROADS

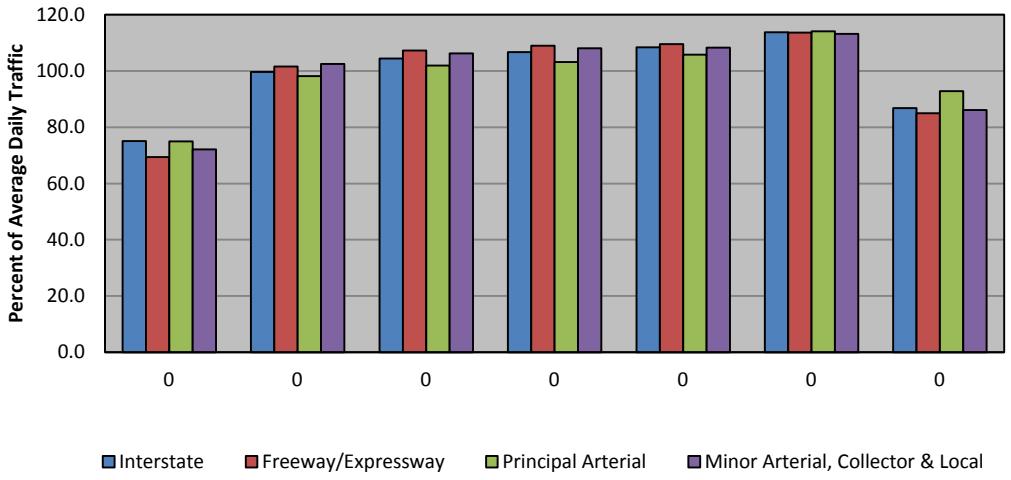


FIGURE 5-5: MONTHLY VARIATIONS ON RURAL ROADS

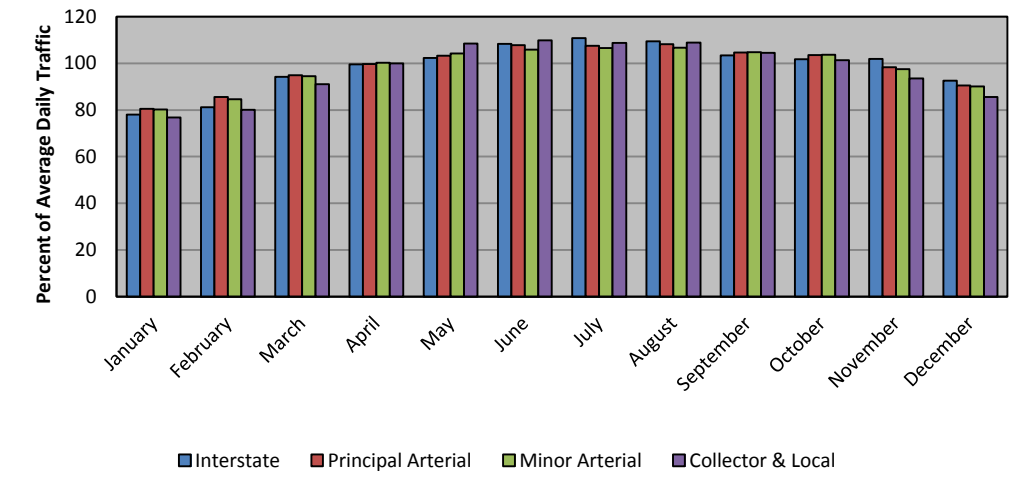


FIGURE 5-6: DAILY VARIATIONS ON RURAL ROADS

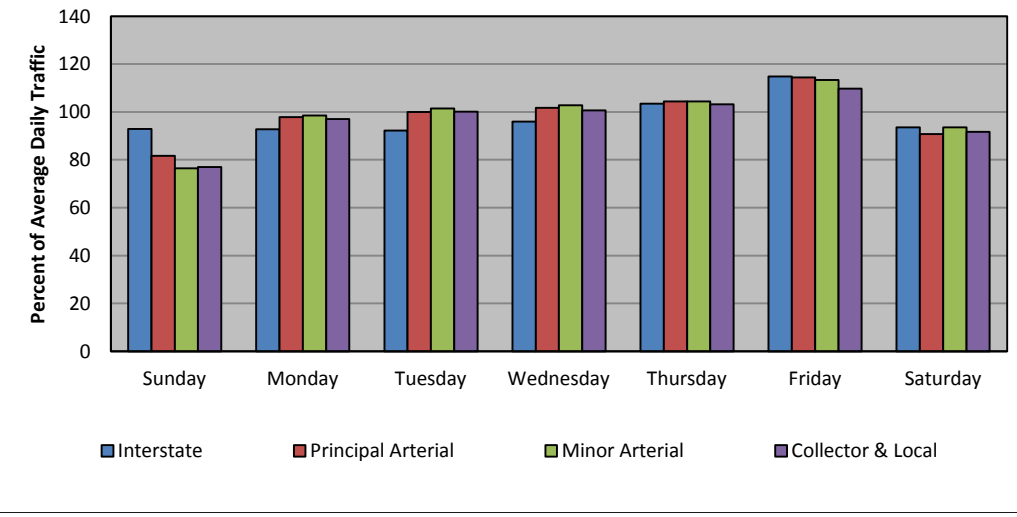
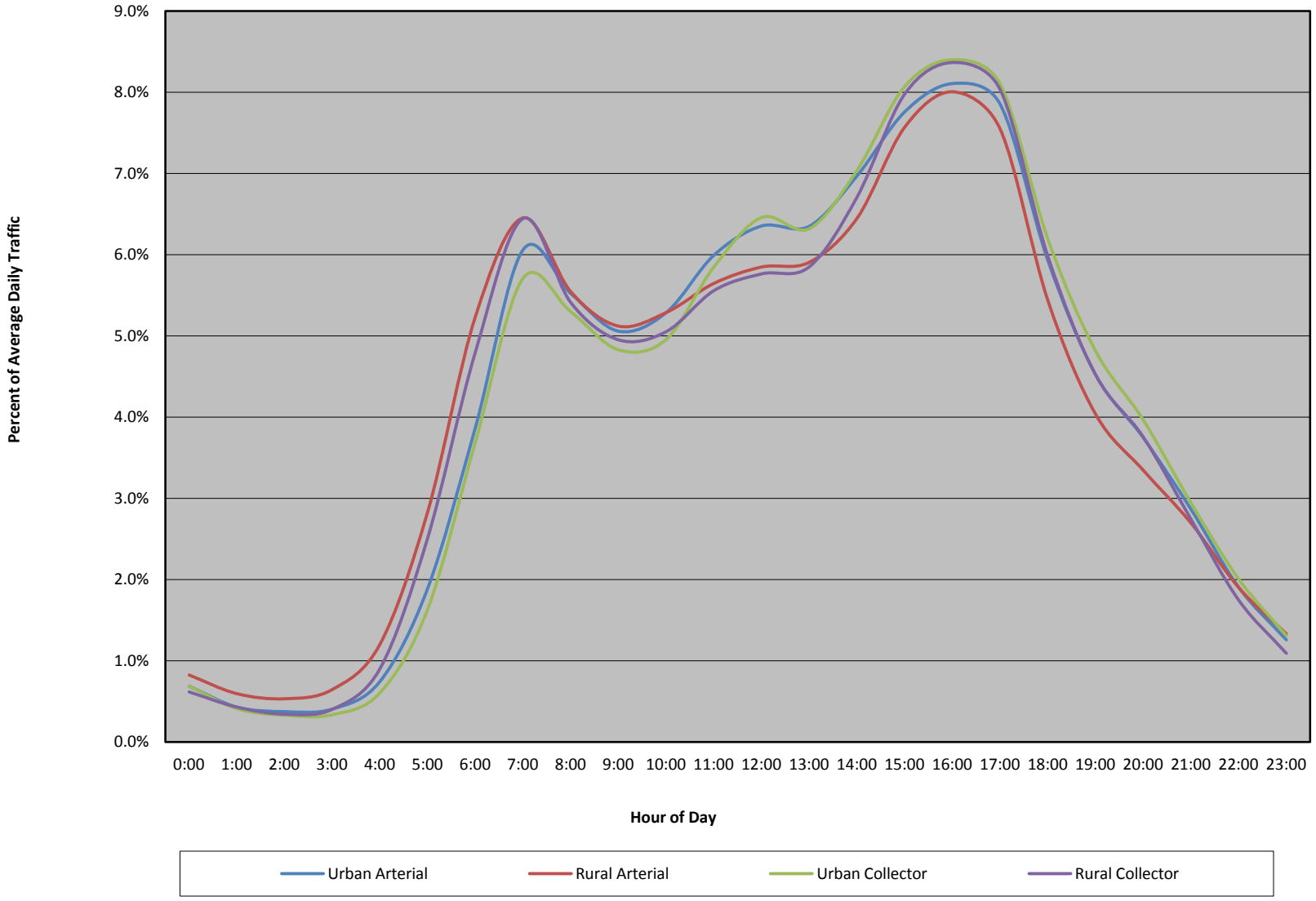


FIGURE 5-7: HOURLY VARIATIONS OF SELECTED ROADWAYS



5 - 9

Regional motor vehicle crash records data has been compiled from information made available by the Ohio Department of Public Safety (ODPS). Information exhibited in Table 5-2 and Figures 5-8 through 5-11 represent data compiled for the period 2007 through 2016 inclusive. Total motor vehicle crashes for the period numbered 33,898 while fatal accidents numbered 92. Examining the setting of crashes during the five-year period of 2012-2016, the Lima Urbanized Area accounted for nearly three quarters (74.7%) of all crashes. During that same 5-year time period, Allen County experienced a 32.7% rise in crashes that resulted in serious injury, and an analysis of the 10-year period suggests an overall increase of 25.2%.

TABLE 5-2
ACCIDENT SUMMARY IN ALLEN COUNTY
2007-2016

Year	Fatal Crashes	Injury Crashes	Serious Crashes	Visible Injury Crashes	Claimed Injury Crashes	Property Damage Crashes	Total Reportable Crashes	EPDO Rate Index
2007	12	892	107	341	444	2,842	3,746	3.08
2008	9	904	93	387	424	2,841	3,754	2.94
2009	12	885	89	341	455	2,583	3,480	3.05
2010	4	868	109	317	442	2,730	3,602	3.06
2011	12	765	83	310	372	2,459	3,236	2.99
2012	7	797	101	282	414	2,310	3,114	3.24
2013	7	794	114	253	429	2,267	3,068	3.40
2014	9	750	83	242	425	2,326	3,085	3.01
2015	8	901	160	278	463	2,633	3,542	3.64
2016	12	806	134	275	397	2,453	3,271	3.53
10 Yr Avg	**9**	**836**	**107**	**303**	**427**	**2,544**	**3,390**	**3.19**

FIGURE 5-8: TOTAL ALLEN COUNTY CRASHES FROM 2007-2016

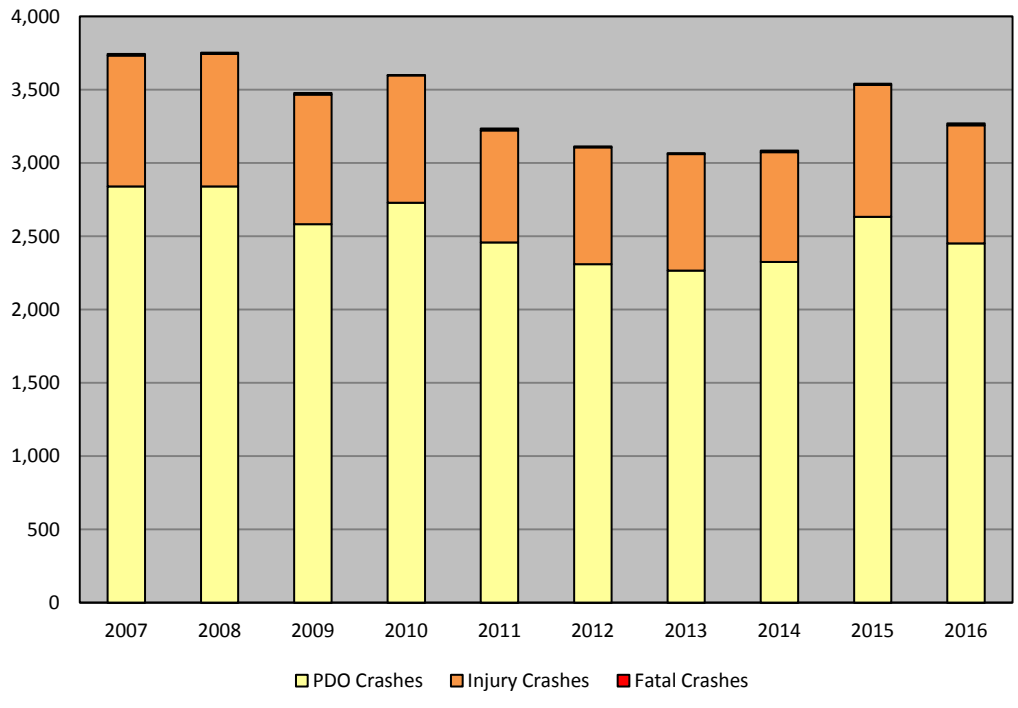


FIGURE 5-9: CRASH INJURIES BY YEAR & SEVERITY 2007-2016

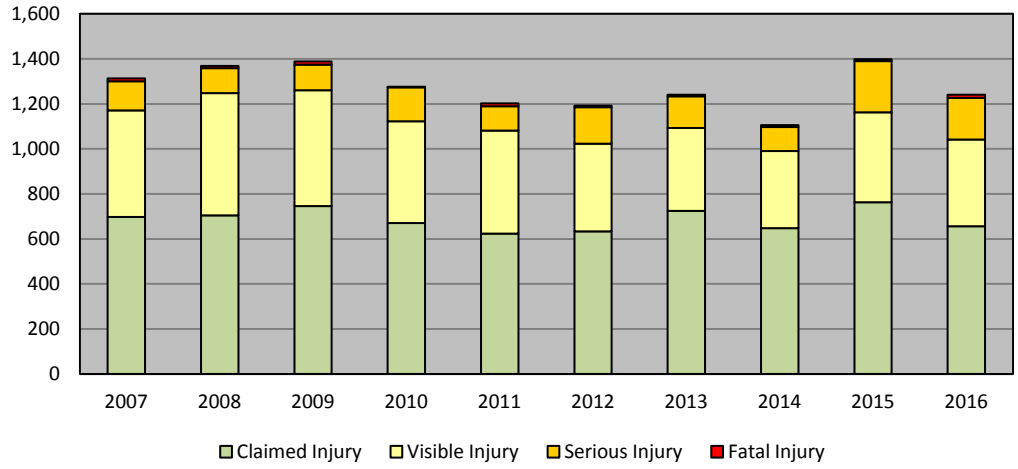


FIGURE 5-10: PERCENTAGE OF 2016 CRASHES BY TYPE

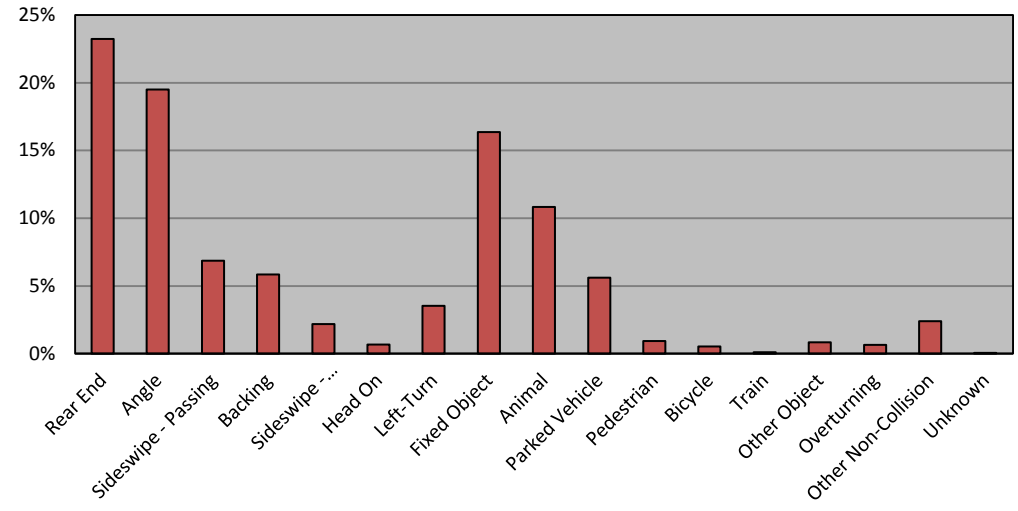
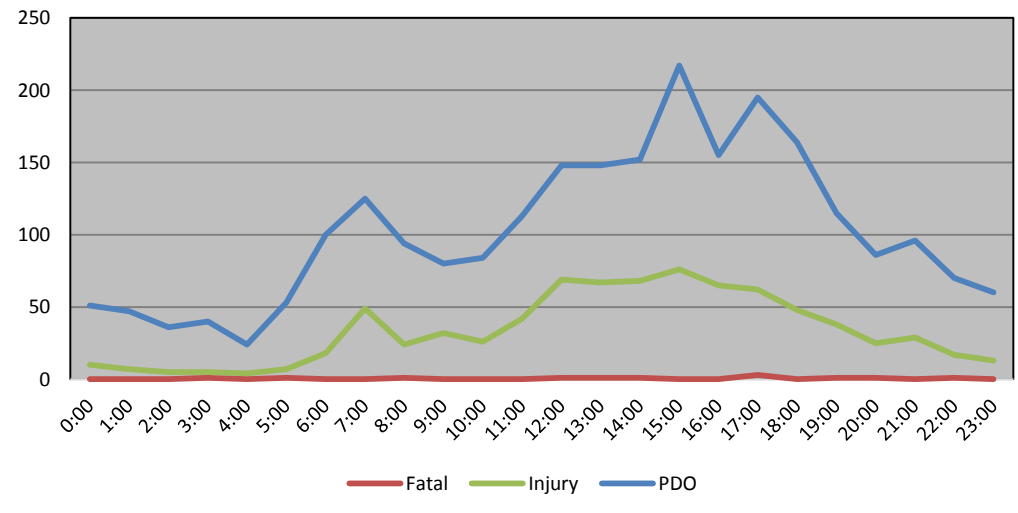


FIGURE 5-11: INCIDENTS BY TIME OF DAY



5.1.2 Public Transportation

Allen County is serviced by both intracity and intercity bus service. Also available is a full range of charter, taxi services, and paratransit service providers within the community. Bus services are provided by the ACRTA, Greyhound Bus Lines, GO BUS, and Baron's Bus Line. Buckeye Charter Services and Trailways offer various charter services for local and regional travel needs. The Black & White Cab Company provides local taxi services and limited shuttle services to the Dayton International Airport. In addition, LYFT provides limited demand response services.

There are also a number of non-profit social service agencies who also provide transportation services within Allen County, including the Allen County Council on Aging, Marimor Industries, Delphos Senior Citizens, and Goodwill-Easter Seals amongst others. These operators have received financial assistance from ODOT (FTA 5310 Program) to help purchase the necessary rolling stock to offer paratransit services to specific targeted clientele; the elderly, poor, and disabled.

5.1.2.1 ACRTA Fixed Route Transit, Paratransit & Demand Response Services

Residents from a wide cross-section of the community use public transportation services to facilitate their commute to work, school, medical appointments, and shopping trips, among other destinations. The ACRTA provides fixed route (FR), ADA complementary paratransit - often referred to as UPLIFT, and demand response (DR) services.

Residents from a wide cross-section of the community use transit in their commute to work, school, medical appointments, shopping trips, among other destinations. In 2017, operations ran Monday through Friday between the hours of 5:50 a.m. and 9:50 p.m., depending on the route. Saturday services are from 7:50 a.m. to 4:50 p.m., while no services are provided on Sunday or six major holidays. The ACRTA presently serves 9 fixed routes and has 14 fixed route buses, 15 paratransit vehicles, 1 maintenance truck, and 1 administration vehicle. All vehicles utilized for public transportation services are lift-equipped and are utilized to meet the travel needs of the mobility-limited citizens in the ACRTA's demand response service.

All routes emanate from the centralized transfer facility which is located on the outskirts of the City of Lima's Central Business District (CBD) at 218 E. High Street. The ACRTA operates on a hub or pulse concept, which brings seven of the routes into the transfer facility at 10 minutes before the hour and two of the routes into the facility at 20 minutes after the hour. The route network provides services along most major traffic corridors, targeting retail service centers, institutional facilities (including medical facilities), and other attractive travel generators. The FR network provides good route coverage to residents within the Lima Urbanized Area, and the majority of residents are within the 0.25 mile of a FR.

In 2017, ACRTA provided 344,648 FR trips over 437,862 revenue miles and 32,162 revenue hours of service. Table 5-3 reveals weekday fixed route operations in terms of mileage, service hours, and trips for each route in CY 2017. The ACRTA tracks also tracks trips by passenger type, revenue miles and revenue hours for each route to support reporting requirements.

TABLE 5-3 ACRTA FIXED ROUTE SERVICE STATISTICS JANUARY-DECEMBER 2017			
Route	**Ridership**	**Miles per Day**	**Hours per Day**
West Market	38,901	99.0	16
East Gate/OSU	40,086	184.5	16
Lima Mall	46,725	197.4	15
North Main	44,015	122.4	8
South Main	78,216	204.6	16.5
West North	48,539	197.4	15
Marimor/ Northeast	8,971	1760	12
JFS Shuttle	15,259	182.4	12
South Shawnee/Apollo	3,709	241.1	13
Total	**333,421**	**1,604.5**	**123.5**
Special Services	1,094	NA	NA
Community	10,133	NA	NA
Total	**344,648**	**NA**	**NA**

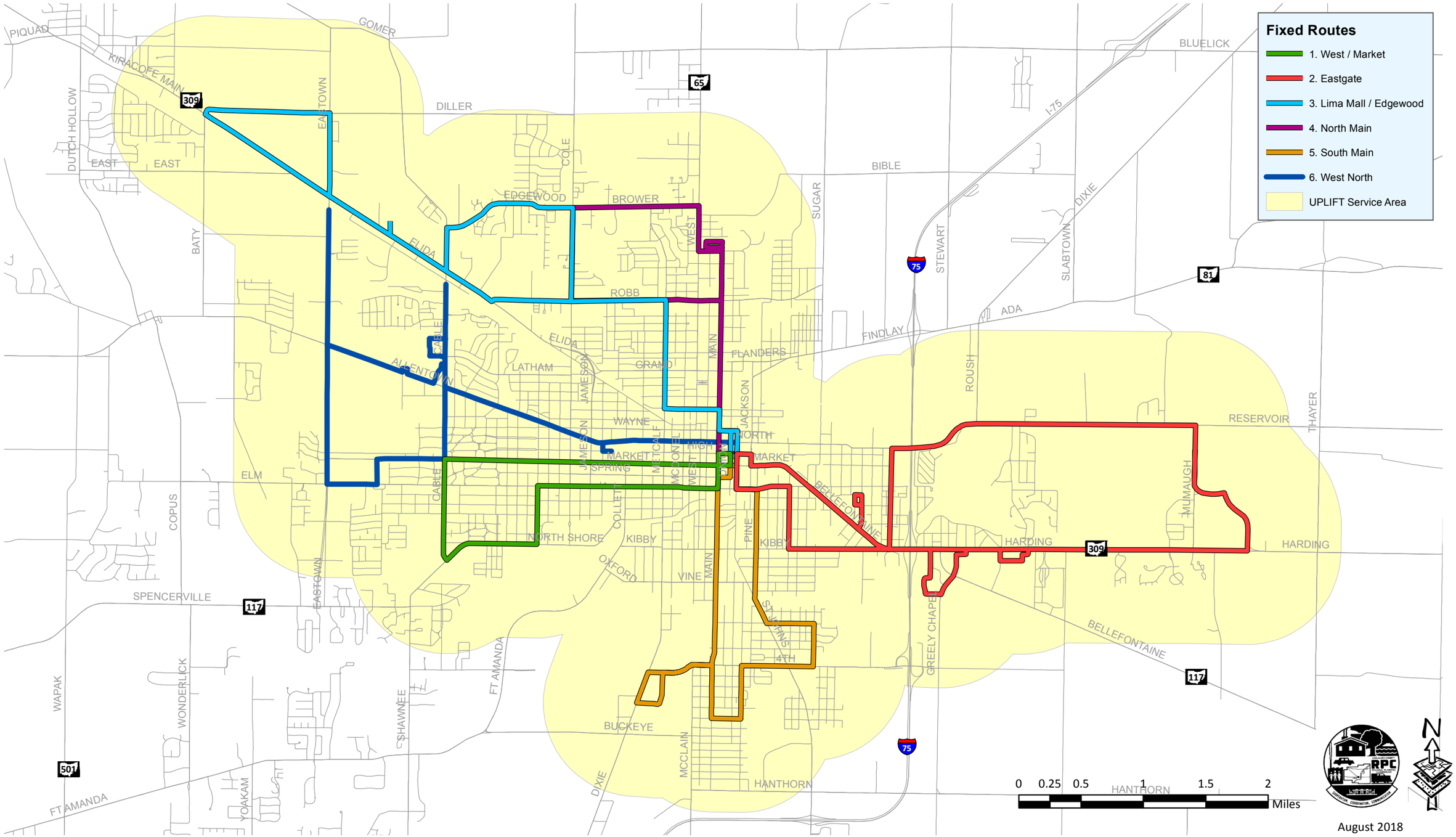
ACRTA's UPLIFT is a mandated paratransit service provided to mobility impaired residents of Allen County. UPLIFT services are available within a three-quarters of a mile corridor of the fixed route service area (see Map 5-4). The Program's total service area in 2017 was approximately 46.3 square miles. The UPLIFT service is made available to qualified individuals on the same days and during the same hours as fixed route services. Trip requests for ADA paratransit can be made up to 14 days in advance and may be scheduled through an answering machine during non-office hours. An assessment of 2017 UPLIFT ridership revealed 5,977 trips. In 2017 UPLIFT provided 18,786 revenue hours and 284,093 revenue miles of service. Total 2017 system ridership also includes DR services which provided 35,635 trips.

