2045 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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Content Disclosure

The 2045 Long Range Transportation Plan Update is financed by the Federal Highway Administration, Ohio Department of Transportation, Federal Transit Administration, and local governments. The contents of this report reflect the views of, Lima Allen County Regional Planning Commission which is responsible for the facts and the accuracy of the data presented herein.

EXECUTIVE SUMMARY

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, the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") 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 2021, there were 1,328.6 total roadway miles in Allen County, of which 23.12 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 (67.9%), or 902.1 miles, were classified as local, and 59.42%, or 789.23 miles, were classified as rural. According to 2021 estimates of daily vehicle miles traveled (VMT), total system mileage exceeded 3.09M miles per day, or 1.13B 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 2020 Decennial Census reported 102,206 County residents, with 35,579 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, 2020 decennial census data also revealed a decreasing trend since 2010 with respect to individuals in poverty, with a decrease of 35.6%.

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 increased from 8,945 in 2010, to 10,259 in 2020. An increase of nearly 15%. 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 2045 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 2045 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 2045 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 1.13B annual VMT; in horizon year 2045, the VMT is projected to reach 1.32B, an increase of 16.9%. Given the increase in VMT, some of the roadway network is projected to operate at an unsatisfactory LOS. The net result is a 270% increase in the number of deficient roadway miles over existing 2021 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 12 bridges in Allen County considered to be in poor condition, costing an estimated \$4.7M to remediate. 10% 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 2045 Plan recommends 32 projects that include an active transportation component.

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 2045 Plan Update are projected to reach \$78 M. Costs associated with the maintenance and replacement of rolling stock and facilities require an additional \$10.0M over the planning horizon.

The freight component is seen as an integral element of the 2045 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.

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 90.02 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 Blue lick Road underpass. The Plan crossing improvements, grade separations, and more restrictive crossing control devices are necessary to address local concerns. Complete engineering costs for improving conditions at 132 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.



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SECTION 1 INTRODUCTION

On November 15, 2021, President Biden signed Public Law No 117-58, the Infrastructure Investment and Jobs Act also known as the Bipartisan Infrastructure Law. The Bipartisan Infrastructure Law (BIL) is the largest long-term investment in our infrastructure and economy in our Nation's history. The BIL provides \$567.1 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband. The BIL works to grow the economy, enhance U.S. competitiveness, create good jobs, and makes the U.S. economy more sustainable, resilient and equitable.

To address the challenges facing the U.S. transportation system the BIL retains a policy driven, performance-based array of programming previously found in earlier Federal Transportation Legislation. The BIL also introduced new programs focusing on key infrastructure priorities including: rehabilitating bridges in critical need of repair, reducing carbon emissions, increasing system resilience, removing barriers to connecting communities, and improving mobility and access to economic opportunity.

The BIL refines and reinforces highway initiatives established earlier under the Moving Ahead For Progress in the 21st Century Act (MAP-21), 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 of 1991 (ISTEA). Collectively, these Acts call for the continuation and improvement of existing programs with new initiatives to meet the challenges of improving safety; protecting the public health and environment; creating economic opportunities and mobility for all Americans.

1.1 Rationale

The BIL was developed to finance and further the efficiency of the existing transportation system by continuing to fully integrate existing transportation modes rather than implementing new, expensive and fragmented infrastructure. The BIL contains a number of new programs targeting the mitigation and impacts of climate change and increasing the resilience of the surface transportation system. The BIL developed the Carbon Reduction Program (CRP) to reduce transportation emissions through the development of State carbon reduction strategies and by funding projects designed to reduce transportation emissions. The BIL worked to prioritize safety in all investment and projects adopting FHWA Safe System approach that encourages states to take substantial, comprehensive actions to significantly reduce serious and fatal injuries on the Nation's roadways," in pursuit of the goal of achieving zero highway deaths.

The provisions of the BIL are to be implemented in conjunction with other federal regulatory acts, its highway predecessors, the Clean Air Act Amendments of 1990 (CAAA) and the Americans with Disabilities Act of 1990 (ADA). Collectively these regulations provide a complicated framework from which to rebuild our nation's transportation infrastructure. This framework, however cumbersome, provides direction to build a truly accessible, truly intermodal transportation system. A transportation system designed to addresses the needs of industry and commerce. A system which addresses the needs of the poor, the elderly, the frail and the mobility impaired. A transportation system that provides an equitable distribution of infrastructure, investment, services and modal choice across geographic and socio-economic communities. A transportation system that protects the environmental impact and advances local health conditions within our neighborhoods. And, a transportation system that serves the needs of the local community far 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, with estimates of \$642.7 million for area roadways, \$16.8 million for rail and freight related improvements, \$22.1 million for bridges, \$27.2 million for active transportation/streetscape improvements, \$17.9 million for air services and \$36.9 million for public transit/paratransit services needed.

And despite the historical emphasis placed on continued investments targeting increased highway capacity, changing demographics, declines in total trips, and declines in vehicle miles of travel coupled with shrinking available funding suggest a new course is warranted.

Today's current transportation system was designed in an age when large families and a growing population pushed development outward fueled in part by inexpensive gasoline and land. Currently, 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 more urban residents and other transportation modes. Moreover, fractured land use policies have created additional strains on the existing system and demands on public dollars. The lack of public transportation services, the absence of sidewalks and bike facilities work to limit the accessibility of certain people from certain employment, educational, social and recreational opportunities. This Plan works to alleviate some of the disparity of the transportationally disadvantaged.

1.2 Purpose

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 2045 Transportation Plan Update is the development of a truly intermodal transportation system, one that is safe, efficient, fiscally sound, equitable, environmentally sustainable, and which provides the regional infrastructure to better compete in the global economy. In keeping with the demands of the BIL and its predecessors, the CAAA and the ADA, the Plan undertakes a series of actions and strategies to accommodate local travel demands. The 2045 Transportation Plan is charged with the responsibility to: (1) identify socio-economic based trends that may affect the transportation system over the 2045 planning horizon; (2) document existing transportation characteristics, including current operating conditions and deficiencies; (3) prioritize projects that consider the unique circumstances affecting community members' mobility needs and allocate resources consistently with those needs, enabling the transportation network to effectively serve all community members; (4) fund projects and inclusion of project elements that proactively address racial equity, workforce development, economic development, and remove barriers to opportunity, including automobile dependence in both rural and urban communities as a barrier to opportunity or to redress prior inequities and barriers to opportunity; (5) prioritize projects that improve the resilience of transportation infrastructure, helping prepare for hazards such as floods, storms, and droughts exacerbated by climate change; (6) identify, assess alternatives, and recommend methods/actions of alleviating current and future transportation deficiencies; and, (7) identify federally eligible projects.

As required in Section 134 (h) of Title 23 U.S.C of Federal Highway Administration, and the Federal Transit Administration Section 5303 (h) of Title 49 U.S.C., the 2045 Transportation Plan must recognize the 8 planning factors to adequately address the transportation planning process for all metropolitan areas. These factors were addressed in MAP-21. 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; and, (8) Emphasize the preservation of the existing transportation system. These factors 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 2045 Transportation Plan Update.

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. The section examines the issue of transportation by providing information on assorted variables including aspects of population, migration, land use and employment trends which effect both the transportation system, as well as, the transportation planning process. 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's) study area as identified in the 2045 travel demand 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 Plan is supported with various appendices to provide a more detailed assessment of particular aspects of the Plan. Appendix A examines the Plans compliance with established goals, performance measures and systems management reporting. Appendix B provides an assessment of the Plan's impact on social, economic and environmental concerns within the community highlighting issues of environmental justice. Appendix C identifies air quality impacts of the Plan on the community.

MAP 1 Allen County Base Map



SECTION 2 TRANSPORTATION PLANNING & THE FEDERAL REGULATORY FRAMEWORK

Federal legislation is a major part of the framework that guides the current transportation planning process. Various 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, and most recently The Investment & Jobs Act ((IIJA) (Public Law 117-58, also known as The "Bipartisan Infrastructure Law" coupled with 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. The Investment & Jobs Act ((IJJA) (Public Law 117-58, also known as the "Bipartisan Infrastructure Law" Bill reflects the largest single transportation investment (\$567.1 billion) in all modes over the 2022-2026 period.

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 atgrade 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. 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 offsystem 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 Investment & Jobs Act (IIJA) Public Law 117-58, also known as The "Bipartisan Infrastructure Law"

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act ((IIJA) (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") into law. The IIJA/BIL is the largest long-term investment in our infrastructure and economy in our Nation's history. The IIJA/BIL provides the basis for FHWA programs and activities through September 30, 2026. It makes a once-in-a-generation investment of \$567.1 B for all infrastructure investments including

\$350 billion in highway programs. This includes the largest dedicated bridge investment since the construction of the Interstate Highway System. More specifically, the IIJA/BIL provides new Federal investment in infrastructure for area roads, bridges, and mass transit, water infrastructure, resilience, and broadband. As examples:

- Based on formula funding alone, Ohio is expected to receive approximately \$9.9 billion over five years in Federal highway formula funding for highways and bridges. On an average annual basis, this is about 30.4% more than the State's Federal-aid highway formula funding under current law.
- Ohio can also expect to receive approximately \$215 M over five years in formula funding to reduce transportation-related emissions, in addition to about \$244 M on over five years to increase the resilience of its transportation system.
- The Bipartisan Infrastructure Law invests \$13 billion over the Fixing America's Surface Transportation (FAST) Act levels directly into improving roadway safety. Over five years, Ohio will receive approximately \$61 million in 402 formula funding for highway safety traffic programs, which help states to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes. On an average annual basis, this represents about a 29% increase over FAST Act levels.
- Local governments in Ohio will also be eligible to compete for \$6 billion in funding for a new Safe Streets for All program which will provide funding directly to these entities to support their efforts to advance "vision zero" plans and other improvements to reduce crashes and fatalities, especially for cyclists and pedestrians.
- Ohio can expect to receive approximately \$78.2 M over five years in funding to augment their commercial motor vehicle (CMV) safety efforts to reduce CMV crashes through the Federal Motor Carrier Safety Administration's Motor Carrier Safety Assistance Program (MCSAP) formula grant. This represents about a 61% increase in funding compared to FAST Act levels.
- Based on formula funding alone, public transportation investments in Ohio are expected to reflect roughly \$1.4 billion over five years under the to improve access across the state this represents about a 34% increase in the first year over 2021 FAST Act formula transit funding levels.
- Under the IIJA/BIL, Ohio expects to receive about \$140 million over five years to support the expansion of an EV charging network in the state. Ohio will also have the opportunity to apply for grants out of the \$2.5 billion available for EV charging.
- Airports in Ohio would receive approximately \$253 million for infrastructure development for airports over five years. This funding will address airside and landside needs at airports, such as improving runways, taxiways and airport-owned towers, terminal development projects, and noise reduction projects.