The ACRTA routinely evaluates its transportation services; typically, the productivity, efficiency and effectiveness of ACRA services are documented in an annual operational analysis prepared with the support of the MPO. Various analyses have been conducted targeting modal choice, and the appropriateness, availability and quality of its service. The ACRTA has reviewed its services based on geographic and site-specific variables cognizant of the concerns of the transit-dependent population. Such analyses have: (1) identified the size and character of the transportationally disadvantaged populations based on age, mobility status, race/ethnic and income;[17] (2) determined the extent of ADA accessibility of all routes on the fixed routes system;[18] (3) assessed the availability of service by geographic

[17]The ACRTA, in conjunction with the MPO, released several documents addressing the Allen County population's characteristics and demand for public transportation services including: "Transportation for Special-Needs Populations", 2016; "Allen County Public Transit – Human Services Transportation Coordination Plan", amended 2016; and, "West Central Ohio Regional Transportation Coordination Plan" (2017). The MPO and ACRTA routinely review and integrate community demographic and socioeconomic characteristics within transit and paratransit-based documents and has routinely conducted ridership surveys since 1992.

[18]The ACRTA, in conjunction with the MPO, have looked at accessibility since 1992 when the MPO released a report entitled "Accessibility Characteristics of the ACRTA Fixed Route System." Subsequent reports examined accessibility based on fleet accessibility, route structure, and the presence of sidewalks, curb cuts and bus shelters.

MAP 5-4
ACRTA FIXED ROUTE & UPLIFT SERVICE AREA



August 2018

area and temporal restraints;[19] (4) reviewed on-time performance measures;[20] (5) addressed systems operations and management performance;[21] and, (6) increased coordination.[22]

The ACRTA utilizes Mobile Data Transmission (MDT) units and GPS software from StrataGen for scheduling and dispatching. This was in an effort to enhance efficiency and further local coordination efforts, while also maintaining existing public transportation services within Allen County. Maintaining existing levels of service, however, requires both continued operating expenditures and investments in various capital items.

The Transit Authority has committed itself to furthering its role and presence in the community. Its commitment is evidenced in the placing of a new transfer facility located within the Lima CBD and the acquisition of new buses, and, its increased collaboration with private (both public and not-for-profit) social service agencies and transportation providers. The ACRTA has maintained its rolling stock and attempted to balance its financial and planning capacities with shrinking local government funding.

The ACRTA has implemented an on-going review of its public transportation services. Various analyses have been conducted targeting modal choice, and the appropriateness, availability and quality of its service. The ACRTA has reviewed its services based on geographic and site-specific variables cognizant of the concerns of the transit-dependent population. Such analyses have: (1) identified the size and character of the transportationally disadvantaged based on age, mobility status, race/ethnic and income;[23] (2) determined the extent of ADA accessibility of all fixed routes;[24] (3) assessed service availability by geographic area and temporal restraints;[25] (4) reviewed on-time performance measures; (5) addressed systems operations and management performance; and, (6) increased coordination.

[19]The ACRTA, in conjunction with the MPO, released several reports reviewing the service area of both fixed route and complimentary paratransit services including "ACRTA Fixed Route System Analysis" (1995), "Proposed Alternatives to Fixed Route System" (1996) "Boarding & Alighting Study" (2004), ACRTA Service Evaluation prepared by RLS & Associates (2005); and, the Allen County Public Transit – Human Services Transportation Coordination Plan, amended 2016.

[20]The ACRTA regularly reviews ridership surveys addressing on-time performance of both fixed route and paratransit services to determine the level of service provided. For further information see the "FY 2018-2022 Comprehensive Operational Analysis & Management Plan (2017). No Ridership surveys were performed in 2017 because of funding constraints.

[21]The ACRTA regularly develops and adopts a 5-year Transit Development Plans outlining its capital needs based upon system requirements, fleet characteristics, and budgetary limitations. The Plans are predicated upon the recommendations contained with their operational analyses and management plan. The FY 2018-2022 Comprehensive Operational Analysis & Management Plan examined, bus facilities, fare structures, operational efficiencies and effectiveness, funding revenues and expenditures and established baseline levels of service across a dozen metrics.

[22] Allen County stakeholders developed and adopted the Allen County Public Transit-Human Services Transportation Coordination Plan in April 2008 and completed annual updates thru December 2016 where thereafter the "West Central Ohio Regional Transportation Coordination Plan was developed and subsequently adopted in 2017.

[23]The ACRTA, in conjunction with the MPO, released several documents addressing the Allen County population's demand for public transportation services including: "Allen County Public Transit – Human Services Transportation Coordination Plan", amended 2016; and, "West Central Ohio Regional Transportation Coordination Plan", December 2017.

[24]The ACRTA, in conjunction with the MPO, released several reports addressing accessibility including "Accessibility Characteristics of the ACRTA Fixed Route System" in 1992. This report provided an update on accessibility with respect to the most current ADA/DOT standards regarding sidewalks, curb cuts and bus shelters. The ACRTA last addressed system accessibility in its Comprehensive Operational Analysis and Transit Development Plan prepared by the MPO in June 2017.

[25]The ACRTA, in conjunction with the MPO, has released several reports reviewing the service area of both the fixed route and complimentary paratransit services targeting the analysis of the fixed route system and alternative analyses (1995 & 1996), ACRTA Service Evaluation prepared by RLS & Associates in 2005; on board passenger surveys & alighting studies (2004 thru 2016); and, most recently prepared the "Allen County Public Transit – Human Services Transportation coordination Plan" amended in 2016.

5.1.2.2 Intercity Bus Lines

Intercity bus services are provided to the community by Greyhound and Barons Bus Lines. Both share terminal activities and space with the ACRTA Transfer Center located at 218 E. High Street. Greyhound provides transit for north/southbound passengers while Barons facilitates east/west travel. Most major cities in the United States can be reached intercity by Greyhound and Barons by connection. Four scheduled intercity buses arrive and depart on a daily basis from the terminal. Hours of departure for Greyhound are 10:15 a.m. and 3:20 p.m. and Barons departs at 1:20 p.m. and 4:50 p.m. Parcel service is also provided by both lines.

5.1.2.3 Buckeye Charter Service

Buckeye Charter Service is a local privately-owned and operated bus company providing localized and regional charter services. The company has a mixed fleet. The service is located at 1235 E. Hanthorn Road east of IR 75.

5.1.2.4 GO BUS

GO Bus is a federally subsidized Rural Intercity Bus Program designed to address the intercity bus transportation needs of the entire state by supporting projects that provide transportation between non-urbanized areas and urbanized areas that result in connections of greater regional, statewide, and national significance. Daily fixed route service is available with prices dependent upon the distance of the trip. Much of the state is within the service area and stops in Delphos, Lima or Van Wert are serviced by routes serving hubs in Columbus and Ft. Wayne with further destinations including Cleveland and Cincinnati available.

5.1.3 Rail System

Railroads have historically played a very important role in the development of Lima and West Central Ohio. The Allen County community has been and remains strategically located at the intersection of various short line and main line railroads; therefore, a hub of railroad operations and a crossroads where large volumes of rail traffic intersect.

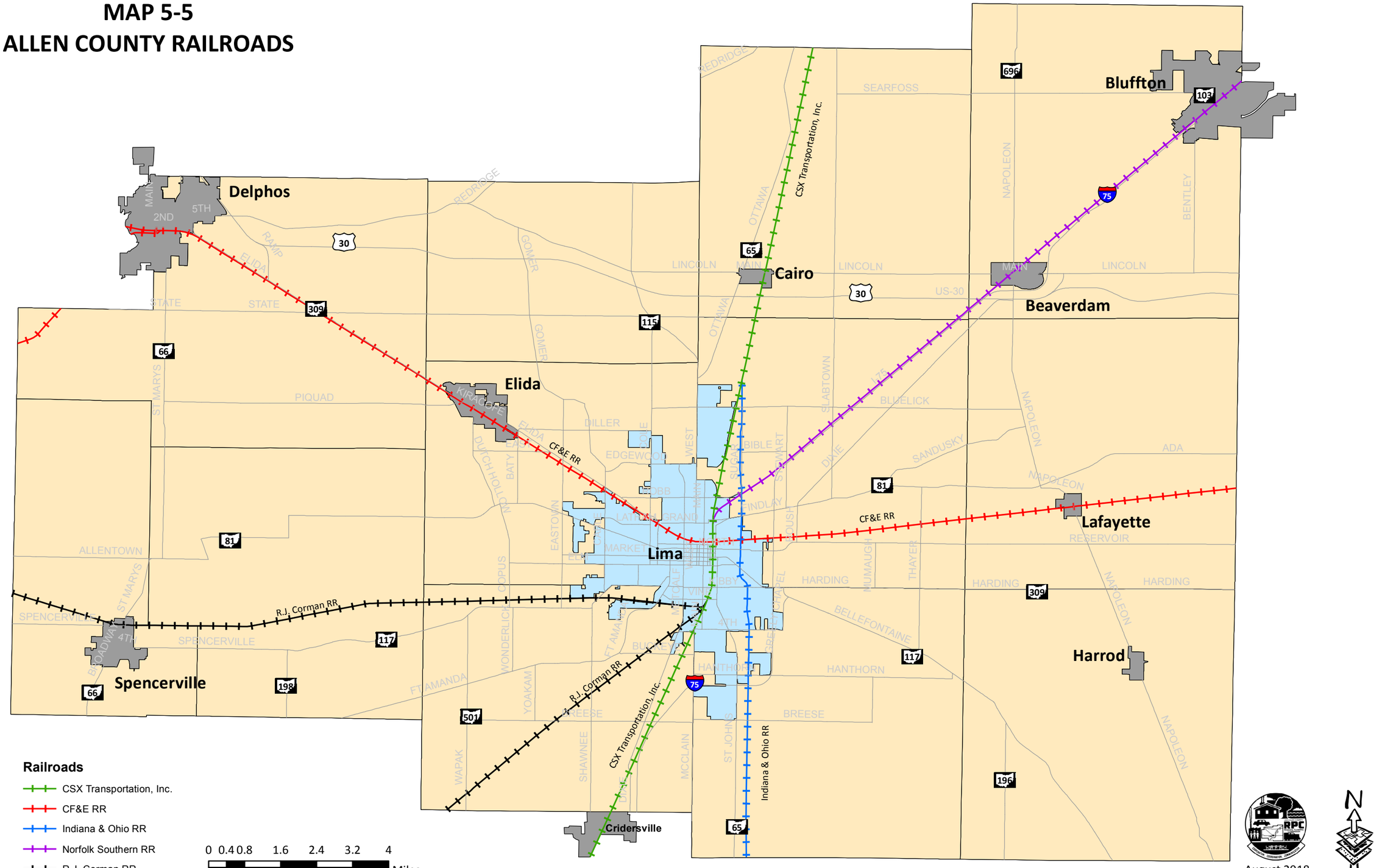
A total of 100.5 miles of rail is documented passing through Allen County. Lima and Allen County rail infrastructure supports the operations of two Class I railroads and three Short Line railroads.[26] The Class I rail carriers include the CSX (18.8 miles) and Norfolk Southern (NS) (22.9 miles) railroads. The area is also serviced by the Indiana & Ohio (I&O) (10.8 miles), Chicago-Fort Wayne & Eastern (CF&E) (28.3 miles) and R.J. Corman (19.6 miles) Short Line railroads. Map 5-5 depicts the rail system traversing the County. Collectively, these railroads are able to provide access to regional, national and international markets.

Allen County has 142 public at-grade rail crossings representing nearly 2.5% of all at-grade rail crossings in the State of Ohio. Based on Federal Railroad Administration (FRA) Hazard Rankings; approximately 1.9% of the local at-grade rail crossings fall within the State's top 10% of most hazardous crossings. Table 5-4 identifies the most hazardous at-grade rail crossings in Allen County by their state ranking.

Based in part on the resurgence of rail as a competitive mode of transportation for freight and people, railroads are being reexamined as to their potential to strengthen

[26]The acquisition of Conrail by CSX and NS has eliminated the services of a Class I railroad and increased local rail traffic.

MAP 5-5
ALLEN COUNTY RAILROADS



the industrial and commercial vitality of the region. In conjunction with the City of Lima, the Ohio Rail Development Commission (ORDC), and the Allen County Commissioners, an industrial development strategy has been developed which focuses on strengthening and increasing the community's already considerable rail infrastructure.[27]

TABLE 5-4
2017 TOP 20 RAILROAD CROSSINGS IN ALLEN COUNTY

PID	State Rank out of 5,746	State Risk Factor	Crossing ID Number	ADT	RR	Street/Highway	Existing Warning System
1	108	0.064991	155706C	453	CSX	Begg Road	GT
2	140	0.059642	155665A	5,269	CSX	W. Fourth Street	GT
3	201	0.049052	155679H	15,124	CSX	E. Market Street	GT
4	291	0.037973	476905R	14,223	NS	Market Street	GT
5	298	0.037498	155676M	7,642	CSX	Kibby Street	GT
6	383	0.032593	476908L	9,876	NS	Kibby Street + Ped Crossing	GT
7	398	0.032034	155675E	3,568	CSX	St. Johns Street	GT
8	525	0.028520	532720M	24,177	CFE	N. Cable Road	GT
9	554	0.027898	155680C	1,681	CSX	E. High	GT
10	566	0.027642	155691P	2,381	CSX	Flanders Avenue	GT
11	569	0.027608	155683X	1,451	CSX	E. Wayne	GT
12	675	0.025280	476902V	2,020	NS	Wayne Street	GT
13	685	0.025130	476909T	2,810	NS	St John / Central	GT
14	700	0.024812	155662E	4,348	CSX	Buckeye Road	GT
15	767	0.023791	476881E	6,046	NS	Dixie Hwy	XB
16	778	0.023693	155677U	789	CSX	E. Eureka	GT
17	784	0.023636	476901N	691	NS	Pearl Street	GT
18	788	0.023513	258601A	18,402	NS	N. Sugar Street	GT
19	804	0.023332	476900G	2,007	NS	McKibben Street	GT
20	811	0.023172	155690H	2,193	CSX	McKibben Street	GT

XB – Standard Cross Buck FL – Flashing Lights GT – Gates

Studies have supported specific recommendations to improve rail-based industrial development and rail/highway transportation conflicts including: (1) improving site access to the Liberty Commons Industrial Park by extending Third Street into the complex; (2) undertaking a comprehensive crossing closure program to improve safety; (3) improving communications between local officials, ORDC and the railroads aimed at minimizing blocked crossings in the City of Lima and Allen County; and, (4) preserving portions of the Conrail Erie Line which may fall to abandonment in order to preserve critical links for the R.J. Corman and I&O rail systems. In addition, there are four underpasses within Allen County that are old concrete structures that have a narrow passage, limit horizontal and vertical sight distance, and have significant height restrictions, all of which lead to safety issues to the roadway users. Two of these underpasses are on Major Collector roadways; one of which (Bluelick Road), is a critical link between IR 75 and SR 65 and SR 115 and also US 30.

Local officials are very much interested in reestablishing the prominence of local rail facilities and furthering the integration of both freight and passenger rail services within the community's existing transportation network. At-grade rail crossing safety and

[27]A report entitled "Liberty Commons Rail Development Study" updated in 2012 by the ORDC and Planning Commission detailing existing rail infrastructure and specific action steps to be taken to better position the Lima market.

accessibility issues may thwart future coordination however, if present site and accessibility issues cannot be resolved. Grade crossing improvements, grade separations and more restrictive crossing control devices are necessary to adequately address local concerns. Within the Lima CBD east/west accessibility issues for emergency services resulted from capacity constraints and blocked crossings along the I&O. Also, within the CBD, increased train traffic and obsolete circuitry worked to block crossings along the CF&E and I&O lines that collectively snarled traffic in all directions. City of Lima officials worked with ODOT, ORDC and the MPO to secure funding for two active projects to help ameliorate delay - the Elm Street RR Grade Separation Project (PID 80441/$16.3M) and the Sugar Street Interlock Project (PID 103648/$1.7M) – both have both been given the green light to construct. At-grade crossing conditions and safety concerns over signal circuiting have been identified in Delphos as traffic on the CF&E Line increased.

The MPO is actively pursuing a 2-fold capital improvement program to further: (1) safety at rail crossings, and, access to area hospitals; and, (2) economic development initiatives by strengthening rail freight and possible passenger service in the community. By establishing a broad-based coalition of community interests and a multi-disciplinary team of transportation and engineering professionals, a seamless system can be developed. The MPO will support efforts to develop ITS technologies across the transportation system including rail. Road closures aimed at improving the safety and efficiency of the rail system may also need to occur pending further study.

Local officials continue to support an additional study regarding the feasibility of developing passenger rail within the State and across the Midwest. Recent presentations made by the ORDC revealed the synergy that such infrastructure would bring to the region. The City of Lima has a restored Passenger Railway Station (former Amtrak) and the associated Railroad Hotel in the Lima CBD to facilitate alternative redevelopment scenarios for passenger rail service and facilities in the community should the opportunity arise.[28,29]

Another issue concerning the rail system is the preservation of abandoned sections of rail lines as future transportation corridors. Such abandonments may be converted to new short line rail corridors, bike trails, scenic pedestrian walkways and/or roadways. Monitoring the possibility of future abandonments and the acquisition of such will become policy. Many avenues for preserving such rail lines have been opened by the United States Congress. The procedure of “railbanking” or filing for a “public use condition” have been effective tools in acquiring the rights to abandoned sections of railroad. The community will share such concerns/interests with the ORDC to affect the mediation of such situations should they arise; of particular interest is the existing Spencerville-Elgin Railroad (SPEG RR) Line should services be terminated.

5.1.4 Roadway Freight System

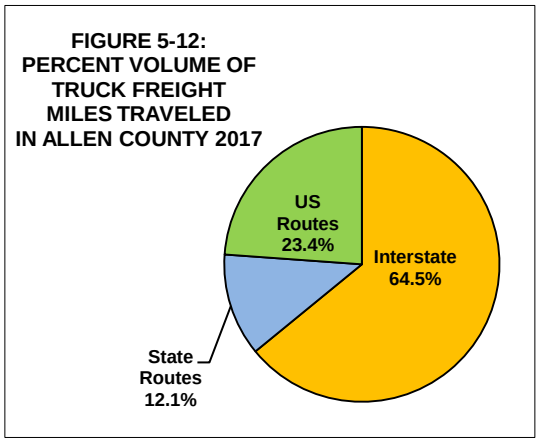
Although the reasons are varied, the globalization of manufacturing-related industries and the transition to a service-based economy help explain the altered volume and pattern of freight movements. Manufacturing firms have become increasingly international. They have developed a global system of manufacturing and distribution based on component costs and access to both resources and markets. As a result, their freight consists of an ever-increasing number of partial product assemblies being transported between an increasing number of points.

[28] A report entitled “Northern Indiana/Ohio Passenger Rail Corridor Feasibility Study and Business Plan” prepared by Transportation Economics & Management Systems, Inc, December 2012.

[29] March 27, 2009 Lima Mayor David Berger participated as a panelist discussing the need and opportunity for High Speed Passenger Rail in Ohio. The studio cut the program which aired several times in April on the Ohio News Network (ONN).

Inventory related cost-cutting measures undertaken by both the manufacturing and service sectors reflect a shift from an on-hand inventory system to just-in-time delivery that has created both opportunities and problems for the freight industry and local transportation officials. Operating with the "warehouse on wheels" concept has dramatically increased the number of trucks on roadways during peak periods of traffic. And, given the suburbanization of services and manufacturing facilities, governments must examine available infrastructure to support necessary freight movements in order to assure accessibility and safety.

Recognizing that efficient and cost-effective freight service is essential to the maintenance of a strong economic base, local officials are working with the local freight and cartage industry. Local leaders are examining the prime factors affecting freight movement within Allen County.



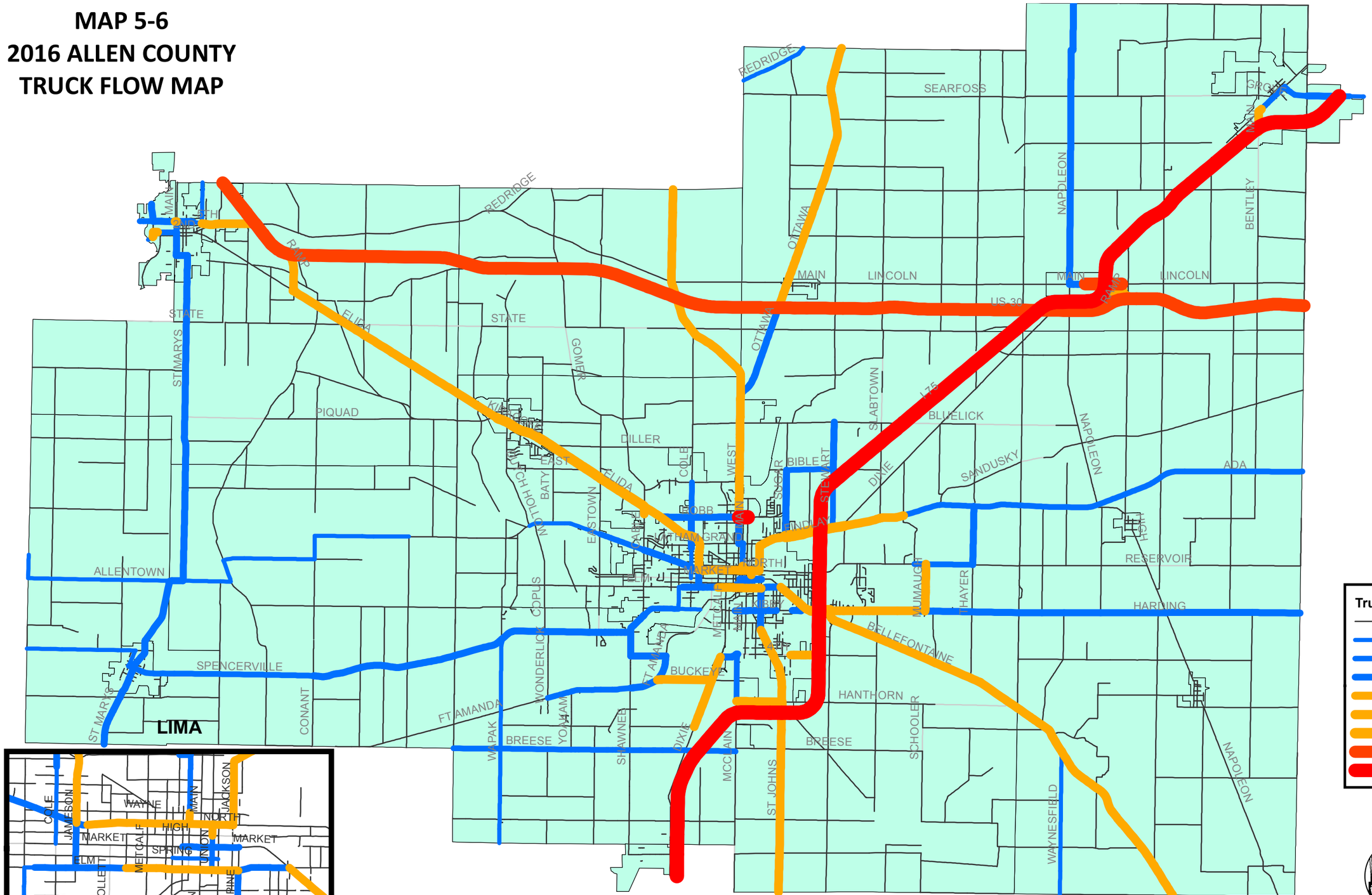
The pattern of truck traffic volumes vary by day of week and are heavily affected by local economic activity. Truck volumes are influenced by the presence or absence of large through-freight movements. In most cases there will be a higher percentage of through truck traffic experienced on the weekend than throughout the week. Also, a road will experience less truck traffic on any given evening when there is a lower volume of through-traffic. A review of higher order roadways in 2017 indicated that, IR 75 supported the largest volume of truck VMT in Allen County at 287,400 miles per day, with US 30 (104,347 miles) and the State Routes (53,740 miles) carrying the remainder of truck traffic. Figure 5-12 provides an overview of the total volume of truck miles traveled on the major roadways in Allen County.