Based on guidance provided by ODOT and FHWA to date, the IIJA/BIL continues the Metropolitan Planning Program, which establishes a cooperative, continuous and comprehensive (3C) framework for making transportation investment decisions in metropolitan areas. With several exceptions the AAJI/BIL continues the planning requirements and funding of the previous Transportation Bills. The IIJA/BIL specifically allows MPOs to use social media and other webbased tools to encourage public participation in the transportation planning process [§ 11201(a)(3), 23 U.S.C. 134(i)(6)(D)].

2.7 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.

2.8 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.

2.9 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.

2.10 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 2045 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 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

The transportation plan's development and implementation depend 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. 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, and works with local communities to preserve branch lines threatened with the potential loss of service through acquisition and rehabilitation assistance. The ORDC also provides loans to 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 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 assess any potential rise in base flood elevations due to bridge design and identify any potential mitigation strategies to 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 it has become pivotal for local economic development initiatives.

3.3.11 Local Units of Government

Some 839.8 miles, or 57.4%, of the Allen County roadway system and its related infrastructure is underwritten and maintained by local governments. There are 20 units of local government that participate in the development of the region's long range transportation planning activities and short-range Transportation Improvement Programs (TIP). They receive federal funding through the transportation policy committee of the LACRPC and are responsible for providing the required local match for the transportation planning process and transportation improvements. Communication between representatives of the local jurisdictions, with ODOT, FHWA, and FTA is facilitated by the LACRPC and the ACRTA.

3.4 Transportation Planning: Plan, Planning Provisions & Factors

Federal policy¹ 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.

On November 15, 2021, President Biden signed the <u>Infrastructure Investment and Jobs Act ((IIJA)</u> (Public Law 117-58, also known as the "Bipartisan Infrastructure Law") into law. The IIJA/BIL is the largest long-term investment in our infrastructure and economy in our Nation's history. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband.

The IIJA/BIL builds on previous legislative initiatives. Such transportation legislation includes: Fixing America's Surface Transportation Act (FAST Act), 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 of 1991 (ISTEA). These historical transportation bills create the framework for local transportation planning. When considered with the ramifications of the Clean Air Act Amendments of 1990, the National Environmental Policy Act of 1969, and the Americans with Disabilities Act 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.

With respect to the LACRPC, and based on guidance provided by ODOT and FHWA to date, the IIJA/BIL continues the Metropolitan Planning Program, which establishes a cooperative, continuous and comprehensive (3C) framework for making transportation investment decisions in metropolitan areas. With several exceptions the AAJI/BIL continues the planning requirements and funding of the previous Transportation Bills. The IIJA/BIL specifically allows and encourages MPOs to use social media and other web-based tools to encourage public participation in the transportation planning process [§ 11201(a)(3), 23 U.S.C. 134(i)(6)(D)].

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. Several federal planning factors were established for states and MPOs to address² 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:

- 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;

 $^{^1\!23}$ U.S.C §134 (a) Metropolitan Transportation Planning.

²23 U.S.C §134 (h) (1) Metropolitan Transportation Planning - Planning Process.

- 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.

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;³ (2) present a range of issues and alternative strategies to address those concerns;⁴ and, (3) provide opportunity for public input during project/plan development.⁵ The MPO followed its adopted public participation plan to guide the planning process. 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 provide the opportunity for media coverage and public input and education.

³The 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.

⁴The 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 2024-2027 TIP was submitted to The Ohio Department of Transportation 1 May 2023. Approval is anticipated 1 July 2023. 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.

⁵The 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.

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.

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.⁶ The effort enabled the LACRPC to target geographic areas for inclusion and increased participation in the planning process.⁷ 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 is provided to show the Lima Allen County Regional Planning Commission designated study areas.

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⁶The LACRPC utilized census data, various transportation system databases, and GIS operations to analyze and identify the potential transportation dependent and underserved populations.