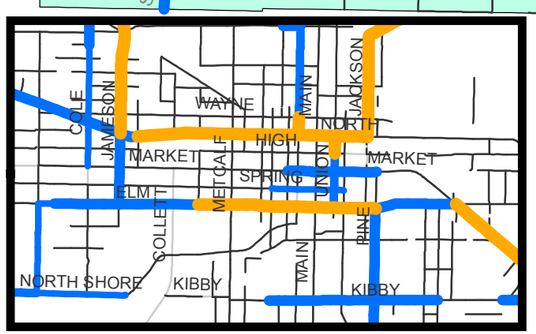
TABLE 5-5
DAILY VEHICLE MILES TRAVELED (VMT) ON STATE ROADS

Road Type	Total VMT	Truck VMT	% Trucks	% Truck VMT
Interstate	802,651	287,457	35.8%	64.5%
US Routes	239,875	104,347	43.5%	23.4%
State Routes	753,224	53,723	7.1%	12.1%
Total	**1,795,750**	**445,527**	**24.8%**	**100.0%**

Map 5-6 indicates Annual Average Daily Traffic (AADT) of trucks that traveled on the major roadways in Allen County for the year 2017 based on LACRPC and ODOT vehicle miles traveled (VMT) tabulations. Major roadways considered reflect the Interstate, U.S. route, and State Route systems. Based on ODOT tabulations, US 30 and IR 75 recorded higher than average percent truck volumes of 43.5% and 35.8% respectively, of all vehicle miles traveled among all major roadways in Allen County. In comparison, the state average percent truck VMT for both the Interstate and U.S. route systems were 18.6% and 13.4% respectively. The State Route system in Allen County (7.1%) was below the state average of 7.8% of all vehicle traffic in 2017, SR 65, SR 115 and SR 696 were the only state routes with truck daily VMT above the state average in 2017 at 9.0%, 10.7%, and 31.8%; respectively.

MAP 5-6
2016 ALLEN COUNTY
TRUCK FLOW MAP

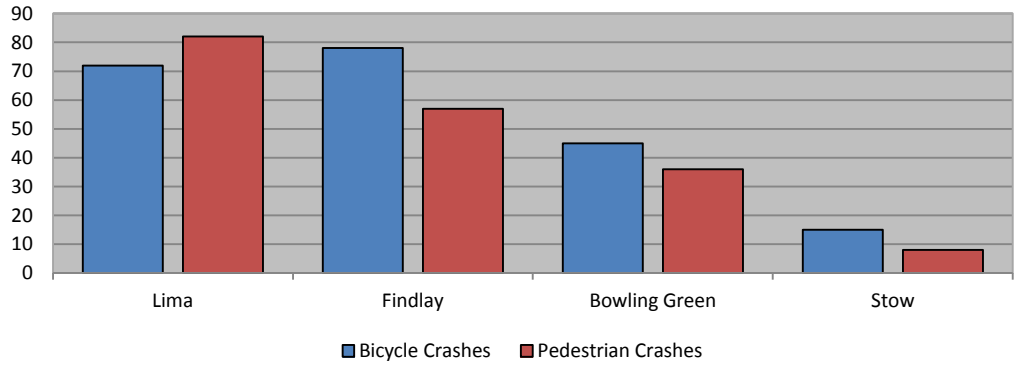




5.1.5 Pedestrian/Bicycle Systems

The pedestrian and bicycle systems in Allen County currently reflect systems that are largely fractured across local political subdivision lines. While Allen County offers unique opportunities for recreation, exercise, and travel for both bicyclists and pedestrians, the existing roadway system is the primary route that bicyclists and pedestrians must access for travel purposes. Sidewalks are largely absent outside the cities and villages. Some residential subdivisions are serviced internally by sidewalks within the Lima Urbanized Area, however connectivity to anything outside the subdivision eliminates much of their utility value as an alternative transportation mode. This inconsistency in sidewalk availability also poses limitations to developing transit services as fixed route access becomes problematic without sidewalks. Within the Lima Urbanized Area sidewalks cover 43.1 miles (24.1%) of all roadways on the functional classification system. Bicycle facilities exist as shared roadways, marked bike lanes, and multi-use paths. The shared roadways and bike lanes are somewhat restrictive to cyclists based on individual experience levels or based on trip purpose as most shared use paths are largely recreational in orientation and generally not supportive of work commutes.

FIGURE 5-13: BIKE/PEDESTRIAN CRASHES 2012-2016



The increased potential for conflicts on shared roadways, not designed and ill-equipped to accommodate non-motorized travel, frequently results in serious traffic incidents. Therefore, traffic crash data is a useful tool to measure the need for both infrastructure improvements and safety initiatives. When reviewing 2012-2016 pedestrian traffic incidents, the City of Lima ranked first among similar-sized municipalities (population 30,000-50,000) in the State of Ohio for pedestrian crashes per 100,000 (crash rate) and second in the number of pedestrian crashes (incident frequency). Examining bicycle crashes, between 2012 and 2016, the City of Lima ranked second among similar-sized municipalities in the State of Ohio in bicycle crashes per 100,000 and third in number of bicycle crashes. Plans for constructing or modifying new pedestrian/bicycle facilities must be identified in order to resolve the safety issues and provide adequate mode choice.

Although in recent years work has been done to enhance connectivity, much work remains to be done. Local political subdivisions within Allen County, including the Johnny Appleseed Metropolitan Park District (JAMPD), the cities of Lima and Delphos, and the villages of Bluffton and Spencerville, maintain a number of shared-use bicycle and pedestrian paths, usually contained within local/metropolitan parks. Table 5-6 and Map 5-7 depict the 287.6 miles of existing and proposed pedestrian, shared-use paths, bike lanes and/or bicycle routes traversing Allen County. There are 45.1 miles of

proposed US Bike Routes in Allen County; their alignment, signage and dedication remains to be finalized by ODOT.

TABLE 5-6
EXISTING & PROPOSED PED/BIKE FACILITIES

Ped/Bike Facilities	Present Miles	Proposed Miles	Total Miles
Shared Use Path	22.7	39.9	62.6
Bike Lane	1.5	13.8	15.3
US Bike Route	0	45.1	45.1
Other Bike Route	12.2	111.2	123.4
Unpaved Path	40.9	0.3	41.2
Total	**77.3**	**210.3**	**287.6**

5.1.6 Aviation System

Located 5 miles southeast of the City of Lima, the Lima-Allen County Regional serves Allen County and the surrounding area. The airport is located on a 722.5-acre tract in Perry Township. The Airport takes access off Hanthorn Road which forms its southern boundary. The Airport's northern boundary is SR 117, which provides visibility and an expectation of increased commercial presence; restricted access however has thwarted further commercial development.

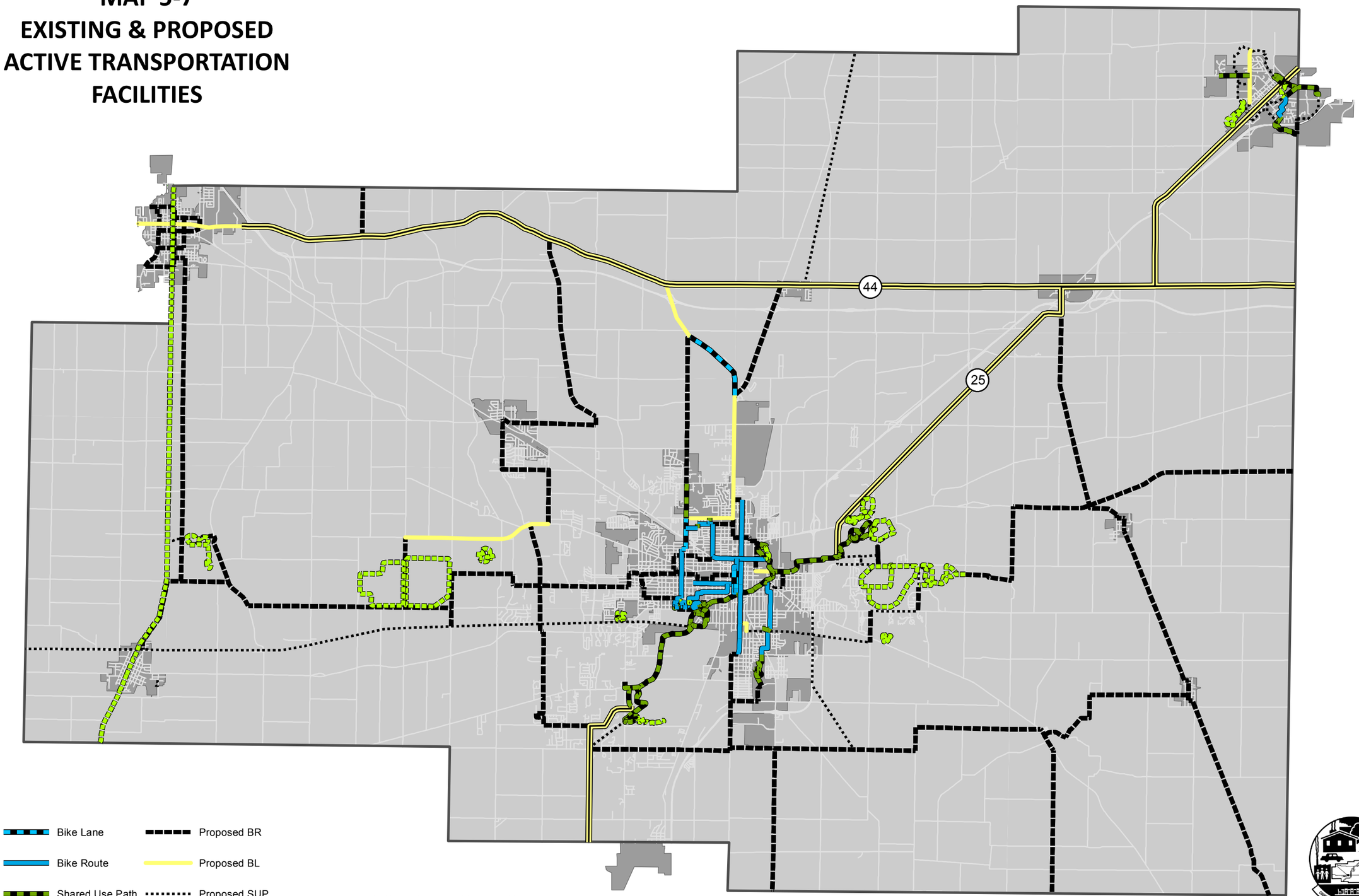
The airport can be divided into two distinct facility areas, airfield areas and related land side facilities. The airfield facilities accommodate the movement of aircraft and include runways, taxiways and aircraft parking aprons, and navigational and communication equipment. Aviation related land side facilities include the terminal building fixed base operator (FBO) buildings, aircraft hangars and automobile usage areas.

The airfield has a single runway. The primary runway, Runway 10-28, is 6,000 feet long and 150 feet wide (resurfaced in 2017). The runway is asphaltic concrete and rated to serve aircraft weighing 60,000 lbs dual wheel. The runway is serviced by high intensity runway lights. In addition, it has Precision Approach Path Indicators (PAPIs) and runway end identification lights (REILs). The runway is also served by a Category I Instrument Landing System (ILS) approach and a full length parallel taxiway with 6 connectors. A second 2,500' long turf runway was permanently closed in 2017. The airport is serviced by three published instrument approaches, both precision and non-precision. The Allen County Airport is located just under Class E Airspace. The FBO provides line services, flight instruction, maintenance, suppliers and lounge facilities. The terminal building is approximately 4,600 square feet and provides office space for the FBO, passenger lobby, pilot lounge, flight planning area, meeting and rest room facilities. There are also 2 corporate hangars, and 40 individual t-hangars, as well as maintenance and storage buildings.

5.2 Current Issues: Constraints

Based on a review of the previous data files, several issues warrant local attention: (1) although the County population experienced a 0.9% increase in total population since 1960, current population projections suggest a declining population; (2) hospital expansions and growth in medical OSDA facilities coupled with the construction of new schools has brought renewed vitality to the Lima Urbanized Area; (3) population growth is occurring in rural areas in both controlled and uncontrolled environments increasing the expense of maintaining local

MAP 5-7
EXISTING & PROPOSED ACTIVE TRANSPORTATION FACILITIES



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roadways and bridges, and increasing the response time of police, fire and emergency medical services; (4) while employment in the traditional manufacturing sector has declined by nearly half (44.4%) since the 1980's, growth in the service (225.7%), transportation & warehousing (15.3%) and Finance, Insurance & Real Estate (14.3%) sectors have increased and diversified the local economy. Overall employment increased has increased by 33.4 percent since 1980; (5) local service and retail centers continue to attract patrons from adjacent counties; (6) the number of vehicle registrations has dropped 4.9% for the 10 year period of 2007-2016 while the volume of traffic on area roadways has risen 0.4% over the same time period, resulting in localized level of service (LOS) problems; (7) public transportation must continue to serve an increasingly aging population residing in an ever expanding service area making the delivery of public transportation more difficult and expensive; (8) Local rail facilities while extensive are inadequate to service the demands of the existing industrial base and support passenger rail for local transportation options. (9) bicycle and pedestrian facilities are lacking especially in the suburban and rural areas where the prevalence and severity of ped/bike crashes with motor vehicles is a constant concern; and, (10) planned airport expansions are being negatively affected by conflicting land use activities. The following narratives are provided to better indicate specific issues pertinent to the community's transportation system.

5.2.1 Roadway Component Constraints

Various corridors were identified during the preparation of the 2040 Transportation Plan Update as problematic through the public involvement process. Suggested highway improvements included additional lanes, improved intersection geometrics, roadway widening, roadway extensions, new bridges, railroad grade separations and at-grade crossing improvements.

There are numerous corridors which have been deteriorating for some time due to the increasing proliferation of retail and service sector activities, along with an increasing number of unabated driveway locations. These corridors need added capacity to function at a satisfactory level of service. Of concern are those corridors where the level of service is deficient and deteriorating; and, where additional study is warranted to improve roadway safety.

Roadway width deficiencies identified on the Federal Functional Classification System are compromising system efficiency and safety. Currently 184.5 miles of the system's higher order roadways eligible for federal funding are deficient in lane width as defined by 12 foot lane widths. Estimated costs to meet federal lane width standards exceed $16.6 million. Table 5-7 provides lane width data by roadway classification and identifies the deficient widths by roadway. Of note, IR 75 and US 30 do not suffer from deficient lane widths.

TABLE 5-7
DEFICIENT ROADWAY MILES BY FUNCTIONAL CLASSIFICATION - 2016

Deficient Road Width	Minor Collector	Major Collector	Minor Arterial	Principal Arterial	Total Miles	Cost to Upgrade @ $7 / sq ft
>= 5 feet	1.2	3.6	1.8	0	6.6	$1,350,000
4 feet	15.3	9.5	2.5	0	27.3	$4,040,000
3 feet	13.3	13.8	0	0	27.1	$3,000,000
2 feet	30.8	56.7	9.3	2.4	99.2	$7,330,000
1 foot	7.8	15.1	1.4	0	24.3	$ 900,000
Total	**68.4**	**98.7**	**15.0**	**2.4**	**184.5**	**$16,620,000**

Based on the various corridor studies conducted on the federal functional classification system completed to date, there are currently some 30.5 miles of higher order roadways in Allen County with a measured deficient Level of Service (LOS), as defined as a LOS of D, E, or F, during at least one time period of the day (am, noon, pm). Further analysis determined that 13.3 miles were identified as LOS D, 10.7 miles were identified as LOS E and 6.5 miles were at LOS F. Current deficient corridors are illustrated in Map 5-8 and the LOS F corridor segment are shown in Table 5-8. Table 5-9 summarizes the miles of deficient corridors by Functional Class.

Although corridors were identified as problematic to the local community during the public involvement process, the funding available to meet such needs is limited in the foreseeable future. And, although total project costs preclude the local political subdivisions from building their way out of the project listing, future corridor studies present an opportunity to prioritize the community's most important projects and address them with available federal transportation dollars.

5.2.2 Bridge Constraints

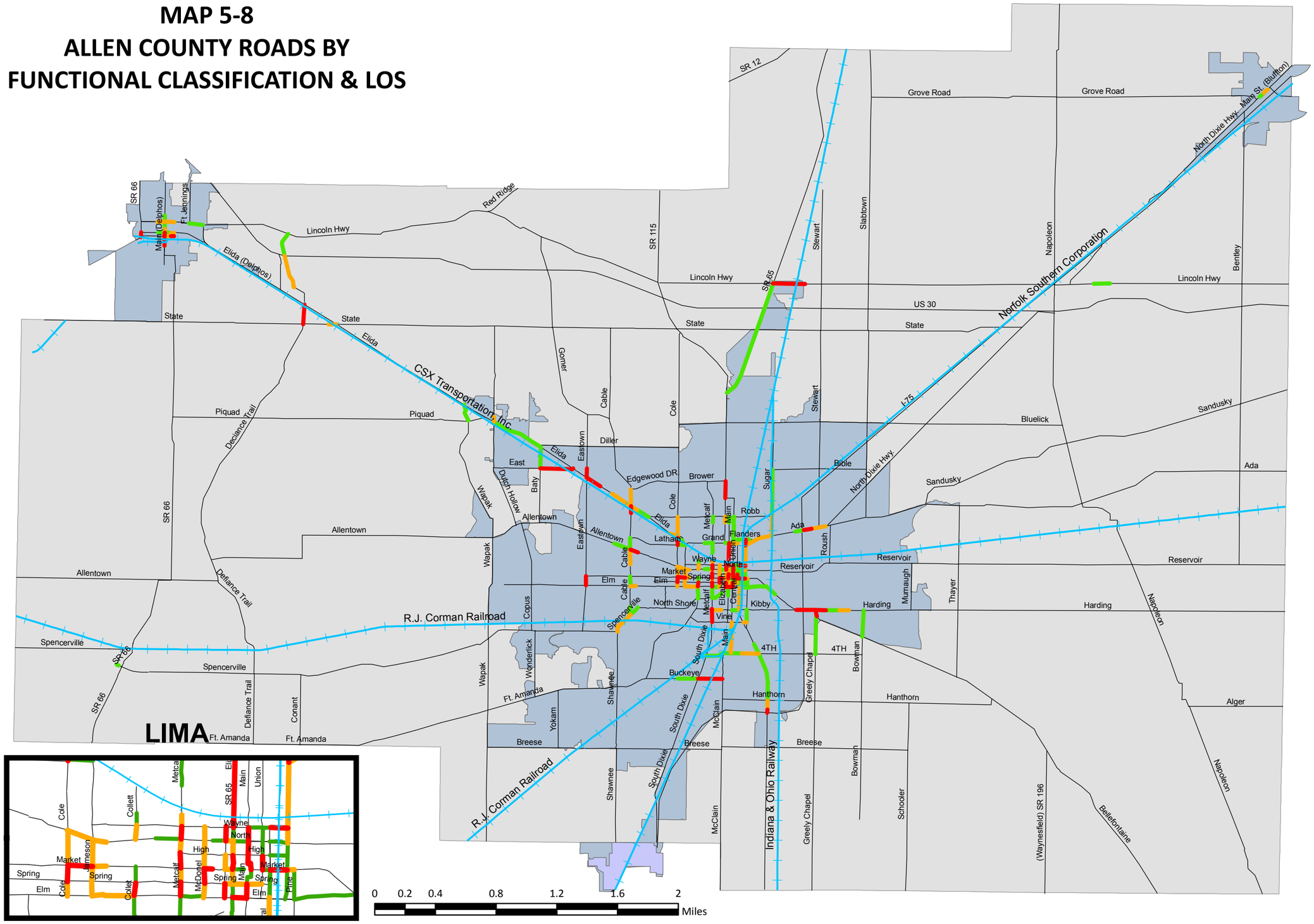
Deficient bridges, which require closure or load limitations, impact the overall effectiveness of the transportation system as well. These restrict both personal and commercial travel. Performance Measures are required by ODOT and FHWA for all bridges and culverts on the NHS system, which include Interstate 75 and US 30 in Allen County. As such the bridges are rated Good, Fair, or Poor as defined by the National Bridge Inventory. Currently, there are 592 bridges and culverts located within Allen County. Of those bridges and culverts, as illustrated in Table 5-10, 361 (63.89%) are in Good Condition, 191 (32.26%) are in Fair Condition, and 25 (4.22%) are in Poor Condition. Excluding culverts, there are 104 bridges maintained by ODOT, 271 Allen County, 8 by the City of Lima, 8 by the City of Delphos, 3 by the Village of Bluffton, 1 by the Village of Spencerville, 3 by Railroads, and 2 by others. The estimated costs associated with the replacement of bridges in Poor condition currently total $9.7 million. Nearly one-half (44.1%) of the bridges and culverts are located on higher order roadways while 20% of bridges and culverts in Poor condition are on such roadways. Table 5-11 and Map 5-9 identify the bridge and culvert condition in the LACRPC region.

5.2.3 Public Transportation System Constraints

Public transit is a valuable component of the transportation system that serves the community's residents and businesses alike. Public transit has delivered just under 400,000 people for the last several years to area schools, employers and service centers and affords entrepreneurs, service providers and their customers the ability to more fully participate in the community and its economic pursuits.

Public transit is currently underfunded. The loss of federal operational funding (JARC & New Freedom) has stymied service delivery and the loss of federal funds has placed a greater burden on the need for local funding. Transit systems must provide local funds to match federal funds. With the exception of the City of Lima, no local governments support transit services. The lack of local funding has been stagnant since 1997 and does not adequately reflect those inflationary costs of providing the service nor the value of the services provided to local residents. The transit agency went on the ballot for a sales tax in 2017 but were not successful. As a result, the transit agency cut Saturday and evening services in December 2017 and three fixed routes were discontinued in January 2018 in order to balance income and expenses. Additional local funding will be required to support public transportation services at the same level of service currently provided.

MAP 5-8
ALLEN COUNTY ROADS BY FUNCTIONAL CLASSIFICATION & LOS



MAP 5-9
2017 ALLEN COUNTY BRIDGES
NBI RATING

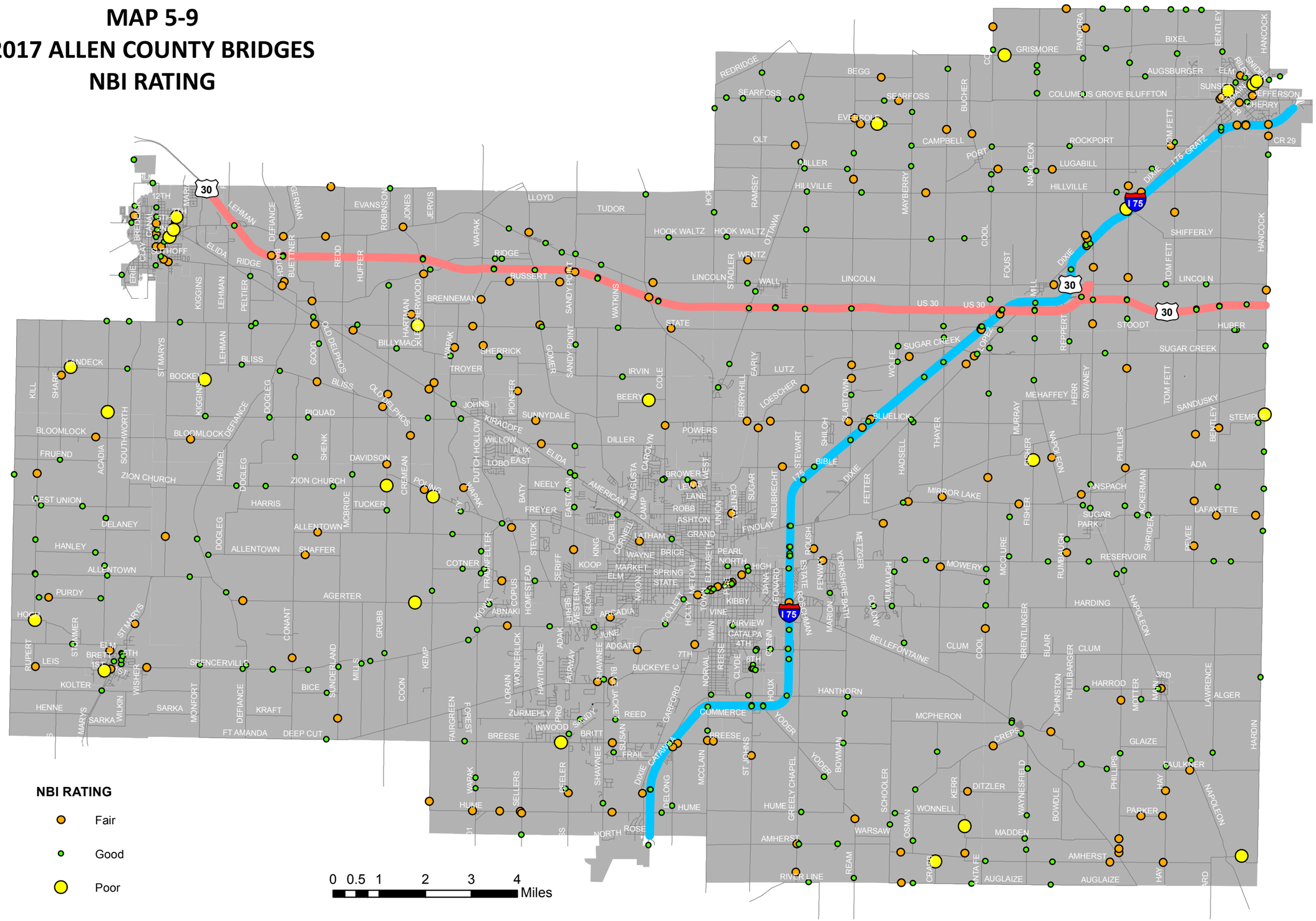


TABLE 5-8 DEFICIENT CORRIDORS - 2016			
Roadway	**LOS**	**Length**	**Location**
1st St. (Delphos)	F	0.068	Franklin to Pierce
Ada	F	0.167	I75 South to I75 North
Allentown	F	0.176	Cable to Cornell
Bellefontaine	F	0.107	Kibby to I-75 S
Bellefontaine	F	0.140	Willard to Greely Chapel
Buckeye	F	0.519	Dixie to McClain
Cable	F	0.150	College to Elida
Cole	F	0.149	Latham to Jameson
Cole	F	0.113	Spring to Market
Collet	F	0.084	Elm to Spring
Defiance Trail	F	0.423	State to SR 309
East	F	0.717	Baty to SR 309
Eastown	F	0.200	Elm to Market
Eastown	F	0.202	Elida to Hartland
Elida	F	0.339	Eastown to American
Elizabeth	F	0.092	Market to High
Elizabeth	F	0.476	Wayne to Grand
Harding	F	0.635	SR 117 to Halyoke
Lincoln Hwy	F	0.690	SR 65 to Cairo East Corp
Main	F	0.093	Elm to Spring
Main	F	0.116	Market to High
Main	F	0.091	North to Wayne
Main	F	0.086	High to North
Market	F	0.163	Cole to Jameson
Market	F	0.054	McDonel to Pierce
Market	F	0.113	Central to Jackson
McDonel	F	0.097	Spring to Market
Metcalf	F	0.288	Vine to Kibby
Metcalf	F	0.091	Elm to Spring
Metcalf	F	0.082	North to Wayne
Metcalf	F	0.102	Market to High
SR 66	F	0.213	Cleveland to 1st
SR 66	F	0.076	1st to 2nd
State (Delphos)	F	0.101	2nd to Bank
Union	F	0.089	Wayne to North
Wayne	F	0.113	Jackson to Central

TABLE 5-9 DEFICIENT LOS BY FUNCTIONAL CLASS - 2016				
Functional Class	**LOS D Miles**	**LOS E Miles**	**LOS F Miles**	**Total Miles**
Principal Arterial	4.5	5.0	1.7	11.2
Minor Arterial	2.4	1.3	.9	4.6
Major Collector	5.6	3.8	3.1	12.5
Minor Collector	.8	.6	.8	2.2
Total	**13.3**	**10.7**	**6.5**	**30.5**

TABLE 5-10
BRIDGE SUMMARY PERFORMANCE MEASURE

Road Description	Total Bridges & Culverts	Number Good	Percent Good	Number Fair	Percent Fair	Number Poor	Percent Poor
NHS-Interstate (IR75)	33	22	66.67%	11	33.33%	0	0.00%
NHS-Non-Interstate (US30)	24	23	95.83%	1	4.17%	0	0.00%
Principal Arterial; less NHS (FC3)	17	13	76.47%	3	17.65%	1	5.88%
Minor Arterial (FC4)	26	15	57.69%	11	42.31%	0	0.00%
Major Collector (FC5)	126	80	63.49%	43	34.13%	3	2.38%
Minor Collector (FC6)	35	22	62.86%	12	34.29%	1	2.86%
Local (FC7)	331	201	60.73%	110	33.23%	20	6.04%
Total	**592**	**361**	**63.51%**	**191**	**32.26%**	**25**	**4.22%**

TABLE 5-11
BRIDGES (LESS CULVERTS) IN POOR CONDITION

Road Name	Bridge No.	Location	Restriction	Year Built	Year Rehabilitated	Sufficiency Rating	Deck Area	Cost Estimate
Fisher Road	0239089	0.40 miles S of Sandusky Road	Closed	7/1/1924		16.0	1981	792,400
Kiggins Road	0241172	0.79 miles N of Piquad Road	45%	7/1/1955		27.2	570	228,000
Seventh Street	0260827	E of Moening Street		7/1/1958		29.8	564	225,600
Dixie SW of Phil	0247626	0.07 miles SW of Phillips Road		7/1/1934		34.5	797	318,800
Grubb Road	0230308	0.01 miles N of Zion Church Road	70%	7/1/1946	7/1/1970	34.6	646	258,400
Kemp Road	0232270	0.07 miles S of Poling Road	80%	7/1/1954		45.8	474	189,600
Acadia Road	0241156	0.57 miles N of Bloomlock Road	80%	7/1/1954		46.0	1206	482,400
State Road	0241113	0.12 miles W of Leatherwood		7/1/1935		46.3	506	202,400
Agerter Road	0230022	0.36 miles W of Kemp Road		7/1/1939		47.9	474	189,600
Crabb Road	0245755	0.14 miles S of Amherst Road	Closed	7/1/1946	7/1/1981	49.8	398	159,200
Landeck Road	0241059	0.19 miles E of Scharf Road		7/1/1934		55.7	560	224,000
Grismore Road	0247693	0.25 miles E of Cool Road		7/1/1964		58.5	872	348,800
Amherst Road	0234591	0.50 miles E of Napoleon Road		7/1/1939		59.4	398	159,200
Bluffton - Main Street	0247596	0.47 miles SW of County Line		7/1/1925		65.0	3876	1,550,400
Kerr Road	0245704	0.73 miles N of Amherst Road		7/1/1931		66.0	431	172,400
Bluffton - Main Street	0247618	0.46 miles SW CO @ AC&Y RR		7/1/1927	7/1/1932	66.5	1550	620,000
Third Street	0260894	W of Douglas Street		7/1/1912		69.9	1438	575,200
First Street	0260800	E of Pierce Street		7/1/1912		70.0	1174	469,600
Bluffton - College Avenue	0248045	0.13 miles NW of Lawn Avenue		7/1/1961		71.9	1974	789,600
Eversole Road	0243639	0.50 miles E of Slabtown Road		7/1/1980		73.0	527	210,800
Breese Road	0249645	0.93 miles W of Shawnee Road		7/1/1967		76.4	2347	938,800
Berry Road	0232483	0.36 miles W of Cole Street		7/1/1968		85.0	1367	546,800
							Total	**9,652,000**

5.2.4 Railroad Component Constraints

There are currently 142 public at-grade rail crossings located in Allen County on 100.5 miles of track. Many of the railroad crossings are currently in need of rehabilitation and an upgrade of the traffic control devices.

Specific railroad crossings located along the CF&E, R.J. Corman, Norfolk Southern, I&O and CSX lines are increasingly causing vehicle delay, posing emergency access problems and stagnating area development. Future delays are anticipated on the Breese Road and 4th Street corridors as a result of Global Energy activities and development of the former brownfield site, the Liberty Commons Industrial Park. Additional new or improved grade separations are being evaluated at corridors mostly on higher order roadways located on the federal functional classification system. Complete engineering costs for improving conditions at the 142 public at-grade crossings remains to be documented and costs, therefore, are not available. It should be noted that dedicated federal/state funding to address on-going rail-related constraints is inadequate but local governments continue to work with ODOT and the ORDC to address such issues.

5.2.5 Roadway Freight System Constraints

The State Highway System oriented itself towards serving urban centers. With the more recent relocation to the outskirts away from the core urban area, freight finds itself traversing state routes through the length of urban areas, when quicker and more efficient routes on less traveled roads might better serve the community and reduce congestion on urban streets. Truck routes need to reflect the origin and destinations they serve, and they need to reflect the operational needs of today's larger trucks. Older city streets were never designed to handle such large vehicles with large turning radii.

The need for increased freight handling facilities along with their location must be identified with potential land use conflicts. After intensive study[30] the City of Lima has proposed new truck routing thru the City of Lima especially targeting SR 65, SR 117 and SR 309. This establishes some new challenges relative to addressing one-way street conversions, geometric modifications, and parking/loading zones during peak hours for Allentown Road, Cable Road, Metcalf Street, Elm Street, Shawnee Road, Spencerville Road, and Wayne Street through the 2040 horizon. Freight-related projects to upgrade roadways needed to enhance connectivity to the state route system have been identified with estimated costs of $48.3 million.

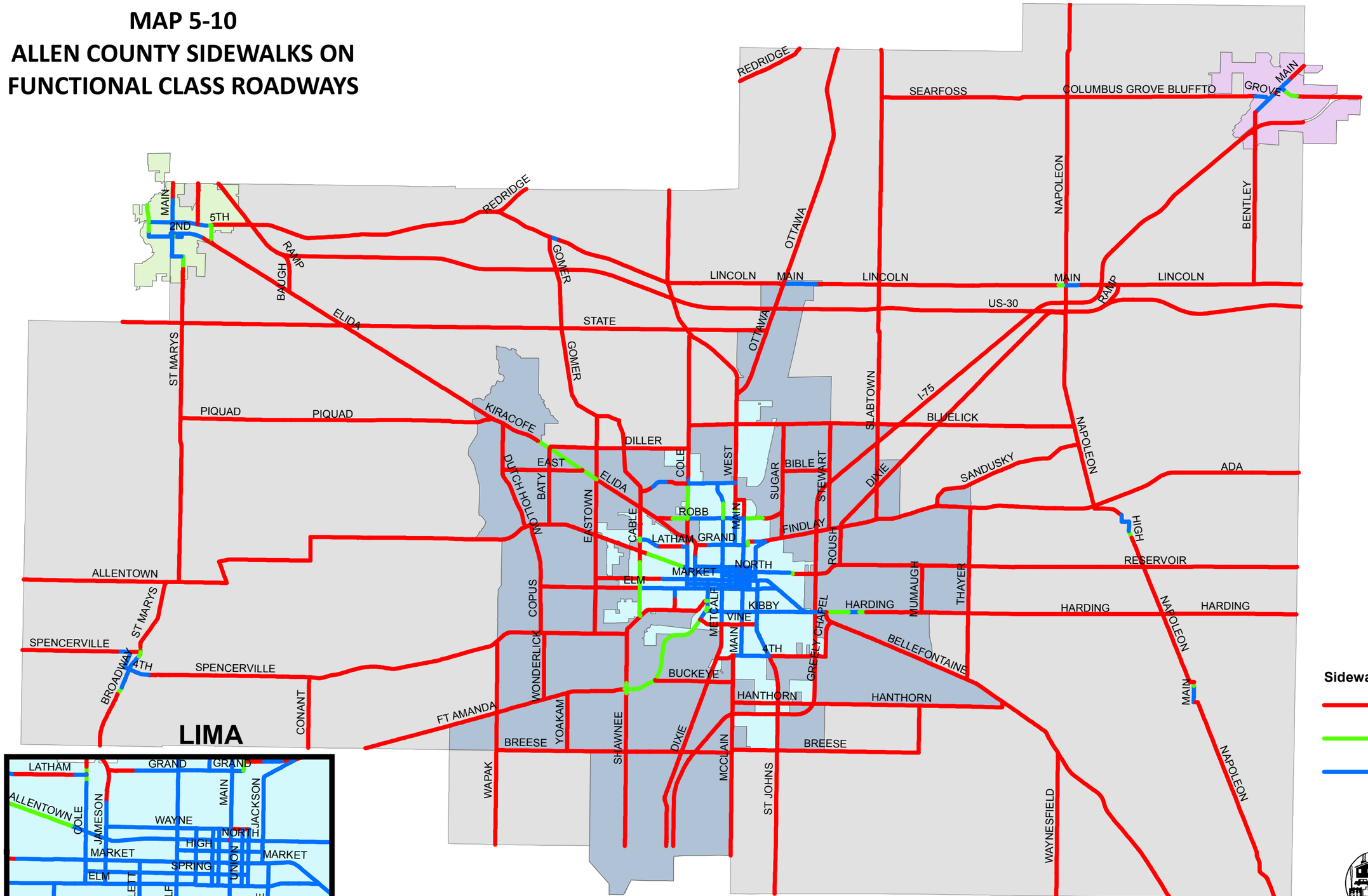
5.2.6 Pedestrian/Bicycle Component Constraints

Pedestrian transportation amenities are lacking in Allen County, particularly in suburban and rural areas. Student pedestrians, especially, are placed at risk when necessary infrastructure is absent. Sidewalks are largely absent in the unincorporated areas and have been dismissed as a viable alternative to the motor vehicle. As depicted on Map 5-10, 135.8 miles of sidewalks are absent along those roadways identified on the Federal Functional Classification System within the Lima Urbanized Area. The cost to construct sidewalks on both sides of the roadways is estimated at $50.2 million.

The effective development of a pedestrian/bicycle network throughout Allen County is constrained by many factors. While the population of Allen County is projected to decline somewhat over the planning horizon, those living within the corporate limits of

[30] A study titled "Lima Area Transportation Study" completed by LJB March 2010 proposed various options to address freight movements.

MAP 5-10
ALLEN COUNTY SIDEWALKS ON FUNCTIONAL CLASS ROADWAYS



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the City of Lima are projected to continue to migrate into the outlying communities. Such migration results in increased traffic congestion and hazardous conditions for bicyclists and pedestrians. Limited right-of-way widths, traffic volumes, and speeds along most major roadways, combined with a lack of bicycle accommodations on most routes, makes bicycling very difficult. Many roads lack shoulders, creating difficult riding situations, especially in rural areas. In addition, because land-use planning is largely controlled by individual political subdivisions, efforts to develop an effective bikeway system are thus thwarted because of disjointed regulations/perspectives. Connectivity is yet another constraint; since most of the existing shared-use paths are not connected, users have to navigate an ill-equipped roadway system and barriers such as busy intersections, highways, and natural obstacles. The county and township roads typically lack safe on-street connections from nearby residential areas and other bicycle trip generators such as schools and parks. The Lima Urbanized Area is served with an inadequate amount of sidewalk and bicycle accommodations. However, the City of Lima and local municipalities have recently become re-energized and are instituting new pedestrian and bicycle facilities in an effort to become more walkable communities and looking at the complete streets approach. This however, does not alleviate the overall concern of poor linkages between transit and shared-use facilities throughout the County. An estimated $18.9 million of funding is needed for future identified pedestrian and bicycle facility projects in Allen County.

5.2.7 Aviation System Constraints

The Lima-Allen County Regional Airport (KAOH) has historically experienced corporate and jet usage which has implications for runway length and the occasional visit of Air Force One. Land side facility improvements need to focus on ground access to the airport and terminal location/amenities. The terminal building and parking areas are in need of architectural improvements to address ADA accessibility; the terminal parking area has limited public events due to its limited size. Recognizing increased technical demands and safety, a 1985 Airport Master Plan for the airport recommended the increased lengthening of Runway 10-28 to 6,500 feet. The additional length is necessary to service larger corporate planes/loads. In addition to GPS approaches to the airport, runway alignment indicator lights (MALSR) to accompany the existing ILS were also recommended in the Master Plan.[31] The Master Plan recommended airport access off SR 117 instead of Hanthorn Road to improve the distance from IR 75 to 3 miles and provide access off of the state route system. An updated Master Plan should be considered given the date of the last plan and the new technologies and fiscal realities that have enveloped small general aviation airports.

Physical improvements of the airport terminal need to reflect its current corporate users; and, any commercial orientation requirements should the community desire to reestablish commercial service. The relocation of a terminal site to the north end of the airport would facilitate greater visibility in the community and greater usage rates. Current land use is largely agricultural; however, large lot residential use is evident under existing/proposed runway approaches and within air traffic patterns. In order to realize the full potential of the airport facility, current zoning controls which allow schools, residential dwellings and ancillary supporting services should be prohibited. Airport, Township and County officials need to limit further encroachment and establish zoning to minimize safety concerns and future development potential. Necessary

[31] "The Lima-Allen County Airport Master Plan," published in 1985 and "The Lima-Allen County Airport – Airport Layout Plan Update," published in 1997 is referenced for purposes of inclusion herein.

operating and infrastructure improvements are estimated at $11.1 million through 2040.

5.3 Projected Traffic Assignments & System Constraints

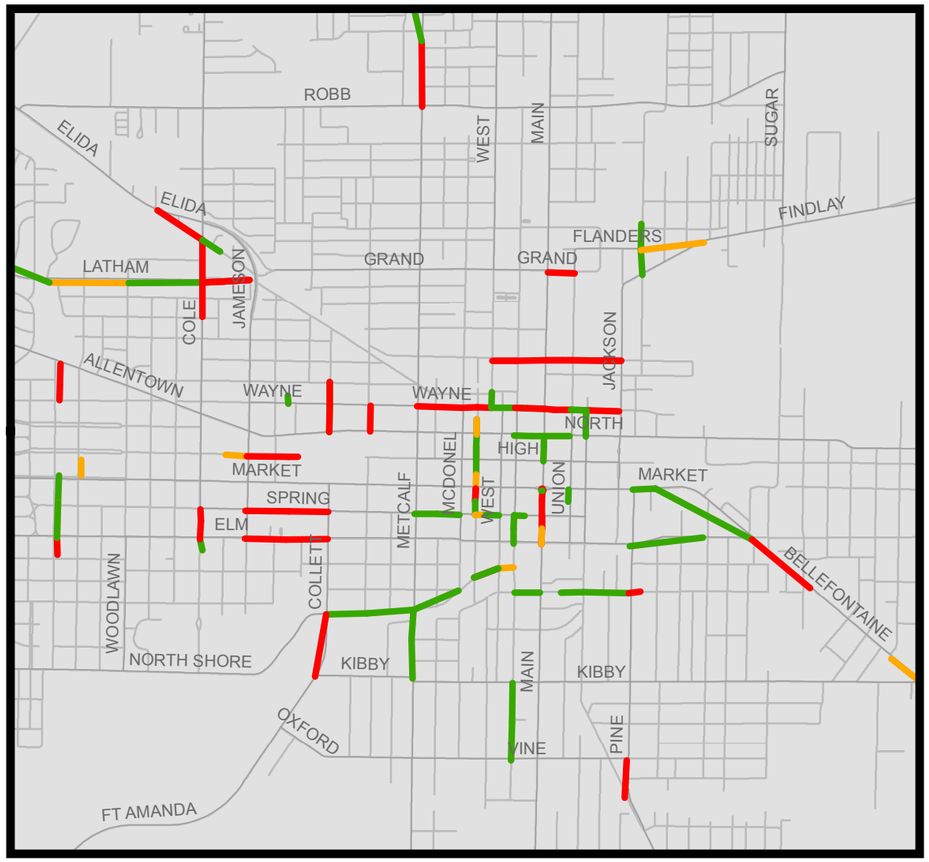
Reviewing some of the previous data files, several issues warrant attention: (1) total Allen County population is expected to decrease to a population of approximately 100,650 by 2040; (2) the population within urban centers especially Central Business District are decreasing while more suburban and exurban areas of Allen County are experiencing uncontrolled growth; (3) the population is expected to become somewhat older and more female in orientation by 2040; (4) total vehicle registrations even with an increase the last 3 years has declined overall since a peak of 122,177 in 2003; (5) total transit system ridership was increasing through 2016, but services reductions were necessitated in 2017 because of inadequate funding; (6) bicycle and pedestrian alternatives to the motor vehicle have been dismissed in the suburban areas and supportive facilities are currently inadequate – the regions higher bike and pedestrian crashes pose a health and safety problem; and, (7) increasing suburbanization coupled with increased employment within the region are expected to generate an increasing amount of traffic on area roadways.