TABLE 3-1 POLITICAL SUBDIVISIONS INVOLVED IN THE LONG PANGE TRANSPORTATION DLANNING PROCESS									
BY DEMOGRAPHICS, ACCESSIBILITY & PARTICIPATION									
		Demographics				Transit Ac	cessibility	Participation In	
Political Subdivision	Total Population 2020	Total Minority 2020	Total Elderly 2020	Household Poverty 2020	Total Mobility Impaired 2020	Demand Response Accessibility	Fixed Route Accessibility	Study Session	Public Meeting
Allen County	102,206	22,515 22.03%	18,159 17.76%	9,432 23.0%	7,891 -7.70%	100%	57,158	\checkmark	\checkmark
City of Delphos (Part)	3,935	408 10.37%	897 22.79%	336 20.30%	460 11.69%		3,935	\checkmark	\checkmark
City of Lima	35,579	14,515 40.80%	5,029 13.60%	4,991 34.60%	3,540 9.95%		35,579	\checkmark	\checkmark
Village of Beaverdam	319	42 13.17%	43 9.80%	26 14.70%	24 7.52%		0	\checkmark	\checkmark
Village of Bluffton (Part)	3,763	382 10.15%	571 15.17%	310 21.40%	243 6.46%		0	\checkmark	\checkmark
Village of Cairo	517	52 10.06%	111 16.20%	33 14.00%	44 8.51%		0	\checkmark	\checkmark
Village of Elida	1,923	190 9.88%	430 21.60%	100 23.60%	150 7.80%		1,923	\checkmark	\checkmark
Village of Harrod	423	29 6.86%	53 13.20%	11 8.00%	32 7.57%		0	\checkmark	
Village of Lafayette	406	24 5.91%	42 10.80%	17 11.10%	35 8.62%		0	\checkmark	
Village of Spencerville	2,198	177 8.05%	357 16.20%	316 37.20%	189 8.60%		0	\checkmark	\checkmark
Amanda Township	2,061	157 7.62%	294 16.30%	1 0.14%	76 3.69%		0	\checkmark	\checkmark
American Township	12,615	2,682 21.26%	2,983 23.65%	1,318 23.80%	805 6.38%		6,500	\checkmark	\checkmark
Auglaize Township	2,334	140 6.00%	419 17.95%	71 8.50%	152 6.51%		0	\checkmark	\checkmark
Bath Township	9,399	1,095 11.65%	1,472 15.50%	523 13.90%	351 3.73%		7,500	\checkmark	\checkmark
Jackson Township	2,737	122 4.46%	478 17.46%	112 12.30%	137 5.00%		0	\checkmark	\checkmark
Marion Township	2,694	87 3.23%	557 20.68%	168 14.90%	291 10.80%		0	\checkmark	\checkmark
Monroe Township	1,550	88 5.68%	258 16.65%	87 13.20%	89 5.74%		0		
Perry Township	3,382	455 13.45%	725 21.30%	324 24.60%	351 10.38%		1,250	\checkmark	\checkmark
Richland Township	1,789	99 5.53%	777 43.00%	135 18.20%	77 4.30%		0	\checkmark	
Shawnee Township	12,482	1,627 13.03%	2,305 19.00%	474 9.80%	717 5.74%		100	\checkmark	~
Spencer Township	869	59 6.79%	541 18.20%	48 15.30%	71 8.17%		0	\checkmark	
Sugar Creek Township	1,231	85 6.90%	217 17.50%	31 7.10%	57 -2.80%		0	\checkmark	\checkmark
		S	ource: ACS 20)16 5-Year Estir	nates: S0101	Fotal Population.			





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 expansion of urban areas, 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 2045. Section 4.6 illustrates the growing dependency upon motor vehicles with ever increasing VMT placing greater demands upon our roadway system, which is then further explained within section 5. 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 Bureau¹ report the 2020 Allen County population estimates at 102,206 residents and 35,579 individuals residing within the City of Lima. Such figures reflect population losses of 3.9 percent and 8.2 percent respectively when compared to 2010 data. Minority population within the county experienced a significant of growth (21%) over the same period.

¹U.S. Census Bureau, 1970-2020 Censuses, DP-1.

MAP 4-1

TEN COUNTY TRADE AREA




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 highlights 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 10,035, or -8.9%. The population growth rate over the same period for the State of Ohio was 10.7%.

Population change is the net result of the relationship between the



number of births and the number of deaths in a population (sometimes referred to as natural change) coupled with the net migration within the community. Comparing 2000 DEC Redistricting Data with the 2020 Census tabulations, Allen County lost 6,267 residents, a loss in population of 6 percent in twenty years. Data indicates that out migration is the principal component of population decline as people leave the community to fulfill opportunities elsewhere. For comparison purposes, the State of Ohio



Illustration 4-2 provides additional insights into the components of population change over the 2010 thru 2019 period.

Whether related to growth or decline, population change is not static nor uniform. For example, Allen County experienced an overall population decrease of 1.5 percent when examining the entire period spanning the 1960 to 2020 period while, as depicted in Table 4-1, many political subdivisions within Allen County have experienced an extended period of continued growth.

Data suggests that the older urban centers of Allen County witnessed a general population decline since 1970, while younger suburban and exurban townships have increased in the overall population. For example, Lima, the county seat, witnessed a 5.3 percent increase in population between 1960 and 1970 before beginning a 30-year decline and dropping 30 percent in size by 2020. The Villages of Beaverdam, Harrod, and Lafayette also experienced precipitous decreases between 1960 and 2020. However, Amanda Township, a township without an incorporated area, experienced sizeable percentage growth over the 60 years witnessing a population growth of 69.35 percent, respectively. Of concern is the effect of annexation on the unincorporated areas over the 60-year period. However, the actual annexation of the population is considered negligible as most annexation initiatives target undeveloped/unpopulated land.

TABLE 4-1 TOTAL POPULATION BY POLITICAL SUBDIVISION (1960-2020)									
Political Subdivision	1960	1970	1980	1990	2000	2010	2020*	PCT Change 1960-2020	
Allen County	103,691	111,144	<mark>112,2</mark> 41	10 <mark>9,75</mark> 5	108,473	10 <mark>6,331</mark>	102,206	-1.45%	
Beaverdam	514	525	492	467	356	382	319	-37.94%	
Bluffton	2,591	2,935	3,237	3,206	3,719	3,952	3,763	48.90%	
Cairo	566	587	596	473	499	524	517	-8.66%	
Delphos	3,716	4,301	3,984	3,901	3,901	3,938	3,935	3.98%	
Elida	1,215	1,211	1,349	1,486	1,917	1,905	1,923	58.27%	
Harrod	563	533	506	537	491	417	423	-24.87%	
Lafayette	476	486	488	449	304	445	406	-14.71%	
Lima	51,037	53,734	47,827	45,549	40,081	38,771	35,579	-30.29%	
Spencerville	2,061	2,241	2,184	2,288	2,235	2,223	2,198	6.65%	
Amanda Twp	1,217	1,498	1,769	1,773	1,913	2,071	2,061	69.35%	
American Twp	9,184	8,766	11,476	10,921	13,599	12,476	12,615	37.36%	
Auglaize Twp	1,740	2,245	2,042	2,241	2,359	2,366	2,334	34.14%	
Bath Twp	8,307	9,323	9,997	10,105	9,819	9,725	9,399	13.15%	
Jackson Twp	1,523	1,761	2,214	2,288	2,632	2,611	2,737	78.59%	
Marion Twp	2,222	2,644	2,734	2,775	2,872	2,777	2,694	25.20%	
Monroe Twp	1,386	1,490	1,621	1,622	1,720	1,702	1,550	11.83%	
Perry Twp	5,045	3,751	3,586	3,577	3,620	3,531	3,382	-32.96%	
Richland Twp	1,530	1,515	1,628	1,821	2,015	1,955	1,789	10.72%	
Shawnee Twp	9,658	9,734	12,344	12,133	12,220	12,433	12,482	29.24%	
Spencer Twp	863	960	925	832	871	844	869	0.70%	
Sugar Creek Twp	1,166	1,209	1,242	1,311	1,330	1,283	1,231	5.57%	
			*Data gath	ered from 202	0 DEC				

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.

ACS data reveals the total number of households and the rate of change in total households reported between 1990 and 2020. Illustration 2-3 shows the trend over time in total households in Allen County. Table 4-2 explains the decline in total households between 2010 and 2020. In 2020 there were 41,025 households, an increase of 0.8 percent from the 2010 figure of 40,719 households. The increase in number of households was not uniform across the county. Jackson, Perry, and Sugar Creek townships all saw significant decrease in the number of households.

Household size is an interesting factor. Table 2-2 presents information relative to the changing size of households. The average household size in Allen County has decreased slightly to 2.4 persons per household between 2010 and 2020, a decline of 4 percent. In comparison, in 2010, the State average size of 2.46 persons per household saw a decline of 2.0 percent in 2020.

In 2020, approximately two-thirds of households (29,718) or 72.4 percent of all households were identified without children. This data may very well indicate that a historical trend of families with children is changing to more two-person households, single-parent households with children under the age of 18 years, and households comprised of retirees. In addition, as the average household size declines the trend of smaller households becomes evident; as of 2020, there were 27,692 (67.5%) households comprised of one or two individuals within Allen County.

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 (2010-2020)										
Political Subdivision	Total Households 2010	Avg. Household Size 2010	Total Households 2020	Avg. Household Size 2020	PCT Change Total HH	PCT Change H.H. Size				
Allen County	40,719	2.5	41,025	2.4	0.8%	-4.0%				
Beaverdam	186	2.3	177	2.5	-4.8%	8.2%				
Bluffton	1,330	2.6	1,450	2.4	9.0%	-6.2%				
Cairo	144	2.4	236	2.9	63.9%	22.9%				
Delphos	1,603	2.4	1,655	2.3	3.2%	-4.6%				
Elida	797	2.7	796	2.5	-0.1%	-7.0%				
Harrod	197	2.9	138	2.9	-29.9%	-1.0%				
Lafayette	101	2.8	153	2.5	51.5%	-10.6%				
Lima	14,618	2.5	14,426	2.4	-1.3%	-3.7%				
Spencerville	859	2.6	850	2.5	-1.0%	-1.2%				
Amanda Twp	709	2.8	697	2.6	-1.7%	-8.2%				
American Twp	5,052	2.7	5,529	2.3	9.4%	-13.7%				
Auglaize Twp	838	2.7	832	2.7	-0.7%	1.5%				
Bath Twp	3,833	2.5	3,761	2.5	-1.9%	-2.4%				
Jackson Twp	1,018	2.7	912	2.7	-10.4%	0.7%				
Marion Twp	1,039	2.6	1,129	2.4	8.7%	-5.5%				
Monroe Twp	638	2.8	661	2.7	3.6%	-6.0%				
Perry Twp	1,565	2.3	1,318	2.5	-15.8%	11.9%				
Richland Twp	706	2.4	741	2.4	5.0%	1.7%				
Shawnee Twp	4,665	2.6	4,813	2.5	3.2%	-4.9%				
Spencer Twp	316	2.6	314	2.6	-0.6%	-0.4%				
Sugar Creek Twp	505	2.7	437	2.8	-13.5%	6.4%				

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.

Consistent with national trends, the County's population is aging. The median age of the County population is 39.4 years. That compares with a median of 39.5 and 38.2 years with the State of Ohio and the United States respectively. Within the County there is considerable variance. The City of Lima had a median age of 33.5 years, compared to Amanda Township with a median age of 50.7 years, more than 10 years older than the median of Allen County.

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, Table 4-3, depicts an age/gender profile of Allen County's population as documented in 2020.

	TABLE 4-3 ALLEN COUNTY POPULATION BY AGE COHORT & GENDER (2020)									
Age Cohort	Male	PCT of Male Pop	Female	PCT of Female Pop	Total	PCT of Total Pop				
< 5	3338	6.40%	2924	5.70%	6262	6.1%				
5 - 9	3354	6.50%	2887	5.70%	6241	6.1%				
10 - 14	3560	6.90%	3476	6.80%	7036	6.8%				
15 - 19	3838	7.40%	3378	6.60%	7216	7.0%				
20 - 24	3779	7.30%	3109	6.10%	6888	6.7%				
25 - 29	3793	7.30%	3027	6%	6820	6.6%				
30 - 34	3011	5.80%	2851	5.60%	5862	5.7%				
35 - 39	2871	5.50%	3004	5.90%	5875	5.7%				
40 - 44	3343	6.40%	3048	6%	6391	6.2%				
45 - 49	3023	5.80%	2776	5.50%	5799	5.6%				
50 - 54	3187	6.10%	3135	6.20%	6322	6.1%				
55 - 59	3301	6.40%	3829	7.50%	7130	6.9%				
60 - 64	3534	6.80%	3273	6.40%	6807	6.6%				
65 - 69	2941	5.70%	2605	5.10%	5546	5.4%				
70 - 74	2016	3.90%	2774	5.50%	4790	4.7%				
75 - 79	1364	2.60%	1758	3.50%	3122	3.0%				
80 - 84	960	1.80%	1224	2.40%	2184	2.1%				
85≤	737	1.40%	1780	3.50%	2517	2.4%				