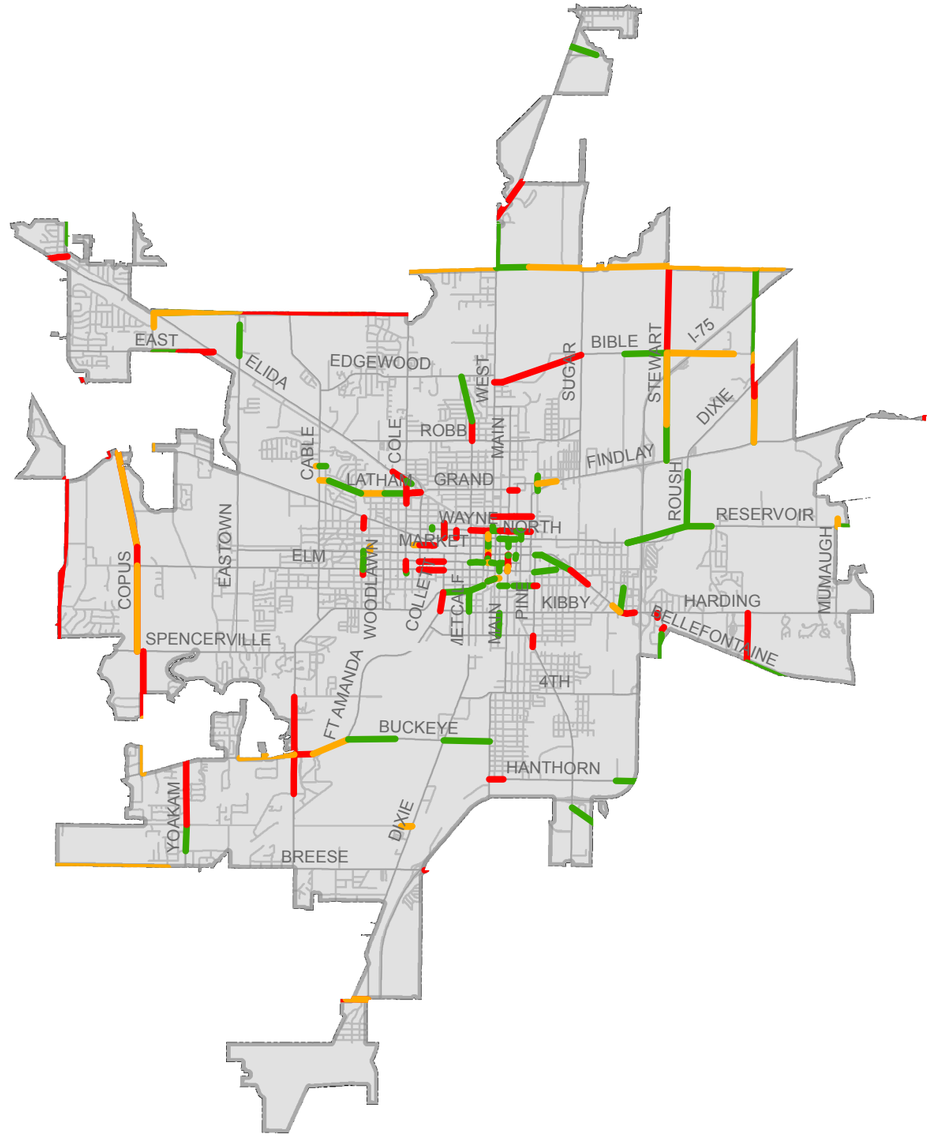
The previous LRTP was prepared in 2013, since that time the model has added additional traffic counts, refined its cordon line data and collected origin-destination trip data. The modeling effort entailed great collaboration in part by ODOT District One, ODOT's Office of Technical Services and the LACRPC. Explanation of the model validation process is noted in a Technical Memorandum published by ODOT Office of Technical Services. The result of such efforts is an "operational picture" of the region's highway network projected out to the year 2040.

Conditions generated from the model run reveal deficiencies of the roadway system based on projected demographic, land use, employment and projected travel patterns within the region. These projections are to be used as a guide for transportation professionals to facilitate the scheduling of improvement projects in the years to come. Traditionally, volume to capacity (V/C) ratios has been used to define deficient roadways; technical documents continue to support that fundamental assumption. Modeling the existing roadway network plus the committed projects (E+C) currently identified in the Regional Planning Commission's FY 2018-2021 TIP allowed future deficient corridors to be identified. The deficient roadway segments were those 81.7 miles projected to be operating at an unsatisfactory LOS in 2040. Based on capacity calculations, 24.3 lane miles are identified as LOS D, 26.9 lane miles are identified as LOS E and 30.5 miles are identified as LOS F. Map 5-11 identifies the corridors projected to be deficient in 2040 by roadway segment.

MAP 5-11
2040 DEFICIENT CORRIDORS
LIMA URBANIZED AREA

LIMA





Deficient LOS

CLOS

- D
- E
- F

0 1.5 3 6 Miles

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SECTION 6
FINANCIAL RESOURCES & FISCAL FORECAST

Allen County's transportation system necessarily recognizes various political boundaries and jurisdictions of responsibility. The federal functional classification system provides an operative, utilitarian division of area roadways based on their function and importance in the overall system. Those roadways on the functional classification system are eligible for federal funding to support their continued operation. The local political subdivisions however, are ultimately responsible for the maintenance and operation of roadways, with any federal funding dependent upon their respective functional classification.

Pursuant to Federal legislation an MPO's Transportation Plan is required to include a financial assessment which demonstrates how the MPO will ensure that operational and maintenance demands are considered and how capital improvement projects included within the Plan can be implemented. Given the various jurisdictions of responsibility, a financial plan has been prepared that takes into account the obligation of maintaining the condition and LOS of area roadways. The financial plan identifies those local fiscal resources currently available to maintain the system, as well as current and future federal funds for transportation improvements. The purpose of this section is to identify the nature and scope of available resources to maintain the system and to present a forecast of the amount of federal funds that will be available to support transportation improvement projects through the year 2040. The documentation of existing fiscal resources as well as forecasts of available federal funds presented in this section have been used in developing the financially constrained 2040 TP.

The financial plan was developed in three steps. The first step was to identify funding sources for area transportation projects currently utilized by the local political subdivisions to maintain the transportation system. Section 6.1 provides an overview of such sources. The second step, a forecast of federal funding currently committed for transportation improvements from 2019-2021. Section 6.2 provides an overview of federal funding by source and year for the currently committed transportation projects using the methodology provided in the ODOT 2018-2019 Business Plan. Additional information is contained in the current TIP document (FY 2018-2021) which is referenced for inclusion herein. In the final step, assumptions were made on each category of Federal funding for transportation improvements and a fiscal forecast developed encompassing the years 2019 through 2021 and 2022 through 2040. The section closes with a financial summation establishing the MPO's compliance with federal fiscal constraint requirements.

6.1 Local Fiscal Resources

The MPO surveyed local political subdivisions to identify the various funding resources used in funding local transportation improvements. Table 6-1 reveals the 3-year average of available annual funding by the respective funding sources and is provided for purposes of documenting local capacity to maintain and operate the existing transportation system. The remainder of this section is offered as a glimpse into local funding.

TABLE 6-1
REGION'S ANNUAL FISCAL RESOURCES (IN MILLIONS)

Gas Tax	License Registration	Permissive License Tax	OPWC	CDBG	Total
3.56	1.11	1.38	2.96	.33	9.34

6.1.1 Gas Tax Receipts

The current State Gas Tax as of May 2018 is 28 cents per gallon with the breakdown of gas tax receipts pursuant to ORC 5735.27. Redistributed Gas Tax funds can be used locally to construct, repave, widen, maintain, repair, clear and clean public highways, roads and streets. Such funding can also be used to erect and maintain street and traffic signs and signals as well as for the planning, maintenance and repair of roads, walks and paths. Gas Tax receipts have generated, on average, $3,560,082 per annum over the past 3-year period for area governments who are charged with the responsibility of maintaining the existing transportation system. As this funding source is supported by the ORC, it is considered a stable funding source for meeting the community's future transportation needs.

6.1.2 License Registration Fees

A major source of funding across the political subdivisions of Allen County is the License Registration fees mandated in 1980. Pursuant to ORC 4501.04, the fees are collected by the State Deputy Registrar and redistributed back to the various political subdivisions based on their station as a county, municipality or township in a weighted and somewhat cumbersome formula. The use of License Registration fees is restricted to the maintenance, repair and construction of public roads and bridges. The License Registration fee has generated, on average, $1,114,117 per annum over the past 3-year period for area governments concerned with the operations of the existing roadway system. The funding source is sustained by the ORC and considered a stable funding source available to meet future transportation needs of the region.

6.1.3 Permissive Motor Vehicle License Taxes

Counties, municipalities and townships have the authority to levy permissive (and successive) motor vehicle license taxes pursuant to ORC 4504.15 and 4504.16, 4504.06 and 4504.17 and 4504.18 respectively. Such tax revenues are eligible for planning, constructing, improving, maintaining and repairing public roads, highways and streets; maintaining and repairing bridges and viaducts; paying debt service charges on notes or bonds issued for such purposes; purchasing, erecting and maintaining street lighting and traffic signal equipment; and, to supplement revenues already available for such purposes. The authority to levy a $5 permissive tax (as well as successive $5 tax) on each vehicle license requires a vote of the electorate in townships and simple resolution with hearings and referendum compliance in counties and municipalities. Additional license taxes levied under respective sections continue in effect until repealed. The permissive Motor Vehicle License Tax generated an estimated $642,621 in 2018 for local governments in Allen County. This source is bolstered by the ORC and is considered a stable funding source for future transportation operations and maintenance needs. In 2018 there was an addition of two successive $5 permissive taxes adopted at the County level so beginning in 2019 an additional $740,000 will be available to support local transportation projects.

6.1.4 Issue I Funds & OPWC

Issue I Funds came about as a ballot initiative and created state-local partnerships to finance necessary infrastructure improvements through the sale of bonds. The passage of Issue I created the State Capital Improvement Program (SCIP) which through the Ohio Public Works Commission (OPWC) administers and disburses programmatic funding via grants and loans to local political subdivisions for necessary infrastructure projects. The OPWC manages the State Capital Improvement Program (SCIP) which provides local

governments project funding for roads, bridges, sewer, water and solid waste systems. From exclusively a transportation perspective, the Local Transportation Improvement Program (LTIP) funds derived from a 1 cent per gallon gas tax make funding available for road or bridge projects only. The Small Government Program provides grants and loans to villages and townships for critical infrastructure projects with populations in the unincorporated areas of less than 5,000 in population. OPWC's Emergency Program reserves funding for emergency projects that arise directly from catastrophic situations that involve an immediate threat for public safety and for which no other local funding source is available. Another component of Issue I funding - the Clean Ohio Program - has provided the funding to acquire open space and underwrite bicycle and pedestrian amenities. According to the OPWC, over the last 3 years Allen County communities have collectively received $2.96 million dollars in funding. This level of funding negates the contributions made under the Small Government Program and the Emergency program because by their nature these sources of funding are unpredictable and not considered for purposes of fiscal constraint.

6.1.5 Community Development Block Grant (CDBG) Programming

The Community Development Block Grant program is funding resource that can be used to address locally identified needs that are eligible activities and qualify under the national objective of Low- and Moderate-Income (LMI) Benefit or Elimination of Slum and Blight. The program includes competitive set-aside funding for Neighborhood Revitalization, Downtown Revitalization and Critical Infrastructure. The CDBG program's Community Allocation Program provides funding for public facilities, public services including transportation, housing, economic development and fair housing activities. The Program's critical infrastructure component works to fund projects to assist high-priority, single-component projects such as roads and other public critical infrastructure component improvements. The Downtown Revitalization programming is geared to target Central Business District improvements and assist with façade improvements and investment in streetscapes or other public infrastructure. While the City of Lima is a direct recipient of CDBG funding, Allen County participates in a statewide competitive program for funding. Examining the last 3 years of programmatic funding, the CDBG Program has contributed $330,000 to local transportation projects across the region annually.

6.2 Financial Forecast for 2019 Through 2021

The LACRPC prepares a Biennial Transportation Improvement Program (TIP). The TIP document is a 4-year listing of all transportation projects scheduled to use federal funding in project implementation. The TIP is important because, with few exceptions, no federally funded transportation improvement projects can be constructed in the MPO's jurisdiction unless it is approved by the Policy Committee and thereafter programmed in the current TIP, now in its second year. Table 6-2 shows the amounts currently programmed over the last three years of the current TIP.

One of the planning requirements of MAP-21 is that the TIP must include a financial plan that demonstrates how the TIP can be implemented, and indicates the resources that can be reasonably expected to be available to carry out the Plan. As a result, a forecast of federal, state transit and local funds available for the 2019-2022 time periods is presented in Table 6-2.

TABLE 6-2 FISCAL CONSTRAINT ANALYSIS						
Fund Type	2019		2020		2021	
	Estimated Cost	Estimated Budget	Estimated Cost	Estimated Budget	Estimated Cost	Estimated Budget
Federal						
STP	1,064,595	1,064,595				
STP MPO	600,000	600,000	638,000	638,000	379,000	379,000
Interstate Maintenance	300,000	300,000				
NHPP FAST			2,476,940	2,476,940		
National Hwy	8,576,243	8,576,243			11,811,226	11,811,226
Bridge	896,400	896,400	450,000	450,000		
CMAQ - MPO	600,000	600,000	749,445	749,445	600,000	600,000
Hwy Safety						
Federal	6,389,943	6,389,943	13,719,889	13,719,889	12,905,059	12,905,059
Labor - Federal	509,622	509,622	959,514	959,514	709,825	709,825
Subtotal	18,596,803	18,596,803	18,856,343	18,856,343	26,226,110	26,226,110
State/Local						
State Funds	8,836,925	8,836,925	11,150,240	11,150,240	9,708,472	9,708,472
Local Funds	3,600,875	3,600,875				
Labor - State	270,301	270,301	485,117	485,117	508,786	508,786
Labor - Local	81,699	81,699				
Subtotal	12,789,800	12,789,800	11,635,357	11,635,357	10,217,258	10,217,258
Federal Transit Agency						
5307 Urban Formula	1,075,450	1,075,450	1,075,450	1,075,450	1,075,450	1,075,450
Local Other	773,373	773,373	374,373	374,373	374,373	374,373
General Rev.	136,290	136,290	136,290	136,290	136,290	136,290
Subtotal	1,985,113	1,985,113	1,586,113	1,586,113	1,586,113	1,586,113

The National Highway System Designation Act of 1995 (NHS Act) expanded the eligibility of bonds and other debt instrument financing costs for Federal-aid reimbursement. Whereby any eligible Federal-aid project may utilize bonds or other debt instrument financing mechanisms involving the payment of future Federal-aid highway funds to retire debt. Such mechanisms are known as Grant Anticipation Revenue Vehicles or "GARVEE" bonds. While no projects in the 2040 Plan have identified the use of GARVEE bonds the MPO wishes to note that said funding has been used in the construction phase of ALL IR 75-0.21 (PID 76691) and ALL IR 75-5.53 (PID 89029) used GARVEE bonds in the construction contract sub-phase. The GARVEE Bond cap for the project ALL IR 75-5.53, PID 76691 was $56,304,761; the GARVEE Bond cap for project ALL IR 75-0.21, (PID 89029) was $56,000,000. As GARVEE bonds provide an affective and reasonable financing mechanism both ODOT and the MPO expect to utilize the tool to help underwrite eligible projects in the future.

6.3 Financial Forecast for 2022 Through 2040

Pursuant to regulatory requirements, the Plan forecasts the extent of expected federal funding by funding category for implementing projects through the year 2040. The projections are based on a half percent increase on federal funding per year. An annual average “baseline” amount was calculated for the federal and state categories. This funding level projection table includes:

- MPO Program – Programmatic monies (STP, CMAQ, etc.) provided to Ohio’s MPO areas, to finance multi-modal transportation system improvement projects and programs in Ohio’s urban areas.

- Safety Program – Safety funds are provided to ODOT and local governments for highway safety treatments or corrective activities designed to alleviate a safety problem or a potentially hazardous situation.

- Transportation Alternative (TA) Program – Allen County does not receive a direct allocation of TA funds, but competes in the statewide program. The projections include the amount of TA funding that Allen County has been issued in the past for specific projects.

- Bridge Program – Reflects funding provided to counties for bridge replacement or rehabilitation.

- Safe Routes to Schools Program – Provides federal funds to enable and encourage children in grades K-8, including those with disabilities, to walk or bicycle to school.

Included in Table 6-3 amounts are also the Interstate Maintenance funds, National Highway System fund, and the Ohio Surface Transportation Program funds.

TABLE 6-3
FUNDING LEVEL PROJECTIONS 2018-2040

Year	Federal $	Growth Factor*	State $	Total
2019	$11,984,266	1/2%	$2,508,379	$14,492,645
2020	$12,044,188	1/2%	$2,508,379	$14,552,567
2021	$12,104,408	1/2%	$2,508,379	$14,612,787
2022	$12,164,931	1/2%	$2,508,379	$14,673,310
2023	$12,225,755	1/2%	$2,508,379	$14,734,134
2024	$12,286,884	1/2%	$2,508,379	$14,795,263
2025	$12,348,318	1/2%	$2,508,379	$14,856,697
2026	$12,410,060	1/2%	$2,508,379	$14,918,439
2027	$12,472,110	1/2%	$2,508,379	$14,980,489
2028	$12,534,471	1/2%	$2,508,379	$15,042,850
2029	$12,597,143	1/2%	$2,508,379	$15,105,522
2030	$12,660,129	1/2%	$2,508,379	$15,168,508
2031	$12,723,430	1/2%	$2,508,379	$15,231,809
2032	$12,787,047	1/2%	$2,508,379	$15,295,426
2033	$12,850,982	1/2%	$2,508,379	$15,359,361
2034	$12,915,237	1/2%	$2,508,379	$15,423,616
2035	$12,979,813	1/2%	$2,508,379	$15,488,192
2036	$13,044,712	1/2%	$2,508,379	$15,553,091
2037	$13,109,936	1/2%	$2,508,379	$15,618,315
2038	$13,175,485	1/2%	$2,508,379	$15,683,864
2039	$13,241,363	1/2%	$2,508,379	$15,749,742
2040	$13,307,570	1/2%	$2,508,379	$15,815,949
Total	**$277,968,238**		**$55,184,338**	**$333,152,576**

6.3.1 FTA 5307 Program

FTA 5307 allocations are federal funds earmarked for transit operations. Small urban transit systems have been able to use such funds for operating, capital maintenance, capital expenditures, ADA services and planning expenditures when approved by FTA. FTA 5307 funding has been stagnant and is subject to change based on State allocations and federal appropriations. As such, and in an attempt to be conservative, projected FTA 5307 funding was established using the average funding received over the 2016-2018 period. Using $3.81 million and with no increase in funding for the 22-year period spanning 2019 through 2040, the cumulative total is estimated at $83.82 million.

The federal funds under 5307 require a local match of fifty percent for operation and twenty percent for capital maintenance before they can be used. The lack of local match could diminish this amount.

6.3.2 FTA 5310 Program

FTA 5310 monies support specialized services to the transportationally disadvantaged (elderly, frail, disabled). Eligible Program costs include operations, capital maintenance and capital acquisitions of the ACRTA. Availability of, and access to, these competitive funds has fluctuated widely in the past predicated upon Federal/State allocations. These funds are therefore, not considered stable and are not used in addressing issues of fiscal constraint.

6.3.3 FTA 5339 Program

FTA 5339 funding to states and transit agencies is used to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities. In addition to the formula allocation, this program includes two discretionary components: The Bus and Bus Facilities Discretionary Program and the Low or No Emissions Bus Discretionary Program. ACRTA has received funding from 5339 and OTP3 in 2016, 2017 and 2018 for capital and repairs. ACRTA will continue to apply for these funds when available in the future; however, these funds cannot be considered stable and are not used in addressing fiscal constraint.

6.4 Summary

In its attempt to comply with the required metropolitan planning factors, the LACRPC developed various data sets, constructed and completed various tests and model analyses, and entered into dialogue to discuss community goals and objectives utilizing various methods of public involvement with interested parties. As a fundamental requirement of Federal legislation, the Plan is required to include a financial assessment which demonstrates how the MPO will ensure that operational and maintenance demands are considered and how capital improvement projects included within the Plan can be implemented.

The various financial assessments contained in this section identified financial resources available to the local community for the operation, maintenance and expansion of the existing transportation system. In Section 6.1, funding sources currently used to maintain and operate the existing system were documented at approximately $9.34 million per annum. These funds are used to address daily operations, maintenance and localized improvements/repairs. Such funding reflects necessary costs associated with staffing and engineering traffic-related activities as well as addressing necessary demands on salt, asphalt, concrete, stone, lights, signals, equipment and facilities.

Section 6.2 identifies those federal dollars committed in the MPO's FY 2018-2021 TIP. Federal funds committed in the FY 2018-2021 TIP total some $103.5 million. The current TIP also identifies approximately $1.6 million in MPO-STP funds through 2021 as well as $1.9 million of MPO-CMAQ funding. Section 6.2 largely reflects monies already committed to projects that are in the process of final design/approval/construction and are therefore unable to be used for future transportation projects. Section 6.3 documents the committed project funding available between 2022 thru 2040. Table 6-4 reflects the amount of state and federal funding expected to be available for new transportation projects by funding source over the 2040 planning horizon. Table 6-4 also includes the FTA operational funds which can be used for operations or capital item. The MPO contends the Plan meets fiscal constraint requirements.

TABLE 6-4 FORECAST FUNDING FY 2018-2040 (000'S)					
Year	**Federal**	**State**	**Local**	**FTA Operations & Capital**	**Total**
2019-2021	36.1	7.5	28.0	11.4	83.5
2022-2040	241.8	47.6	177.5	72.4	538.8
Total	**277.9**	**55.1**	**205.5**	**83.8**	**622.3**

SECTION 7
TRANSPORTATION SYSTEM IMPROVEMENTS

Despite the past emphasis on increasing highway capacity, roadway constraints remain a problem in Allen County. The community continues to experience growth in the number of autos, trips, and vehicle miles traveled. While the price of gasoline has remained relatively high, the percentage of Allen County commuters who drive alone to work has increased[32], contributing to higher fuel consumption, air and noise pollution, as well as certain other localized capacity constraints. Population is declining; its aging and becoming more female in orientation. The community's disability rates are also increasing and placing additional demands on publicly funded transportation services. Land use policies and development practices of the past have proven out-of-sync with transportation investments, creating further strains on the existing system and additional demands on public dollars. Suburban and exurban development challenges existing urban centers at a time when the design of lower order rural roadways is compromising roadway safety. While such issues are problematic, the 2040 Long Range Transportation Plan (LRTP) Update seeks to reverse the trend.

In concert with federal legislation, the ambition of the 2040 LRTP is to facilitate an intermodal transportation system; one that is safe, efficient, secure, fiscally sound, and environmentally friendly. The 2040 Plan looks to provide a transportation system that has a strong foundation that enables and encourages regional competition in the global economy. In keeping with demands of the FAST Act and MAP-21 and its predecessors, as well as NEPA, CAAA and the ADA, the Plan works to significantly change the region's approach to accommodating travel demand. Embracing the policies established by MAP-21 and the FAST Act acknowledge the passing of an era marked by massive investments in new highway capacity, transitioning instead to a system that is more equitable and more sustainable.

In tandem with other federal legislation, the FAST Act steers the transportation course for metropolitan areas. Legislation emphasizes the following national goals[33] and expects the support of state transportation agencies and MPOs to achieve the legislation's priorities, as follows:

- Achieve a significant reduction in traffic fatalities and serious injuries on all public roads;
- Maintain the highway infrastructure asset system in a state of good repair;
- Achieve a significant reduction in congestion on the National Highway System;
- Improve the efficiency of the surface transportation system;
- Improve the National Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
- Enhance the performance of the transportation system while protecting and enhancing the natural environment;
- Reduce project costs, promote jobs and the economy, and accelerate project completion through eliminating delays in the project development and delivery process.

To achieve these national priorities, legislation sets out specific requirements within the local and state transportation planning process. While federal legislation continues the gradual shift in responsibilities from federal to state and local governments with respect to transportation planning and project selection, it allows considerable flexibility to allocate federal aid in order to balance transit and highway improvements. However, both the FAST Act and MAP-21 require the metropolitan planning process to establish and use a performance management[34] approach to transportation decision making and to use performance measures[35] in tracking progress toward targeted goals. The MPO is to develop the goals of

[32] American Community Survey (ACS) 5 Year Estimates, 2010, 2013 and 2016.
[33] §1203; 23 USC 150(b).
[34] §1203; 23 USC 150(a).
[35] §1203; 23 USC 150(c).

its Transportation Plan consistent with various MPO planning factors[36,37] as outlined in federal legislation. Federal legislation requires the MPO to integrate performance measures and targets[38] to assess the performance of the transportation system as well as to consider how changes in local policies and investments impact the identified performance targets. While a performance-based planning process has been legislated, the legislation has not been fully fleshed-out by federal and state partners, in terms of specific requirements. However, federally mandated planning factors require that an MPO Transportation Plan address:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility options available to people and for freight;
- Protect and enhance the environment, promote energy conservation, and improve quality of life and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Support intercity bus and commuter vanpools;
- Enhance travel and tourism;
- Promote efficient system management and operation; and,
- Emphasize the preservation of the existing transportation system.