4.3.4 Race & Ethnic Diversity

One of the key components of the assessment is an examination of the community's racial and ethnic make-up and its associated concentration. Federal policies have defined minority populations in several ways. Included are persons of all non-white races, Hispanics of any race, and persons of multiple races. The Census identifies seven major minority racial/ethnic classifications, including American Indian and Alaska Natives; Black or African-American; Asian; Native Hawaiian and Other Pacific Islanders; persons of other races; persons of two or more races; and persons of Hispanic or Latino origin. 2020 ACS data revealed that representatives of all minority classifications lived within Allen County, except for Pacific Islander.

Following the national trend, Allen County's population has grown more racially and ethnically diverse during the past decade. Racially, Whites comprise the largest percentage of the population at 78 percent. The largest minority group within Allen County is the Black/African-American population, 12.2 percent of the total population. Those minority groups that identify as two or more races comprise 5 percent of Allen County's population. All other minority groups comprise approximately 2.6 percent of the county population. Although dispersed across the County, the County's largest minority, the African-American population is primarily concentrated in the City of Lima, where it constitutes 27.6 percent of the City's population.

	Table 4-4 Minority Population										
Political Subdivision	Minority Pop. 2010	PCT Minority 2010	Minority Pop. 2020	PCT Minority 2020	Change '10-'20	PCT Change '10- '20					
Allen County	18,623	17.51%	22,515	22.03%	3,892	20.90%					
Beaverdam	14	3.66%	42	13.17%	28	200.00%					
Bluffton	222	5.62%	382	10.15%	160	72.07%					
Cairo	20	3.82%	52	10.06%	32	160.00%					
Delphos	147	3.73%	408	10.37%	261	177.55%					
Elida	128	6.72%	190	9.88%	62	48.44%					
Harrod	9	2.16%	29	6.86%	20	222.22%					
Lafayette	14	3.15%	24	5.91%	10	71.43%					
Lima	13,489	34.79%	14,515	40.80%	1,026	7.61%					
Spencerville	93	4.18%	177	8.05%	84	90.32%					
Amanda Twp	52	2.51%	157	7.62%	105	201.92%					
American Twp	1,780	14.27%	2,682	21.26%	902	50.67%					
Auglaize Twp	73	3.09%	140	6.00%	67	91.78%					
Bath Twp	777	7.99%	1,095	11.65%	318	40.93%					
Jackson Twp	57	2.18%	122	4.46%	65	114.04%					
Marion Twp	51	1.84%	87	3.23%	36	70.59%					
Monroe Twp	38	2.23%	88	5.68%	50	131.58%					
Perry Twp	340	9.63%	455	13.45%	115	33.82%					
Richland Twp	50	2.56%	99	5.53%	49	98.00%					
Shawnee Twp	1,218	9.80%	1,627	13.03%	409	33.58%					
Spencer Twp	19	2.25%	59	6.79%	40	210.53%					
Sugar Creek Twp	32	2.49%	85	6.90%	53	165.63%					

Table 4-4 reveals the extent of racial diversity across the local political subdivisions of Allen County.

Ethnicity typically refers to a person's country of origin and their cultural ties. It should be understood that this demographic measure is distinctly different from one's racial stock. The Census indicates ethnicity in terms of Ancestry and Hispanic Origin.

The 2020 Census data suggests that the minority populations in Allen County have continued to grow. While the Black/African-American population experienced a slight decline of < 1 percent, the Hispanic population, which currently makes up 3.2 percent of the population in Allen County, and a saw steady growth with 23.2 percent growth between 2010 and 2020.

TABLE 4-5											
TOTAL MINORITY (RACE & ETHNICITY) POPULATION BY POLITICAL SUBDIVISION (2020)											
Political Subdivision	Black & African - American	Asian	American Indian	Other Races	Two or More Races	Hispanic or Latino Origin	Total	Percent			
Allen County	12475	835	233	583	5117	3272	22,515	22.03%			
Beaverdam	1	0	0	0	28	13	42	13.17%			
Bluffton	98	34	4	29	132	85	382	5.57%			
Cairo	3	3	1	0	31	14	52	10.06%			
Delphos	29	7	8	9	128	227	408	6.26%			
Elida	56	7	0	11	73	43	190	9.88%			
Harrod	4	1	0	0	16	8	29	6.86%			
Lafayette	5	0	0	0	7	12	24	5.91%			
Lima	9833	203	116	<mark>2</mark> 72	2606	1485	14,515	40.80%			
Spencerville	14	2	15	34	72	40	177	8.05%			
Amanda Twp	22	9	6	15	69	36	157	7.62%			
American Twp	1409	165	24	74	557	453	2,682	21.25%			
Auglaize Twp	9	3	1	3	84	40	140	6.00%			
Bath Twp	256	134	19	43	357	286	1095	11.65%			
Jackson Twp	8	3	1	6	76	28	122	4.49%			
Marion Twp	9	7	2	0	41	28	87	4.71%			
Monroe Twp	4	3	0	3	61	17	88	5.68%			
Perry Twp	187	2	5	17	176	68	455	13.45%			
Richland Twp	4	2	2	6	42	43	99	1.53%			
Shawnee Twp	512	245	27	56	479	308	1627	13.03%			
Spencer Twp	6	3	1	2	33	14	59	6.79%			
Sugar Creek Twp	6	2	1	3	49	24	85	6.90%			

Table 4-5 Breaks down those of Hispanic and Latino Origin by Race.