The FAST Act continues to require metropolitan transportation plans and transportation improvement programs (TIPs) to provide for facilities that enable an intermodal transportation system, including pedestrian and bicycle facilities. It adds to this list other facilities that support intercity transportation (including intercity buses, intercity bus facilities, and commuter vanpool providers). The FAST Act also requires that the metropolitan long-range plan include identification of public transportation facilities and intercity bus facilities.[39]

Moreover, the FAST Act expands the scope of consideration of the metropolitan planning process to include: improving transportation system resiliency and reliability; reducing (or mitigating) the stormwater impacts of surface transportation; and, enhancing travel and tourism.[40] Appendix A presents a broader discussion of the various performance measures.

Previous sections of this document detailed the nature of the community in terms of its location, land use, population, employment and transportation. This final section of the document looks to affect positive change across all transportation modes. And, predicated upon MAP 21, the FAST Act and its predecessors which have provided the guidance and regulatory requirements, this section looks to frame the locally derived and developed 2040 Transportation Plan to serve the region. Immediately following this introduction - the MPO presents its mission statement and basic tenants of the Plan followed by the MPOs Plan goals and objectives. In subsequent order the final subsections address the transportation components; the Plan's program of projects both committed thru FY 2021 as documented in the MPOs Transportation Improvement Program, and recommended project listing (2022-2040), before discussing the issues of fiscal constraint.

[36] §1201; 23 USC.
[37] §5303; 49 USC.
[38] §1203; 23 USC 150(d).
[39] 23 U.S.C. 134(c)(2) & (i)(2)
[40] 23 U.S.C. 134(h)(1)(I) & (J)

7.1 The 2040 Transportation Plan: Mission & Planning Principals

The MPO necessarily employed the 3C planning process to develop the aspirations, mission, goals and objectives of the 2040 Transportation Plan. But such products grew out of a number of previous community planning efforts that reflect: traffic studies, land use examinations, health assessments, zoning plans, engineering reports, model analyses and environmental assessments. Collectively these previous efforts helped develop the following broad and sweeping mission statement:

> *"Allen County will be served by a fully integrated and accessible transportation system designed to support and sustain a vibrant, healthy, prosperous community in a safe, efficient, equitable and environmentally friendly manner – where an individual is not forced to rely on an automobile for travel needs out of necessity, but rather by choice*."

As presented earlier, the transportation system reflects various modes each struggling under various administrative responsibilities, budget limitations and often times competing interests. The fact is that Allen County has a very strong highway network with which to continue to support transportation needs and the growth of the local community. The current challenges are to manage the highway network; and, integrate the other modes in such a way as they collectively serve the needs of local industry, its residents and compliment the community's unique natural and neighborhood environments. To maintain the system while expanding modal choice will not be easy.

The MPO developed basic tenants or principals as the foundation for the Transportation Plan. They were developed to better promote consistency with local regulations and the various community reports, plans and assessments adopted by local governments.

- ☑ Develop a safe, secure and efficient transportation system serving the community inclusive of all persons, all modes–motorized and non-motorized.

- ☑ Grow a transportation system that will support and strengthen the economic vitality of the community by furthering economic development initiatives that enables global competitiveness, productivity, and efficiency.

- ☑ Target transportation investments that encourage the development of healthy, livable communities – healthy in terms of both physical health and economical health, livable in terms of providing safe, walkable and affordable living conditions associated with a high quality of life.

- ☑ Create an equitable transportation system which is accessible and that will provide adequate mobility and mode choice for all persons regardless of economic, physical and emotional limitations.

- ☑ Develop a transportation system that will minimize adverse environmental impacts to the environment and respect community values; careful to promote energy conservation and protect and enhance the environment.

7.2 Goals & Objectives

Recognizing the federal goals and predicated on the mission statement and the collective summation of the statement of principles, the MPO adopted 4 succinct goals for the 2040 Transportation Plan. They were targeted goals, designed to be understandable and measureable.

1. Develop the infrastructure necessary to create regional economic opportunities, support the new economy and strengthen the community's ability to compete locally and globally.
2. Target infrastructure investments that promote and sustain system level efficiencies, reliability, safety and security.
3. Preserve and protect both the natural and built environment.
4. Encourage the development of healthy, educated, sustainable and livable communities thru equitable public investments.

The 2040 Transportation Plan Update was developed with the input and cooperation of the local Transit Authority and ODOT to ensure consistency with national and state goals/objectives.[41] As per federal legislation, Transportation Plan goals and objectives were crafted cognizant of national performance measures both currently established and those that can be expected. Such measures will help establish and enable the Plan's federal investments and collective impact to be quantified, assessed and better understood; thereby, increasing the overall accountability and transparency of funding spent and improving decision making process.

7.3 2040 Transportation Plan Components

Plan projects reflect the phased-timing of the fiscally constrained Transportation Plan. Short-term high priority projects are presented as committed projects. The committed projects are contained in the MPO's Transportation Improvement Program (TIP). Recommended projects are projects to be implemented over the life of the 2040 Plan. A summary of each of the transportation system's component follows.

7.3.1 Highway Element

Federal regulations and public sentiment mandate that the MPO's make the most effective use of existing transportation funding by taking the steps necessary to preserve the existing infrastructure and introduce those traffic management strategies that reduce congestion. In order to address the required actions, the MPO must necessarily undertake the following tasks: (1) identify the current status of existing infrastructure; (2) identify the location of existing congestion; (3) identify strategies to preserve existing infrastructure and minimize/eliminate congestion; (4) evaluate effectiveness of strategies; and, (5) provide input into the MPOs Transportation Improvement Program and Long Range Transportation Plan.

The MPO approached the process by: working with ODOT and local stakeholders to identify: pavement condition ratings, bridge condition ratings, and locations where congestion was occurring based on volume to capacity ratios, and/or on level of service analyses conducted at the intersection level and upon corridors identified as higher order roadways of the federal functional classification system. Traffic volumes and crash data were collected by the MPO to establish crash rates, crash severity and other safety concerns. The MPO worked with local elected officials to establish pavement conditions on county, township and village roads, completed ADA Transition Plans in smaller villages, undertook various safety analyses at area intersections/corridors, facilitated technical reviews of all fatal crashes, and supported roadside safety audits. In addition, the MPO continued to facilitate a robust public involvement process with local stakeholders, including, public transit and providers of transportation[42] in order to develop and maintain an effective short-range capital improvement program (TIP) and Long Range Transportation Plan.

[41] 23 USC 134(h)(2).
[42] 23 USC 134(i)(6)(A).

The Plan Update recognizes the efforts of local stakeholders during the identification of eligible projects. The planning process identified projects by the type of project and the strategic approach each took to validate the effectiveness of such projects using for example Synchro Software, Highway Capacity Software, HSM manuals/techniques, and/or travel demand model (TDM) as the basis upon which projects would be justified. Model analyses and travel time speed and delay studies were also conducted on the functional classification system in an effort to isolate recurring congestion more attributable to incident management than congestion management such as motor vehicle accidents or vehicle break-downs. For purposes of clarification projects were classified as: capacity projects, safety projects, preservation projects, and systems management & operations (SMO) projects. The MPO examined the proposed projects against a No-Build scenario and then through the 2040 period by project types. The No-Build scenario reflected the existing 2016 base roadway network with those committed projects (E+C) as identified in the current TIP. The LACRPC modeled various project alternatives independently and collectively. This was done to identify any significant change in value due to a specific project.

The Plan acknowledges a highway system that must accommodate 1.18 billion VMT annually. Assessments using Volume-to-Capacity (V/C) ratios and speed-delay studies established LOS measures to equate roadway demand to available supply. Demand expressed as roadway volume, and supply expressed as the carrying capacity of a roadway established the foundation for a LOS assessment based on the 2016 roadway network that revealed 30.5 miles operating at an unsatisfactory LOS. In horizon year 2040, VMT is projected to reach 1.32 billion, an increase of 11.9 percent. Given the increase in VMT and adding the scheduled and recommended projects to the base network 81.7 miles of roads are projected to operate at an unsatisfactory LOS. The net result is a 267 percent increase in the number of deficient roadway miles over existing 2016 traffic conditions. The various analyses coupled with stakeholder input allowed the MPO to recommend various projects that preserve the existing system and to reduce or eliminate congestion at identified locations. Selected projects were grouped by type and analyzed collectively.

7.3.2 Bridge Element

Integral to the highway system are the bridges and culverts that serve it. Section 5.2.2 presented an overview of the bridge element and identified 592 bridges and culverts based on their respective condition and the functional classification of the roadway they serve. There were no bridges in poor condition found on NHS-Interstate or NHS Non-Interstate system. In fact, there were only 25 cases where such infrastructure was found to be in poor condition 20 of which were on local roadways. Table 5-11 identifies 22 local bridges identified as being in poor condition as defined by National Bridge Institute (NBI) standards with a total estimated cost of $9.6 million. The Plan identifies 21 bridge projects costing $48.8 million to be addressed. Given the 2040 planning horizon and bridges currently deficient and those projected to need rehabilitation (77/$82.1 million), the fund balance seems somewhat inadequate; some variation in project scheduling and available funding can be assumed reasonable given the varying causes, conditions, and magnitude of structural deficiencies.

7.3.3 Pedestrian/Bicycle/Trail System Component

Visions of Allen County in the Year 2020, a report compiled by a citizen-based visionary group, is a comprehensive countywide visioning document which paints with broad

strokes the future of Allen County. The Plan called for the development of green infrastructure to provide better and more aesthetically pleasing connectivity between the individual communities of Allen County. To accomplish this end, three action steps were identified: (1) create a network of bike paths, as open space corridors to connect existing parks throughout Allen County; (2) complete proposed bike paths currently planned for the county; and (3) identify funding sources to connect existing parks or create new parks. Similar visioning exercises were completed in the Spencerville, Bluffton, Lima and Delphos.

The Hike/Bike component of the 2040 Transportation Plan reflects Visions of Allen County as well as the findings and recommendations made in the Active Transportation Plan adopted by the MPO.[43] The Active Transportation Plan supports development of bicycle and pedestrian infrastructure and acknowledges the very real and positive economic, health, and environmental outcomes of utilizing these active transportation alternatives rather than the automobile to meet travel and recreational needs. The Hike/Bike Component looks to develop a regional system of interconnected pedestrian paths and sidewalks, mixed use trails, on-road bicycle facilities, and amenities that link together Allen County communities as well as area educational facilities, employment sites, and parks in a comprehensive way. Reliance on the private automobile for transportation is minimized and made a personal choice rather than a requirement under the 2040 Plan.

The Active Transportation Plan identifies projects through the year 2040, that reflect include 124.6 miles of on-road bike facilities, 38.6 miles of off-road bike/pedestrian facilities and 50.2 miles of new sidewalks. In total project costs approach nearly $40 million. This 2040 Plan Update recommends $12.1 million of strictly bicycle and pedestrian projects (15). But more than 37 other projects also include bicycle and pedestrian accommodations in what is generally recognized as a roadway project. The Plan Update recommends the inclusion of 55.7 miles of sidewalks and on-road bicycle lanes and 28.1 miles of of-road shared use facilities to support development of a more environmentally-friendly and sustainable transportation system. The 2040 LRTP depicts the existing and proposed bikeway network on Map 5-7.

7.3.4 Transit Component

Section 5.1.2.1 provided an overview of transit operations. A Public Transit Index (PTI) based assessment revealed the ACRTA operating at LOS D through LOS F in 2010. The PTI assessment improved in several areas after the MPO examined 2016 operational profiles. But, in order to meet a satisfactory LOS C standard across all the metrics, the ACRTA would need to increase the travel speed of its vehicles, minimize headways between fixed route trips, increase the percent of all non-subscription demand response trips, decrease crash rates, decrease road calls, increase FR ridership, and replace aging rolling stock. From a capital perspective the Transit Authority also needs new fueling capabilities, bus parking/garage and an updating of its intermodal transfer facility.

Transit patrons traveled to area employers, hospitals, businesses and service centers and public transit afforded these residents the ability to more fully participate in the community and its economic pursuits. Public Transit ridership reached 386,260

[43] The Active Transportation Plan for Allen County was adopted by the MPO in November 2017. The MPO prepared the report to serve as a policy document and modal element supporting the Allen County 2040 Long Range Transportation Plan Update. This document works to provide the rational, justification, and guidance necessary to adopt those policies and undertake those strategies that collectively will serve active transportation options, creating a healthier, more equitable, and more sustainable transportation system for the region.

passengers in 2017 an increase of 1.2% over 2016 figures. But transit funding is very fluid and fiscal support, especially local funding, has been difficult to identify. Financial assessments of the ACRTA found inadequate local funding undermining the growth of public transportation services.

The Public transportation component of the 2040 Transportation Plan Update is supported by the Allen County Public Transit Human Services Transportation Plan (amended 2016), The West Central Ohio Regional Transportation Coordination Plan (2017), and the Comprehensive Operation Analysis of the Allen County Regional Transit Authority (2017). Collectively, these documents work to establish policy and programming and provide the rationale and justification for federally funded capital improvements, transit services and operational funding; they are referenced herein for purposes of clarification and direction. The transit component builds on these documents and identifies specific goals and strategies that collectively promote a safe, accessible, and convenient public transit system capable of providing reliable, cost effective, environmentally-friendly travel alternatives for residents and employers.

Based on the current operational profile (June 2018), operating costs for transit estimated over the life of the 2040 Plan are projected to reach $77.7 million. Costs associated with maintenance/replacement of rolling stock and facilities require an additional $12.5 million over the Plan horizon. Current fiscal projections of FTA 5307 funds identify $28.9 million over the life of the plan. Other federal funding including capitalized maintenance collectively suggest another $26.4 million. Local funds able to be raised by the Transit Authority are projected at $28.5 million. An imbalance in available funding is projected at $6.4 million over 20 years. Recognize, however, that FTA 5339 monies were excluded from fiscal projections as they were considered discretionary. The Plan Update works to integrate transit by allocating funding for the purchase of necessary vehicles, facility upgrades, and sidewalks to improve accessibility for the transit dependent and an increased commitment to support transit and paratransit operators interested in furthering the coordination of services. The Plan seeks to support fiscal commitments with MPO CMAQ and STP funds in order to help offset an anticipated shortfall in FTA funding the Transit Authority is projected to receive. Unless additional federal, state and local monies are identified available public transportation services will need to scaled back again in terms of: types of service, hours of operation, miles of services, frequency of service, and geographic service area.

7.3.5 Freight System Component

Special consideration is given to freight as the economy is heavily dependent upon it for the movement of commodities and goods. The freight component is seen as an integral element of the 2040 Transportation Plan Update and the Community Economic Development Strategy (CEDS).[44] Both documents work to strengthen economic development and the community's ability to secure and support its manufacturing base with highly competitive warehousing, rail, air and roadway networks. The freight component reflects the need for an accessible, reliable and freight-friendly system of highways, bridges, rail and air links that support the community's manufacturing, warehousing and agricultural processing facilities in a safe and efficient manner. The freight component works to support and strengthen the region's economic base, and local employment opportunities necessary to establish a higher quality of life for Allen County residents.

[44] Comprehensive Economic Development Strategy for Allen County, Ohio; LACRPC, 2015.

Generalizations in Section 5 have been made regarding the proportion of freight moving on the individual corridors, along with the mode of delivery, tonnage moved and value of that freight delivered. Analyses must be made regarding peak periods of operation, both by time of day and day of week. The need for increased freight handling facilities along with their location must be identified with potential land use conflicts. Safety issues for both truck and non-truck vehicular traffic must also be addressed. Finally, existing truck route designations need to be reviewed and established. The State Highway System oriented itself (or vice-versa) towards serving urban centers. This made sense when businesses and services were concentrated at or near the CBD's. With relocation to the outskirts away from the core urban area, freight finds itself traversing state routes through the length of urban areas, when quicker and more efficient routes on less traveled roads might better serve the community and reduce congestion on urban roads.

The Plan recognizes the need to support freight and calls for improvements to specific roadways on the Federal-aid system in an attempt to produce economic sustainability and development while also improving safety and the flow of freight. All federal, US, and state routes have been identified for needed improvements (e.g. resurfacing, reconstruction, widening, etc.) over the Plan horizon; 16 such projects totaling $43.8 million have funding already committed and are scheduled for construction by 2021.

Several lower order roadways supporting freight movements were also identified in the Plan for improvements (e.g. drainage, widening and other geometric upgrades, resurfacing, and extension) on: Amanda, Bluelick, Breese, Buckeye, Dixie, Hanthorn, McClain, Reservoir, Slabtown, Thayer and Vine among others. Suggested improvements to improve these targeted freight corridors are estimated at $26.5 million. Other freight-related intersection projects (15/$4.1 million) were identified by interested stakeholders during plan development. Concerns regarding the negative impact the Bluelick RR underpass has on freight movements were voiced; the underpass improvement (PID 180) remains a recommend project in the Plan.

7.3.6 Rail System Component

The rail system component of the 2040 Transportation Plan is inextricably linked to the freight component and to a murkier, less obvious relationship with public transit components of the Plan. Collectively, these components establish the rationale and justification for broad policies and programs that identify and prioritize federally funded capital improvement projects that work to move people and goods. The rail component works to promote the further integration of rail infrastructure and related services necessary to expand rail capacity and support economic development initiatives dependent upon safety, cost effectiveness, as well as, reliable freight and passenger rail transportation service.

Recognizing the resurgence of rail as a competitive mode and an existing resource for community development and industrial expansion, local officials are supporting the further integration of rail within the community's existing transportation network. The vision of the 2040 rail system component suggests: "Rail services provide industry, business, and residents a safe, attractive and interconnected freight and passenger mobility option. Class I, regional and short-line rail services provide economic opportunities that enhance the region's competitiveness by providing efficient and cost-effective connections to national and international markets. Rail services support intermodal connections that support a seamless movement of goods and people to

urban and rural markets alike. Passenger rail service is the mode of choice for business and leisure travel across the state and the Midwest. Residents will embrace rail services as they improve the livability of the community and enhance the community's quality of life providing good jobs, improved air quality, energy conservation efforts, and promotion of efficient land use.

However, at-grade rail crossing safety and accessibility issues may thwart future coordination if present site and accessibility issues cannot be resolved. Grade crossing improvements, grade separations and more restrictive crossing control devices are necessary to adequately address local concerns. Accessibility issues stem from the limited capacity of the NS line and the current trackage rights enjoyed by CSX and I&O. Standing trains continue to block at grade-rail crossings for extended periods of time and threaten the necessary access of emergency response vehicles. Grade separations have been studied[45] and found to be warranted based on improved accessibility and safety. Recently, a railroad underpass was constructed on Vine Street. Additional queuing space for Potash and Husky, as well as CSX, NS and G&W stacking, loading and unloading operations remain issues. Also of concern are the aging and functionally obsolete railroad underpasses around the community including those located on Collett/Ft. Amanda, Seriff, Union (2), Metcalf, and Bluelick. These bridges pose safety concerns and hamper the movement of freight.

The MPO continues to support several rail projects. Given the reoccurring blockage at the Breese/CSX crossing local stakeholders are supporting PID 104666 that looks to minimize traffic back-ups with IT investments ($387,0000). The Elm Street grade separation project (2018/PID 80441) already under construction is expected to be completed in FY 2020; the Sugar St Interlock project (2018/PID 103648) is in the final design stage; and, the Bluelick Road underpass (PID 180/$20.0 million) which remains to be studied and designed. Complete engineering costs for improving conditions at the 142 public at-grade crossings remain to be documented and such costs are not included. It should be noted that dedicated funding to address on-going rail-related constraints is inadequate.

7.3.7 Aviation System Component

The aviation system component of the 2040 Transportation Plan is a nontraditional component of the community's transportation plan. The component is supported by the Allen County Airport Master Plan and subsequent Airport Layout Plan[46] updates and adopted economic development strategies[47]. Collectively, these documents help establish the rational and justification for federally funded capital improvements and operational funding. The aviation component recognizes Federal Aviation Administration design and infrastructure and level of service requirements and works to implement specific goals/strategies that collectively support the further development of a safe, accessible and convenient general aviation facility capable of providing timely, reliable and cost effective, transportation alternatives to meet business, freight and personal travel needs. It is because of the growing importance of freight and intermodal connectivity that the component is necessarily discussed.

[45] Feasibility Study: South Main Street Railroad Grade Separation, Kohli & Kaliher and TranSystems, 2000; Alternative Analysis Report AL-Lima Grade Separation, American Structurepoint Inc., 2008.

[46] Allen County Regional Airport Master Plan, RW Armstrong, 1985. Allen County Regional Airport Layout Plan; RW Armstrong, 1997 & 1998. Allen County Regional Airport Layout Plan; CHA, 2015.

[47] 2040 Perry Township Comprehensive Plan; 2015. Comprehensive Economic Development Strategy for Allen County, Ohio; LACRPC, 2015.

The Allen County Regional Airport serves as an integral part of Ohio's General Aviation Airport system. The Airport provides appealing services and amenities that further the interests of industry and freight and support personal mobility options that are necessary to sustain employment opportunities, health care services, education and recreation. The Airport is a safe and secure environment that supplies only top-quality services rendered in a reliable and cost-effective manner.

7.3.8 Other Issues

The planning document acknowledges various transportation related issues and addresses transportation demand initiatives, various operational improvements, freight planning, as well as land use policies. Although the Plan does not specifically address major investment studies, it is understood that such planning activities may be required prior to project programming.

Current funding for transportation is inadequate. Fiscal concerns over the continued status and viability of the community's transit system, airport, rail and bridge infrastructure have been discussed and separate ballot initiatives failed in 2017 to address same. Although continued Federal and state funding is expected, local efforts to identify alternative/innovative funding streams will be required.

7.4 Committed Improvements

Committed improvements are those projects considered as priority projects and most important to maintaining the overall transportation system. The list of committed projects is included in the MPOs current Transportation Improvement Program (TIP) for the LACRPC study area serves as the short-range component of the 2040 Plan Update. The TIP document is valid for fiscal years 2018 through 2021. The financial resources and fiscal analysis for these projects was documented in Section 6 of this Plan.

Table 7-1 identifies the committed infrastructure improvements projects for Allen County. There are 20 committed projects reflecting some $48.7 million in total costs. Bridge projects - summarized as replacements and deck overlays accounted for 8 of the 20 projects and totaled $6.5 million. Roadway preservation projects on the NHS and SR systems numbered 9 and accounted for $37.6 million. The remaining projects reflected signal operational improvements and safety upgrades. ACRTA expects to be able to program FTA 5339 grant awards in FY 2019 for projects to address needed parking lot improvements the acquisition of 5 vehicles, bus shelters and maintenance equipment ($2.4 million).

7.5 Recommended Projects Summary

Section 6 identified reasonably anticipated funding streams for local maintenance and operations at $9.34 million per annum or 205.5 million over the 2040 planning period. Federal and state sources totaled an additional $333.1 million over the planning horizon. All totaled the Plan Update projects $538.58 million as being available to support area transportation projects.

The Plan's recommended projects are identified in Table 7-2. The project listing containing 137 projects was compiled based on current system deficiencies, alternative analyses and results of travel demand modeling. Planning regulations governing fiscal constraint restricted the 2040 LRTP Update to those funds that could be reasonably expected over the planning horizon and consequently limited the recommended projects list.

The recommended projects were determined to be of considerable importance to the community and the transportation system overall. Maps 7-1 through 7-3 document the

locations of the various recommended but uncommitted projects for Allen County through the 2040 planning horizon.

The Plan highlights transportation system maintenance and operational improvements over adding new roads. Goals of the Plan Update emphasize multi-modal approaches and improving LOS at bottlenecks where congestion is re-occurring. As documented in Section 5, re-occurring congestion was documented at both the corridor and intersection levels. Recommended projects reflect attempts to minimize deficient LOS along corridors and at intersections. Signal coordination is a primary emphasis throughout the Lima CBD as well as the main east-west corridors thru the County including SR 309 and SR 117. Projects attempt to eliminate delay due to left-turning vehicles blocking through traffic to increase flow and minimize crashes; several projects therefore either accommodate protected left turns or eliminate left turning vehicles. The additional capacity resulted from implementation of left turn lanes and/or a two-way left turn lane was recommended at a number of intersections and along various roadway segments. Railroad improvements are recommended and included herein to eliminate re-occurring blockage of crossings on the Federal-Aid System. Projects reflect the widening of existing lanes over adding lanes to minimize potentially negative environmental and/or socio-economic impacts. Projects addressing deficient lane widths are repetitive in urban, suburban and exurban environments as are deficient intersection geometrics. Attempts to accommodate the safety of the motoring public as well as large trucks and freight movements were carefully considered.