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 Allen County population aged 25 years or older educational attainment levels. This data shows that 6522 individuals or 9.43 percent of all individuals 25 years of age or older have not completed a high school education. This statistic compares favorably against national attainment levels where 11.5 percent of the population fails to earn high school diplomas. However, given that there are several very respectable post-secondary schools locally accessible, it is somewhat disappointing that only 12,902 adult residents, or 18.65 percent, have completed a 4-year and/or graduate degree program, especially when compared to State (28.9%) and National (32.9%) benchmarks.

TABLE 4-6 EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS & OVER (2020)								
Educational Attainment	White Po	opulation	Minority P	opulation	Total Po	pulation		
Educational Attainment	Number	Percent	Number	Percent	Number	Percent		
Less than High School Diploma	4,583	7.80%	1,939	18.65%	6,522	9.43%		
High School Graduate or GED	23,557	40.08%	3,562	34.26%	27,119	39.21%		
Some College or Associates								
Degree	19,115	32.53%	3,507	33.73%	22,622	32.71%		
Bachelor's Degree or Higher	11,513	19.59%	1,389	13.36%	12,902	18.65%		

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.

The median household income within Allen County has lagged behind that of Ohio and the United States since before the 2000 decennial census period. As a result, the income gap with the State has increased from -7.9 percent in 2010 to -10.7 percent in 2020 for median household incomes. Results are more drastic when compared to the United States; the deficit increased from -15.9 percent in 2010 to -20.2 percent in 2020.

Examining family median income, a similar pattern exists. Median family incomes across the County slipped over the last decennial period when comparing them to State and national trend lines. Median family income in Allen County is 81.07 percent of the median family income in 2020, a decrease of 7.1 percent compared to the 2010 level (88.2%). When comparing Allen County's median family income against the State, the data shows the gap continued to grow, adding 5.8 percent difference between the two.

In 2020, the median non-family income remained steady from 2010 at 86.6 percent of the State's median value and 76.8 percent of the entire nation. Per capita income for Allen County in 2020 jumped of 20.3 percent from 2010 figures. This compares with the State and national per capita increases, 22.6 and 22.8 percent respectively. national figures over the ten years. In 2020 Allen County's per capita income was 83.9 percent of that of the State and 76.9 percent of the national figure.

TABLE 4-7 COMPARATIVE INCOME MEASURES (2010-2020)								
Income Measure	Allen County Ohio US Allen Allen County PCT of OH PCT of U.S.							
2020								
Median Household	\$51,892	\$58,116	\$64,994	89.29%	79.84%			
Median Family	\$64,913	\$74,391	\$80,069	87.26%	81.07%			
Median Non-Family	\$29,974	\$34,626	\$39,027	86.57%	76.80%			
Per Capita	\$27,231	\$32,465	\$35,384	83.88%	76.96%			
2010			-	-	-			
Median Household	\$40,719	\$47,358	\$51,914	86.00%	78.40%			
Median Family	\$55,549	\$59,680	\$62,982	93.10%	88.20%			
Median Non-Family	\$23,701	\$27,366	\$31,305	86.60%	75.70%			
Per Capita	\$21,713	\$25,113	\$27,334	86.50%	79.40%			

4.3.7 Poverty Status: Persons & Families below Poverty Level

The 2020 ACS provides information on the number of individuals and families within Allen County whose incomes fall below the established poverty level. ACS 2020 5-year estimates revealed that 12,702 individuals, or 12.9 percent of all individuals, and 2,418 families or 9.5 percent 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 from poverty, 50.6 percent had children, and 19 percent had children under 5 years of age. For comparison purposes, data indicates that 36 percent of all households and 16.1 percent of all families within the State of Ohio were below the established poverty level.

An examination of income data from the 2020 census report reveals a positive trend in the proportion of individuals in poverty. 7,015 individuals rose from poverty status between 2010 and 2020 tabulations, representing a drop of 35.6 percent.

TABLE 4-8								
RATIO OF INCOME TO POVERTY LEVEL AMONG INDIVIDUALS (2020)								
Poverty Level Number Percent								
Below 50% of Poverty Level	5,846	5.9%						
50% to 99% of Poverty Level	6,856	7.0%						
100% to 149% of Poverty Level	9,481	9.6%						
150% to 199% of Poverty Level	10,202	10.3%						
200% of Poverty Level or More 66,207 67.2%								
C170	02 2020 ACS Allen County							

TABLE 4-9 POVERTY BY FAMILY STATUS (2020)							
Family Type Total Percent of Total Number in Poverty Percent of Type							
Married w/children	6685	26.13%	268	4.01%			
Male alone w/children	1384	5.41%	139	10.04%			
Female Alone w/children	4152	16.23%	1519	36.58%			
Family - No children	13359	52.22%	492	3.68%			
Total 25580 100.00% 2418 9.45%							
	ACS	2016-2020 B17010 Alle	en County				

4.3.8 Mobility Limited Population

Persons with disabilities face some of the greatest barriers to fair housing choice due to needed accessibility features and access to public transit, support services and/or affordability. Advocacy groups, through various Federal legislative initiatives, have established the civil rights of the disabled, especially regarding housing, employment, education, and transportation. Each of these Acts also utilizes different terms and definitions to address specific eligibility criteria and/or services. 2020 ACS 5-year estimates on the disabled population within Allen County have reported that 16,773 persons have a disability, representing 16.7 percent of all non-institutionalized persons. Map 2-5 depicts the disability rate by census tract. For purposes of this report, it is important to mention that of persons under the age of 5 years residing in Allen County, 60, or 1 percent have a disability.