Examining the Plan's recommended project listing the bulk of projects reflect highway preservation and safety improvements totaling some $189.8 million in projects. Elements of the highway projects reflect bridge upgrades, which account for $48.7 million; freight-supportive projects conservatively total $30.6 million. Highway capacity and extension projects total $20.4 million. Active Transportation options, restricted to just bicycle and/or pedestrian projects totaled $12.1 million; Transit projects totaled $70.5 million. Figure 7-1 provides categorical expenditures across the 2040 planning horizon based on projects' primary purpose.

FIGURE 7-1: CATEGORY OF EXPENSES 2019-2040

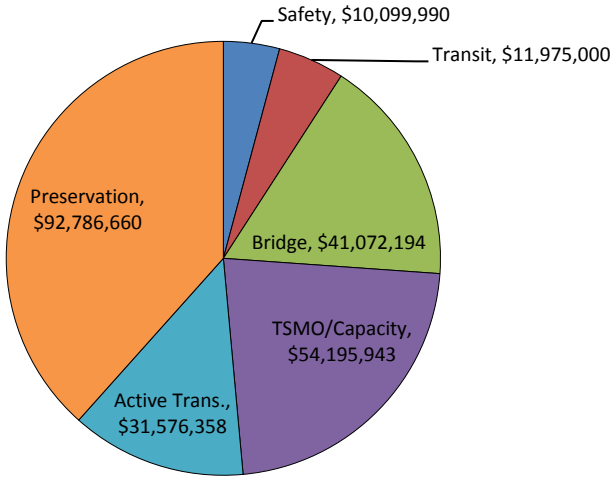


Table 7-2 projects are those that community leaders and residents collectively recommend for inclusion in this planning document. These projects will receive priority consideration for programming in future TIP documents.

TABLE 7-1 PROJECTS BY YEAR COMMITTED FOR CONSTRUCTION					
Fiscal Year	**Location**	**Project Sponsor**	**Description**	**Project Cost**	**PID**
2019	SR 103 Bluffton	ODOT	SR 103 bridge replacement over Riley Creek.	1,222,581	93756
	IR 75	ODOT	Resurface I 75 from the Stewart Road overpass to just north of the SR 696 interchange.	5,174,882	94206
	SR 66	ODOT	Replace 8 culverts.	708,698	102197
	Delphos	ACEO	Replace (3) bridges in Delphos, 1st, 3rd, 7th streets.	1,154,788	103412
	Grubb	ACEO	Replace bridge on Grubb Road over Honey Run.	290,000	104252
	SR 65, SR 117, SR 309	ODOT	Resurface SR 65 4th to Elm; SR 117 Greely Chapel to Bowman; SR 309 Devonshire to Hardin Co.	2,114,728	105524
2020	ALL US 30	ODOT	Mill and fill with asphalt concrete, minor joint repair and bridge rehabilitation if necessary from Junction of CR 88 interchange to structure number ALL-30-1328.	6,418,170	88830
	SR 65	ODOT	Replace bridge deck over Ottawa River.	3,733,894	88306
	SR 117	ODOT	Overlay bridge deck of SR 117 over CSX RR (Shawnee Road S of Cable).	1,123,843	98522
	SR 81	ODOT	Replace bridge deck over Ottawa River.	1,016,225	101189
	Breese & IR75	ODOT	Traffic Signals with possible RR pre-emption.	387,000	104666
	SR 65, SR 117, SR 81	ODOT	Resurface SR 65 Pine to Union; SR 117 Woodlawn to Union; SR 81 SR 66 to Wapak; SR 81 Eastown to Cable.	2,307,397	105527
	SR 66, SR 117	ODOT	Resurface SR 66 Auglaize Co to NCL Spencerville; SR117 Van Wert Co to Seriff Road.	2,598,000	107637
	Delphos State Routes	ODOT	Resurface SR's 66 Main to Van Wert; SR 66 Allen Co to State; SR 190 Main to Ft Jennings 190; and 697 in the City of Delphos.	520,000	108373
2021	ALL/HAN 75	ODOT	Resurface I 75 from just north of the SR 696 interchange to just south of the SR 235 interchange.	6,149,369	165
	CRs	ACEO	Upgrade guardrails on County Roads.	305,348	101979
	IR 75	ODOT	Resurface and replace bridge from Riley Creek to Hancock County SR 235.	10,767,893	104095
	SR 117	ODOT	Resurface from Bowman Road to Auglaize Co.	1,588,000	107684
	SR 65	ODOT	Replace Culvert .57 mile north of Auglaize Co.	311,025	107728
	SR 81, SR 117, SR 309	ODOT	Replace signals at SR 81 & Roush; SR 117 & Bowman; SR 309 & Diller; SR 309 & Baty; and, SR 309 & Greenlawn.	1,200,000	107748

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS

PID	Location	Project Description	Cost	Year	Authority
6	SPEG Rail & Trail	Construct 10' wide hike/bike path on SPEG Railroad right-of-way approximately 11.3 miles from Spencerville Road to Shawnee Road.	7,326,221	2026	JAMPD
7	Grand Avenue	Reconstruct 2 lanes with curbs, sidewalks and drainage from Union Street to Metcalf Street.	2,342,871	2029	Lima
8	Cole/Robb	Reconstruct the intersection of Robb Avenue and Cole Street with mast arm signals and left turn lanes with adequate storage, curbs, drainage and sidewalks.	486,895	2023	Lima
11	Reservoir Road	Reconstruct and realign intersection of Reservoir and Cool roads.	550,000	2040	ACEO
25	Miami-Erie Canal Phase II	Construct pedestrian/bike trail from south Corp. Limit of Delphos to the north Corp. Limit of Spencerville.	1,348,085	2020	JAMPD
27	Metcalf Street Reconstruction	Reconstruct with curbs, sidewalks and drainage from CF&E Railroad to Grand Avenue.	1,287,000	2020	Lima
28	Metcalf Street Reconstruction	Reconstruct with curbs, sidewalks and drainage from Grand Avenue to Robb Avenue.	2,655,796	2030	Lima
30	Kibby Street	Reconstruct 2 - 12' and parking lanes with turn lanes, curbs, sidewalks and drainage from Collett Street to Pine Street.	3,582,157	2020	Lima
31	Cable Road	Reconstruct and widen to 2 lanes with curbs, gutters, sidewalks and drainage from Shawnee Road to University Boulevard; widen at intersections to provide turn lanes.	3,489,077	2032	Lima
32	St. John's Road	Reconstruct 2 lanes with turn lanes, curbs, sidewalks and drainage from Breese Road to Pine Street.	4,065,588	2036	Lima
36	Main Street	Reconstruct Main Street from North Street to Northern Avenue with curbs, drainage and sidewalks.	9,288,986	2040	Lima
39	Thayer Road Phase 3	Repave and widen to 2 - 12' lanes from Reservoir Road to SR 309. Provide R/W roadside drainage and culverts as needed. Make necessary roadway intersection modifications to accommodate WB-67 vehicle design.	2,318,548	2025	ACEO
40	Thayer Road Phase 4	Reconstruct and widen to 2 - 12' lanes from SR 117 to SR 309. Provide R/W roadside drainage and culverts as needed. Make necessary roadway intersection modifications to accommodate WB-67 vehicle design.	2,100,000	2029	ACEO
43	ALL-Lima Traffic Study Phase 4	Modify Central Avenue and Union Street to one-way, one lane operation between Elm Street and North Street; implement pedestrian and bicycle components and traffic signal modifications as recommended.	1,563,000	2030	Lima
44	Napoleon Road	Widen pavement to 8,800 linear feet for 2 - 12' lanes with shoulders and drainage improvements as warranted from SR 309 south to north Corporation Limit of Harrod.	1,150,000	2040	ACEO

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS
(Continued)

PID	Location	Project Description	Cost	Year	Authority
45	Elm Street	Reconstruct and widen pavement 4,991 feet for 3 - 12' lanes, provide curbs, gutters and sidewalks, improve drainage and provide signalization as needed from Cable Road to Eastown Road.	1,500,000	2035	ACEO
50	Vine Street Reconstruction	Reconstruct existing roadway width with curbs, walks and drainage from Metcalf Street to Main Street.	2,203,519	2034	Lima
51	Sugar Street	Reconstruct 13,000' with curbs, drainage and sidewalks (complete streets) from 4th Street to Findlay Road.	13,676,955	2035	Lima
54	Ottawa River Corridor-Phase II	Install landscaping along Phase II (Main Street to Schoonover Park similar to that installed in Phase I).	230,000	2020	Lima
56	Breese/ Shawnee Road Intersection	Widen existing intersection with lane configuration to accommodate WB-67 vehicle design. Access management principles are to be applied to improve intersection safety. Project to include ROW acquisition and utility relocation as necessary. Install decorative lighting and decorative mast arm mounted signals.	300,000	2032	ACEO
57	Lafayette Hike/Bike	Construct 10, 100' bike/ped path to provide a safe and improved alternative travel commute option from Lafayette to Harding Highway.	1,191,900	2040	Lafayette
58	Cole Street	Reconstruct to 4,000 linear feet for 2 - 12' lanes with curbs, gutters and sidewalks from Brower Road to Diller Road.	1,250,000	2020	Lima
60	Cole Street	Reconstruct and widen 4,000 linear feet to 3 - 12' lanes south with curbs, gutters and sidewalks from Robb Avenue to Brower Road.	2,040,000	2031	Lima
61	Reservoir Road	Reconstruct and widen 43,000' to 2 - 12' lanes with shoulders and drainage improvements as warranted from Mumaugh Road to Hardin Co. Line.	2,000,000	2028	ACEO
62	Cole Street	Reconstruct and widen 4,500 linear feet to 3 - 12' lanes of pavement with curbs, sidewalks and drainage from Market Street to Conrail Railroad.	2,180,000	2031	Lima
63	Main Street - Lafayette	Reconstruct 3,600' Main Street/Business District. Full depth pavement replacement, correct drainage, install curbs, sidewalks, lighting and entryway enhancements.	2,207,700	2035	Lafayette
64	Main Street - Harrod	Reconstruct 2,770 linear feet of Main Street/Business District. Full depth pavement replacement, correct drainage, install curbs, sidewalks, lighting and entryway enhancements.	2,273,759	2036	Harrod
65	Ottawa River Corridor	Construct pedestrian/bike trail from Ottawa Metro Park to OSU Campus.	4,500,000	2019	JAMPD

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS
(Continued)

PID	Location	Project Description	Cost	Year	Authority
69	Elida Road	Elida Avenue intersection improvement with roundabout, curbs, gutters, storm sewers and sidewalks.	1,500,000	2025	ACEO
70	Slabtown Road	Reconstruct and widen pavement to 34,000 linear feet for 2 - 12' lanes with shoulder and drainage improvements as warranted from Bluelick Road to Begg Road.	1,000,000	2020	ACEO
71	Cable Road	Make horizontal alignment correction as needed, reconstruct 5,400 linear feet of pavement to 2 - 12' lanes, improve shoulders, provide storm sewers and signalization as needed from Edgewood Drive to Diller Road.	1,000,000	2020	ACEO
74	Ottawa River Corridor	Extension of Ottawa River Corridor from SR 81/Slabtown Road to McLean Teddy Bear Park - Bath Schools.	15,000	2020	JAMPD
76	Elm Street	Reconstruct and widen pavement approximately 2,875 linear feet for 3 - 12' lanes, provide curbs, gutters and sidewalks, improve drainage and provide signalization as needed from Eastown Road to Stevick Road.	2,000,000	2040	ACEO
78	North Street	Widen North Street to 5 lanes between Metcalf Street and Jameson Avenue.	1,463,161	2032	Lima
80	Robb Avenue	Reconstruct and widen 1,400 feet to 3 - 12' lanes with curbs and sidewalks from Main Street to overpass.	746,282	2020	Lima
81	North Street	Reconstruct with curbs, sidewalks and drainage from Jackson Street (Ottawa River) to Sugar Street.	164,779	2020	Lima
82	Fourth Street	Reconstruct 2 lanes with curbs, gutters and sidewalks from Metcalf Street to Main Street.	716,431	2020	Lima
83	Grand Avenue	Reconstruct 2 - 12’ lanes with curbs, sidewalks and drainage from Metcalf Street to Jameson Avenue.	1,731,376	2020	Lima
87	Breese Road	Reconstruct 7,400 linear feet from Shawnee Road to IR 75 Interchange 120 to reflect 2 - 12' lanes with turn lanes as required to address access management and drainage concerns, full depth pavement replacement, realign residential entrances with road ROW acquired as required, install curbs, gutters, sidewalks, pedestrian lighting and entryway enhancements.	5,074,722	2022	Shawnee
93	1st Street - Delphos Phase III	Grind and resurface pavement on 1st Street. Install, remove and/or replace existing curbs and gutters as needed from Main Street to Pierce Street.	514,985	2025	Delphos
94	Cole Street	Reconstruct 3,000 linear feet for 2 - 12’ lanes with curbs, gutters and sidewalks from Latham Avenue to Robb Avenue.	1,069,321	2025	Lima

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS
(Continued)

PID	Location	Project Description	Cost	Year	Authority
99	Bluelick/Dixie	Dixie Road intersection improvement. Remove and reconstruct with full depth pavement to improve geometrics.	415,300	2022	ACEO
100	Bluelick/ Slabtown	Widen existing intersection at Slabtown Road integrating 12' standardized lane widths and left turn lanes.	250,000	2034	ACEO
102	Perry School Bikeway Project	Construct 10' hike/bike path 6,400' between Perry School Campus and Perry Museum on old traction line.	928,886	2021	Perry
104	Dixie/Slabtown	Widen existing intersection at Slabtown Road integrating 12' standardized lane widths and left turn lanes.	200,000	2038	ACEO
105	Bluelick/West	Widen existing intersection at West Street integrating 12' standardized lane widths and left turn lanes.	150,000	2028	ACEO
123	Dixie Highway Bridge	Replacement of bridge between Snider and Riley roads.	1,000,000	2030	ACEO
125	Spencerville Bikeway Station	Multi-purpose comfort station in Spencerville with restrooms and bicycle lockers.	1,489,629	2030	JAMPD
127	Buckeye Road & McClain Road	Reconstruct and widen existing intersection with lane configuration to accommodate WB-67 vehicle design addressing utility relocation and drainage improvements.	257,500	2025	ACEO
134	Hume Road Bridge	Replacement of bridge between Delong and McClain roads.	181,188	2025	ACEO
136	Dixie Highway Bridge	Replacement of bridge .47 miles SW of County Line over Riley Creek.	1,446,296	2025	ACEO
137	Metcalf Street Bridge	Replacement of bridge .66 miles N of Buckeye Road.	12,419,803	2035	ACEO
151	Leonard Avenue	Extend Leonard Avenue south to 4th Street. Make necessary intersection modifications to accommodate WB-67 vehicle design.	6,772,364	2027	Lima
152	Lima Main Street	Aesthetically enhance the City of Lima downtown N. Main Street by updating sidewalks, landscaping and sidewalk furniture along the 300 and 400 blocks. Design aesthetics.	604,133	2027	Lima
154	State Street - Delphos	Grind and resurface pavement on State Street. Install, remove and/or replace existing curbs and gutters as needed from 5th Street to 1st Street.	942,568	2040	Delphos
156	N Main Street - Delphos	Grind and resurface from 5th Street to 13th Street.	172,780	2020	Delphos
169	SR 117 Rerouting	Reroute SR 117 in the Village of Spencerville corporation limits to SR 66 and North Street. Make necessary roadway intersection modifications to accommodate WB-67 vehicle design.	417,918	2037	Spencerville

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS
(Continued)

PID	Location	Project Description	Cost	Year	Authority
180	Bluelick Road Underpass	Reconstruct overpass increasing vertical clearance and improving horizontal alignment to accommodate WB-67 vehicle design.	20,000,000	2040	ACEO
183	Bluffton Hike/Bike Phase 3 - JAMPD Connector	Construction of 10' paved hike/bike trail connecting the Community's existing green space, residential and employment centers.	137,050	2024	Bluffton
184	Bluffton Hike/Bike Phase 4: Buckeye Park Connector	Construction of 10' paved hike/bike trail connecting the Community's existing green space, residential and employment centers.	511,875	2029	Bluffton
188	ACRTA	Maintenance, Safety/Operating Equipment, Fueling Station, Bus Facility & Rolling Stock.	500,000	2019	ACRTA
189	ACRTA	Maintenance, Safety/Operating Equipment, Fueling Station, Bus Facility & Rolling Stock.	500,000	2020	ACRTA
190	ACRTA	Maintenance, Safety/Operating Equipment, Fueling Station, Bus Facility & Rolling Stock.	500,000	2021	ACRTA
191	ACRTA	Maintenance, Safety/Operating Equipment, Fueling Station, Bus Facility & Rolling Stock.	500,000	2022	ACRTA
192	ACRTA	Maintenance, Safety/Operating Equipment, Fueling Station, Bus Facility & Rolling Stock.	500,000	2023	ACRTA
193	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	525,000	2024	ACRTA
194	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	525,000	2025	ACRTA
195	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	525,000	2026	ACRTA
196	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	525,000	2027	ACRTA
197	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	525,000	2028	ACRTA
198	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	550,000	2029	ACRTA
199	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	550,000	2030	ACRTA
200	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	550,000	2031	ACRTA
201	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	550,000	2032	ACRTA
202	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	550,000	2033	ACRTA
203	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	575,000	2034	ACRTA
204	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	575,000	2035	ACRTA
205	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	575,000	2036	ACRTA
206	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	575,000	2037	ACRTA

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS
(Continued)

PID	Location	Project Description	Cost	Year	Authority
207	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	600,000	2038	ACRTA
208	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	600,000	2039	ACRTA
209	ACRTA	Maintenance, Safety & Operating Equipment, and Rolling Stock.	600,000	2040	ACRTA
210	Breese Road	Replace and widen bridge east of IR 75.	450,000	2024	ACEO
211	McClain Road	Reconstruct and widen lanes Breese Road to Buckeye Road.	250,000	2040	ACEO
212	Cole/Diller	Reconstruct intersection with left turn lanes and signal.	450,000	2024	ACEO
213	Bluelick/Cole	Reconstruct intersection with left turn lanes.	450,000	2025	ACEO
214	Main Street (SR 66)	Reconstruct 2 lanes from Railroad to Suthoff with curbs, gutters, sidewalks and utility relocations.	4,032,917	2023	Delphos
215	Lincoln Highway	Resurface from Menke to State Street (SR 66).	37,948	2020	Delphos
216	5th Street	Resurface from SR 190 to East of US 30 ramps.	360,000	2020	Delphos
217	5th Street	Reconstruct for Complete Streets, three lane with TWTL, bike lanes, curbs, gutters and sidewalks from Corp Line to Corp Line.	9,931,297	2031	Delphos
218	Miami Erie Canal	Reconstruct towpath from Delphos S Corp Line to N Corp Line (park).	750,000	2040	Delphos
219	Spencerville/ North Shore	Install sidewalks from Cable Road to McDonel Street.	828,000	2020	Lima
220	Roschman Avenue	Sidewalks and lighting from hotels to Sams Club.	75,000	2020	Perry
221	Cable Road	Install sidewalks from Elida Road to University Boulevard.	478,000	2022	Lima
222	Market Street	Install sidewalks from Pears Avenue to Corp Line.	365,000	2024	Lima
224	Reservoir Road	Install sidewalks between Dewey Avenue and Roberts Avenue.	120,000	2026	Lima
225	Market Street	Reconstruct with sidewalks from West Corp Line to Woodlawn Avenue.	2,574,000	2030	Lima
226	Central Avenue	Reconstruct from Kibby Street to Elm Street with 12' lanes, parking and sidewalks.	1,750,000	2030	Lima
228	Market & Jameson	Upgrade intersection.	200,000	2040	Lima
229	Buckeye & Ft Amanda	Upgrade intersection.	2,000,000	2030	ACEO
230	Buckeye Road	Widen to include 3-12' lanes with TWLT from Ft Amanda Road to McClain Road.	1,500,000	2025	ACEO
231	Shawnee Road	Widen to 3 lane from Ft Amanda Road to Zurmehly Road with curbs, gutters and sidewalks.	250,000	2025	ACEO
232	Breese Road	Repave from Breese Road to Dixie Highway.	125,000	2025	Shawnee
233	Dixie Highway	Repave from Breese Road to Buckeye Road.	200,000	2020	ACEO

TABLE 7-2
RECOMMENDED TRANSPORTATION PROJECTS
(Continued)

PID	Location	Project Description	Cost	Year	Authority
234	Main Street	Upgrade street lighting from Railroad to Church Street.	255,000	2022	Beaverdam
235	SR 81 & Baty Road	Rebuild intersection to provide LT lanes and possible signal.	200,000	2025	ODOT
236	Breese Road	Resurface and realign from IR 75 to McClain Road.	600,000	2035	Perry
237	Breese Road	Resurface and realign from McClain Road to SR 65.	450,000	2035	ACEO
238	McClain Road	Resurface and realign from Breese Road to Commerce Parkway.	500,000	2035	ACEO
239	McClain Road	Resurface and realign from Hanthorn Road to Buckeye Road.	200,000	2035	ACEO
240	Hanthorn Road	Resurface and realign from McClain Road to SR 117.	2,500,000	2035	ACEO
241	Ft Amanda Road	Resurface and realign Buckeye Road to Adgate Road.	200,000	2035	Shawnee
242	Adgate Road	Resurface and realign from Ft Amanda Road to Shawnee Road.	300,000	2035	ACEO
243	Shawnee Road	Resurface and realign from Adgate Road to SR 117.	200,000	2035	ACEO
244	Breese/McClain South	Widen and upgrade intersection.	250,000	2035	ACEO
245	Breese/McClain North	Widen and upgrade intersection.	100,000	2035	ODOT
246	Breese/SR 65	Widen and upgrade intersection.	100,000	2040	ODOT
247	Hanthorn/ SR 117	Widen and upgrade intersection.	500,000	2040	ODOT
248	Adgate/ Ft Amanda	Widen and upgrade intersection.	250,000	2040	ACEO
249	Adgate/ Shawnee	Widen and upgrade intersection.	250,000	2040	ACEO
250	Hanthorn/ McClain	Widen and upgrade intersection.	250,000	2040	ACEO
88421	Bellefontaine & Kibby	Construct a signalized 4-leg intersection of Bellefontaine Avenue, Kibby Street and Collins Avenue. SB Collins Avenue will require 2-12' lanes with LT lane. WB Bellefontaine Avenue will require 2 LT lanes, 1 Thru lane, and one THRT lane. NB Kibby Street will require 2 LT and 2 RT lanes. EB Bellefontaine Avenue will require 1 LT, 1 Thru, and 1 THRT lane. Kibby Street and Industry Avenue to be signalized. A roundabout is an alternative.	14,820,000	2034	Lima
90949	ALL-Lima Traffic Study Phase 3	Convert Wayne Street to two-way operation and modify High Street Corridor with pedestrian and bicycle components and traffic signal modifications as recommended. Modify High Street to 1 lane one way complete street.	3,512,117	2020	Lima
94214	IR 75	Resurface IR 75 from Napoleon Road to bridge over Riley Creek.	4,527,832	2022	ODOT

TABLE 7-2 RECOMMENDED TRANSPORTATION PROJECTS (Continued)					
PID	**Location**	**Project Description**	**Cost**	**Year**	**Authority**
94251	US 30	Resurface US 30 form 13.28 to Beaverdam.	1,540,000	2022	ODOT
105570	SR 309	Replace 3 culverts.	509,880	2022	ODOT
105686	IR 75	Resurface IR 75 from National Road to 4th Street.	2,323,178	2023	ODOT
106256	SR 103	From the railroad tracks to the west side of Citizens Parkway in the Village of Bluffton. Phase 1 of 2 to reconstruct Jefferson Street (SR 103) in the Village of Bluffton, including curbs, gutters, drainage, storm sewer and sanitary sewer. There will be sidewalks on the south side and a shared use path on the north side. The project will add a two way left turn lane. Project will also resurface from the Norfolk Southern overpass to the Norfolk Southern at grade crossing using preservation funds. District One P&E will provide plans for this resurfacing.	6,343,556	2024	Bluffton
106257	SR 103	From the west side of Citizens Parkway to the IR 75 southbound ramps in the Village of Bluffton. Phase 2 of 2 to reconstruct Jefferson Street (SR 103) in the Village of Bluffton, including curbs, gutters, drainage, storm sewer and sanitary sewer. There will be sidewalks on the south side and a shared use path on the north side. The project will add a two way left turn lane.	4,138,989	2027	Bluffton
107674	SR 66	Resurface SR 66 from SCL of Spencerville to SCL of Delphos.	1,436,000	2022	ODOT
107686	SR 696	Resurface from CSX Railroad Beaverdam to Putnam Co.	971,000	2022	ODOT
107687	SR 65	Resurface from SR 115 to Putnam Co.	433,000	2022	ODOT
107835	SR 117	Replace bridge over Kohler Ditch.	217,284	2024	ODOT
107837	US 30	Paint US 30 structures over IR 75.	1,853,645	2024	ODOT
107874	US 30	Resurface from Beaverdam to SR 235.	3,477,000	2024	ODOT
107875	SR 196, SR 501	Resurface SR 196 and SR 501 from Auglaize Co. to SR 117.	1,950,000	2023	ODOT
108503	State Road Bridge	Replacement of bridge between Defiance Trail & Old Delphos Road.	2,994,098	2025	ACEO

7.6 Project Funding Summary

The 2040 LRTP reflects a comprehensive planning process that ensures that required transportation needs are identified and resources made available to address future demands. The document prepared by the Regional Planning Commission was supported with commentary and coordination between ODOT and local governments. The LRTP reflects a total of $308.4 of federal, state and local funds programmed out over the course of the 2040 planning horizon.

An examination of the funding reveals that state and federal funding encompass more than half ($333.0 million/53.5%) of total funding, local funding accounts for $205.5 million (33.03%), and FTA operations and capital is expected to reach $83.8 million (13.47%) (see Figure 7-2).

FIGURE 7-2: FORECAST FUNDING BY TYPE (2019-2040)

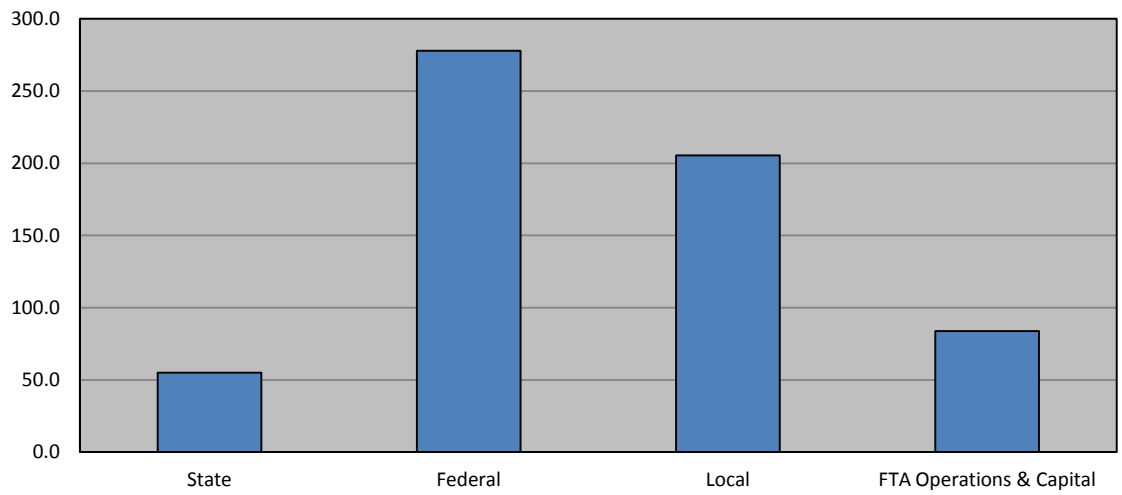
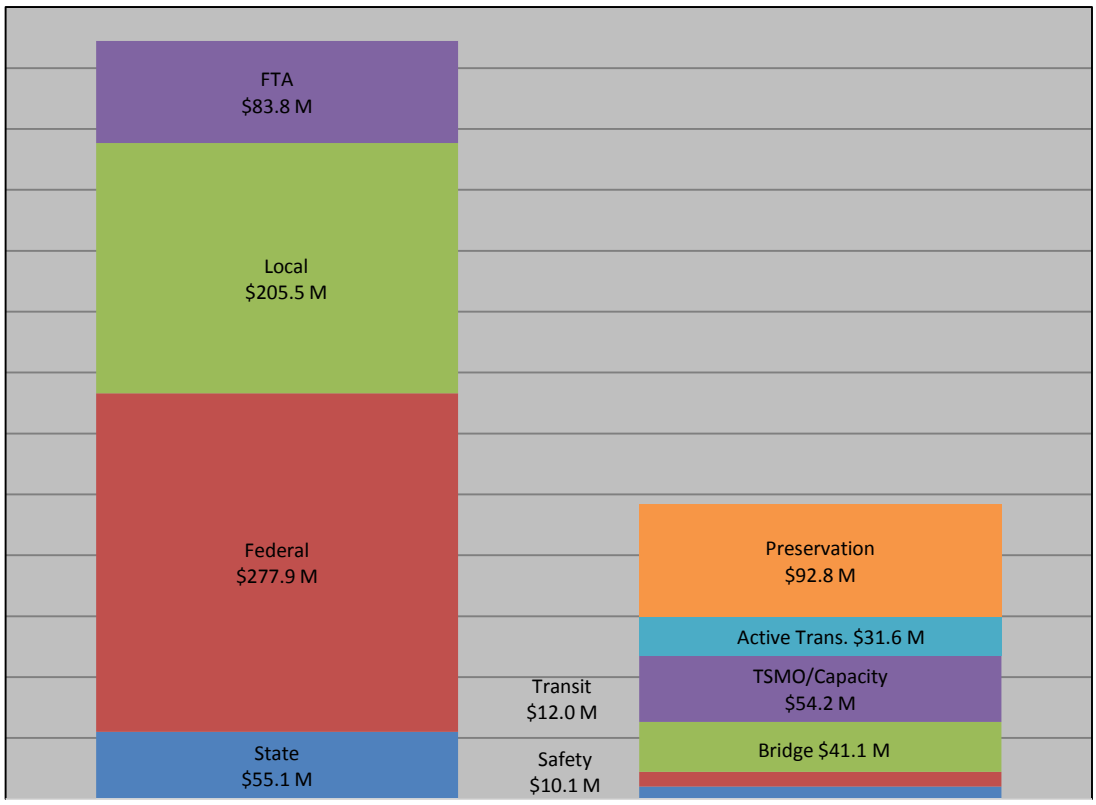
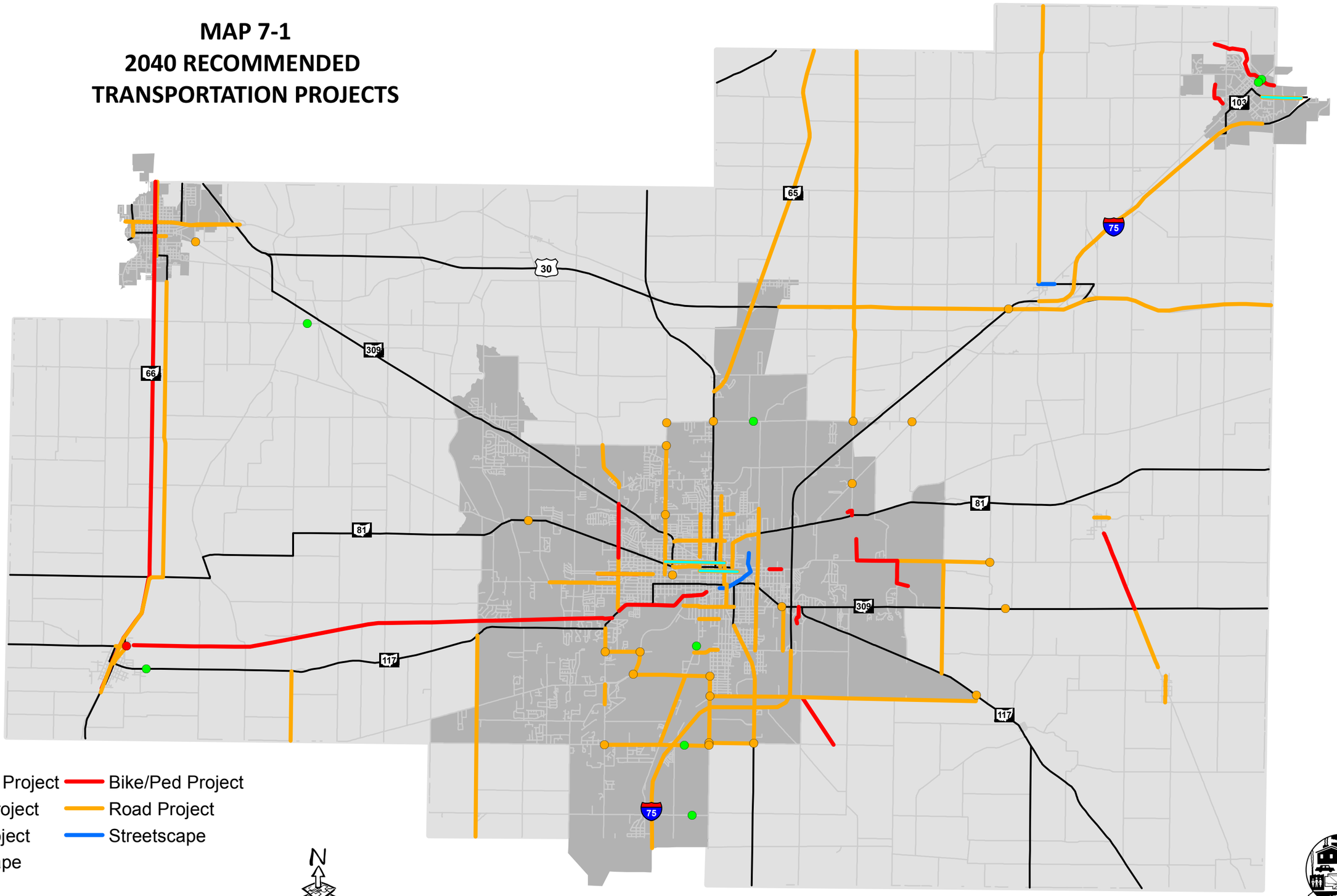


Figure 7-3 shows the project income and cost broken down by income origination and project cost The local share of income must not only be used as match for federal and state funds but also is used to cover the preservation and upgrade of township and county roads. Based on project costs estimated at $290.4 million and available funding exceeding $500 million, the 2040 Long Range Transportation Plan Update is considered fiscally constrained and meets federal planning requirements.

FIGURE 7-3: PROJECT INCOME & COSTS

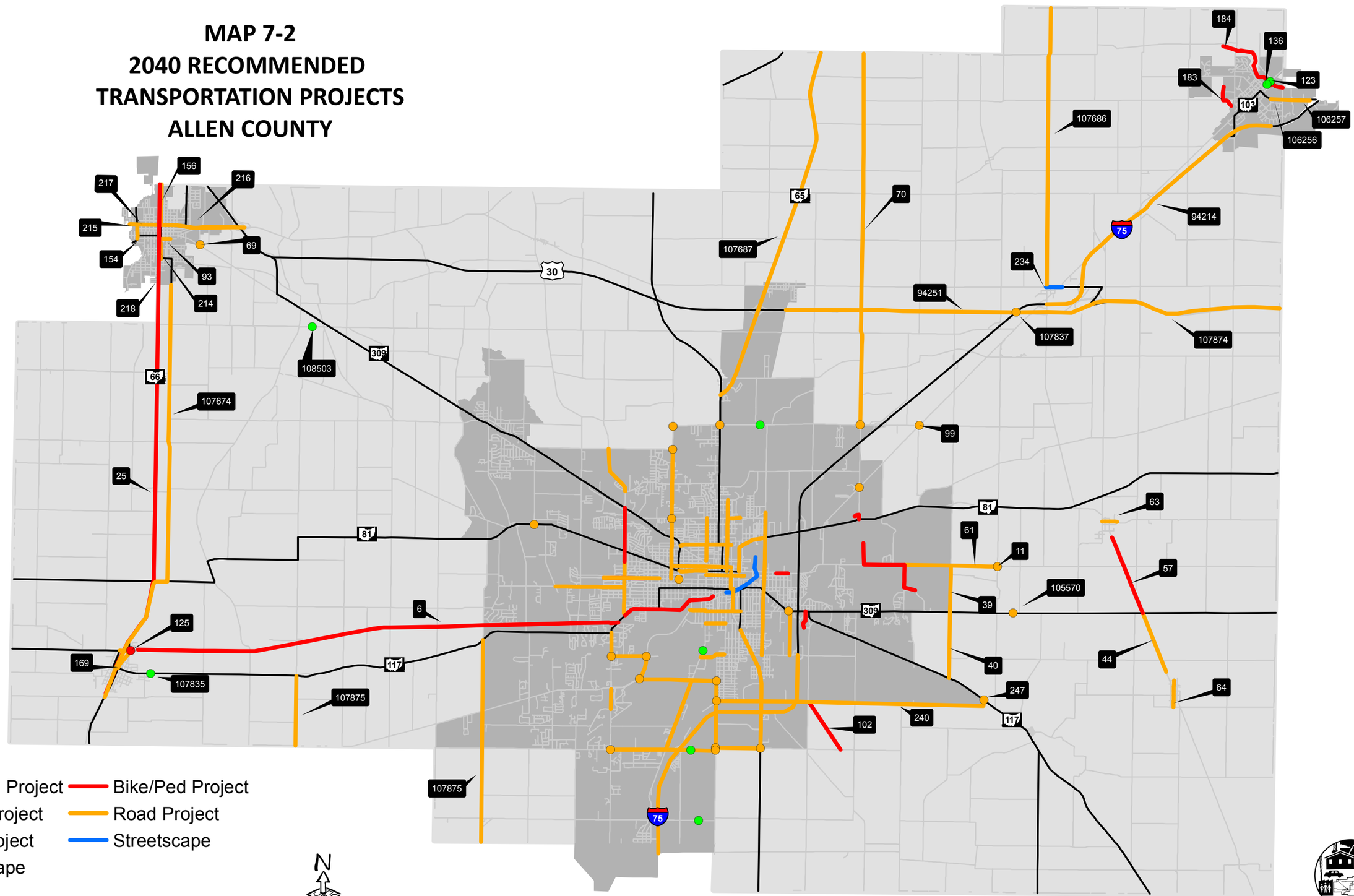


MAP 7-1
2040 RECOMMENDED TRANSPORTATION PROJECTS



August 2018

MAP 7-2
2040 RECOMMENDED TRANSPORTATION PROJECTS
ALLEN COUNTY



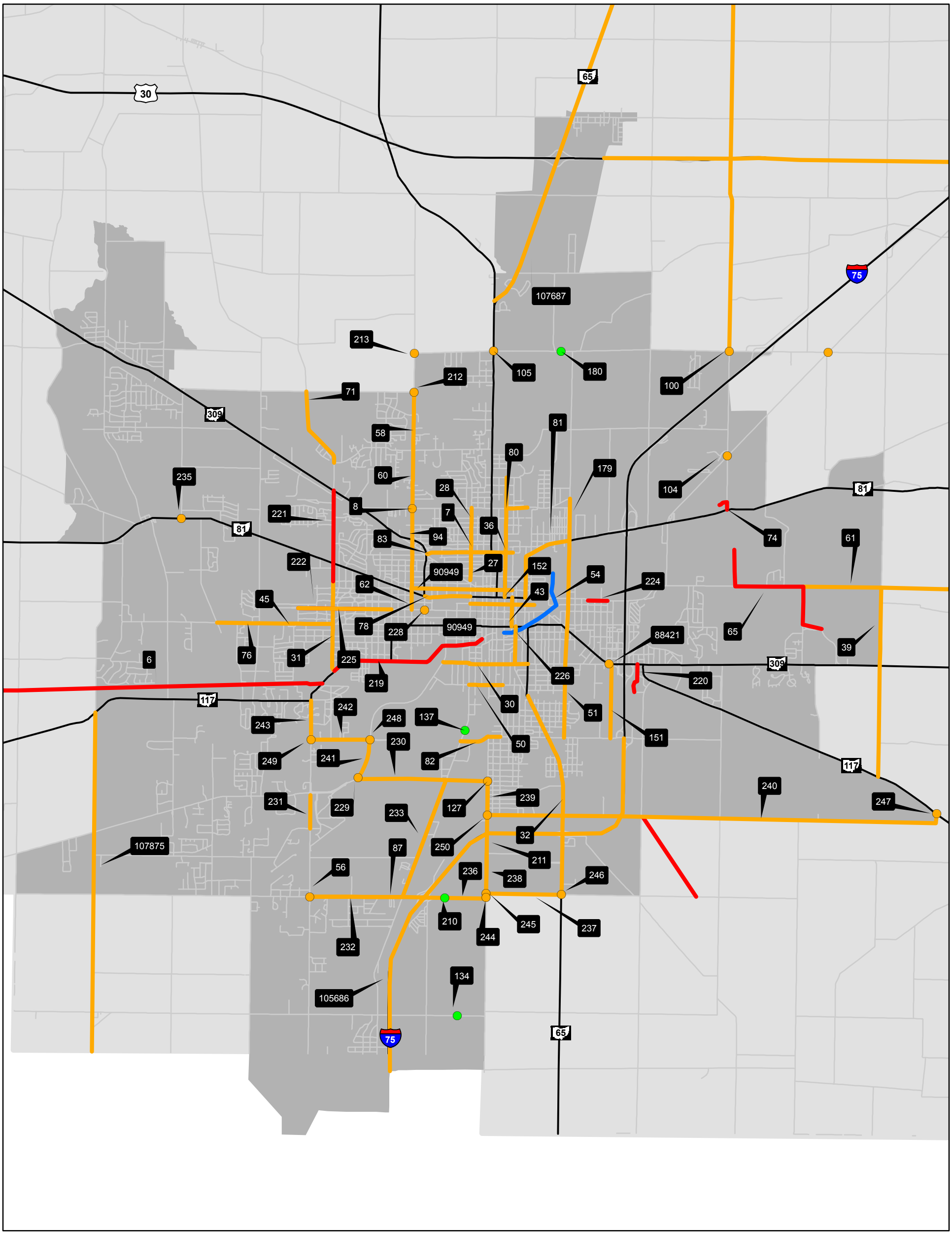
- Bike/Ped Project
- Bridge Project
- Road Project
- Streetscape
- Bike/Ped Project
- Road Project
- Streetscape

0 1 2 4 6 8 Miles

N

August 2018

MAP 7-3
2040 RECOMMENDED
TRANSPORTATION PROJECTS
LIMA URBANIZED AREA



Bike/Ped Project
Bridge Project
Road Project
Streetscape

Bike/Ped Project
Road Project
Streetscape

0 1 2 4 6 8 Miles

N

August 2018

RESOLUTION: **APPROVAL OF THE 2040 LONG RANGE TRANSPORTATION PLAN UPDATE INCLUSIVE OF APPENDICES & RESOLUTIONS**

WHEREAS, the Transportation Coordinating Committee (TCC) of the Lima-Allen County Regional Planning Commission (LACRPC) is designated as the Metropolitan Planning Organization (MPO) by the Governor of Ohio and, in cooperation with local elected officials from Allen County, is acting through the Ohio Department of Transportation; and,

WHEREAS, the TCC in cooperation with the State of Ohio is responsible for carrying out the Continuing, Comprehensive and Coordinated (3C) transportation planning process for Allen County in cooperation with local elected officials; and,

WHEREAS, the 2040 Long Range Transportation Plan Update has been developed with consideration of national goals set forth in 23 USC 150(b) and in conjunction with guidelines set forth specifically in 23 CFR Part 450.324 including State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan; and,

WHEREAS, the LACRPC has prepared a 5-year update for the 2040 Transportation Plan and worked with representatives of the Ohio Department of Transportation in order to demonstrate Transportation Plan and 2018-2021 Transportation Improvement Program (TIP) conformity to the 1997 Ozone standards based on 2018 mobile budget tests as established in the State Implementation Plan; and,

WHEREAS, the LACRPC undertook an extensive outreach program to ensure and secure public participation during development of the 2040 Transportation Plan Update inclusive of formal public meetings, an open house at the Allen County Fair, public meetings of local governments, public service announcements, Spanish language placards, media interviews, a 24x7 web site presence of the DRAFT Plan, and focus group meetings including local neighborhood associations, environmentalists, advocates for the poor, elderly and disabled, pedestrian and bicycle activists, as well as with users of transit and paratransit services; and,

WHEREAS, the MPO and Allen County Regional Transit Authority (ACRTA) worked to integrate National Performance Management Measures and targets to assess the performance of the transportation system in accordance with 23 CFR Part 450.306(d) specifically addressing safety, pavement condition, bridge condition, truck travel time reliability and transit asset management as required by the Moving Ahead for Progress in the 21st Century Act (MAP 21); and,

WHEREAS, the 2040 Long Range Transportation Plan Update identifies those Federal Aid projects determined to be warranted, as well as, policies for the implementation of said projects;

NOW, THEREFORE, BE IT RESOLVED by the Transportation Coordinating Committee (TCC) of the Lima-Allen County Regional Planning Commission that the Committee approves the Year 2040 Long Range Transportation Plan Update, as the transportation plan for the Lima Urbanized Area and MPO planning area, and recommends that the participating members of the Regional Planning Commission incorporate said improvements into their future capital improvement planning process. The TCC approves the 2040 long range plan and makes an affirmative transportation conformity determination on the updated plan and existing 2018-2021 TIP.

ADOPTED THIS 23rd DAY OF AUGUST 2018

Doug Post, Chair
Transportation Coordinating Committee

Attest: Thomas M. Mazur, Executive Director
Lima-Allen County Regional Planning Commission

BOARD RESOLUTION OF
ALLEN COUNTY REGIONAL TRANSIT AUTHORITY
TO APPROVE THE 2040 LONG RANGE TRANSPORTATION PLAN UPDATE
INCLUSIVE OF APPENDICES & RESOLUTIONS

WHEREAS, the Allen County Regional Transit Authority (hereinafter, "Allen County RTA") was legally established by the Board of Commissioners of Allen County, Ohio, pursuant to §306.32 of the Ohio Revised Code; and,

WHEREAS, the Allen County RTA is the transit operator for Allen County, Ohio; and,

WHEREAS, the 2040 Long Range Transportation Plan Update has been developed in conjunction with guidelines set forth specifically in 23 CFR Part 450.324; and

WHEREAS, On December 4, 2015, President Barack Obama signed into law P.L. 114-94, the Fixing America's Surface Transportation (FAST) Act. The 5-year Bill establishes transportation funding at $305 billion for fiscal years (FY) 2016 through 2020 and is the first law in over a decade to provide long-term funding certainty to transportation programs; and,

WHEREAS, the 2040 Long Range Transportation Plan Update has an expansive legislative history including the initial mandates established in the Moving Ahead for Progress in the 21st Century (MAP-21) Act; the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); the Transportation Equity Act for the 21st Century (TEA-21); and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The FAST Act builds on those legislative initiatives; and,

WHEREAS, the MPO and Allen County RTA worked to integrate National Performance Management Measures assessing and establishing Safety and Transit Asset Management measures to use as required by Moving Ahead for Progress in the 21st Century Act (MAP 21); and,

WHEREAS, the Allen County RTA wishes to remain on the 2040 Long Range Plan Update to remain eligible for available funds; and,

NOW, THEREFORE, BE IT RESOLVED that the 2040 Long Range Plan Update is approved and adopted.

Passed this 16th day of August, 2018 .

Brad Taylor, Board President

Patricia Stein, Finance Director/Board Secretary