Within the four primary conditions which define the disabled population, the Census further identifies persons whose disability restricted employment and those whose disability affected their ability to "go-outside-the-home" without assistance. The U.S. Census Bureau identifies those with a go-outside-the-home disability as "mobility-impaired". This mobility-impaired component of the larger disabled population is that group of individuals most likely need specialized paratransit consideration, as they would most likely not be able to drive, walk independently or utilize public fixed-route transportation services. ACS tabulations suggested that 7,891 persons were considered ambulatory-impaired or 7.9 percent of all non-institutionalized individuals. Among those non-institutionalized persons, identified as 65 or older, 3,629 were deemed mobility-impaired or 20.8 percent of the total elderly population.

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 2045 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 4-10 identifies the extent of the mobility limited populations by political subdivisions as documented in the 2020 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.

	DISABILITY STATUS OF RESIDENTS OF ALLEN COUNTY (2020)											
Political Subdivision	NI POP	# DIS	% DIS	Hearing	Vision	Cognitive	Ambulatory	Self- Care	Ind. Living			
Allen County	100,261	16,773	16.73%	4,504	3229	6,237	7,891	2,327	4,731			
Beaverdam	443	70	15.80%	6	31	31	24	2	4			
Bluffton	3,761	425	11.30%	100	51	105	243	47	147			
Cairo	684	91	13.30%	32	21	43	44	7	49			
Delphos	3,770	639	16.95%	217	188	177	460	114	204			
Elida	1,995	309	15.49%	109	24	95	150	50	55			
Harrod	402	59	14.68%	23	17	20	32	11	12			
Lafayette	387	66	17.05%	15	10	31	35	10	29			
Lima	34,987	6,835	19.54%	1,349	1,247	2,914	3,540	1,029	2,132			
Spencerville	2,149	483	22.48%	50	132	252	189	19	128			
Amanda Twp	1,797	191	10.63%	68	68	53	76	47	64			
American Twp	11,782	1,976	16.77%	705	365	647	805	261	704			
Auglaize Twp	2,259	398	17.62%	138	8	157	152	27	123			
Bath Twp	9,473	1,335	14.09%	540	313	474	351	153	201			
Jackson Twp	2,533	408	16.11%	161	160	119	137	21	91			
Marion Twp	2,955	435	14.72%	127	17	54	291	32	89			
Monroe Twp	1,707	163	9.55%	55	23	25	89	14	29			
Perry Twp	3,350	672	20.06%	136	58	290	351	127	142			
Richland Twp	1,759	160	9.10%	68	21	36	77	17	72			
Shawnee Twp	12,050	1,695	14.07%	491	367	643	717	315	399			
Spencer Twp	785	194	24.71%	24	87	28	71	17	38			
Sugar Creek	1,233	169	13.71%	90	21	43	57	7	19			

4.3.9 **Population Projections**

According to projections done by the Ohio Department of Development, Allen County is looking at a downward trend in population over the course of the next 30 years.

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.

Allen County P	opulation Projections 2020-2050
Year	Population
2020	102,206
2025	99,240
2030	96,098
2035	92,535
2040	88,791
2045	85,016
2050	81,503



4.4 Labor Force Profile & Trends

The total labor force in Allen County, reflecting those 16 years of age and over, numbered 81,851 persons according to the ACS 2020 5-year estimates; those not participating in the labor force reflected 31,300 or 38.2 percent of the total available labor force. As documented by the ACS 2020 5-year estimates, the civilian labor force in Allen County was 50,516, of which 47,687 (94.4%) were employed.

A perspective on the labor force can be gained by examining the number of employed persons by type of occupation. Table 4-12 uses ACS 2020 5-year estimates to identify the dominant occupations in the region: Educational services, health care, and social assistance (11,325), Manufacturing (10,259), followed Retail Trade (5,513). In Allen County, the employment-population ratio, the proportion of the population 16 years of age and over in the workforce, has ticked up over the last ten years from 57.0 percent in 2010 to 61.8 percent in 2020.

TABLE 4-12 LABOR FORCE BY OCCUPATION (2020)								
Industry NAICS Employees Percent								
Agriculture, forestry, fishing, and hunting	11	547	1.15%					
Construction	23	2472	5.19%					
Manufacturing	31-33	10,259	21.52%					
Wholesale trade	42	1237	2.60%					
Retail trade	<mark>44-</mark> 45	<mark>551</mark> 3	<u>11.00</u> %					
Transportation, warehousing, and utilities	22, 48- 49	2743	5.75%					
Information	51	645	1.35%					
Finance and insurance, real estate renting and leasing	52-53	1947	4.08%					
Professional, scientific, and management, and administrative and waste management services	54,55,56	3190	6.69%					
Educational services, and health care and social assistance	61-62	11,325	23.76%					
Arts, entertainment, and recreation	71-72	4132	8.67%					
Other services, except public administration	81	2076	8.67%					
Public Administration	92	1582	3.32%					
Total Labor Force	9	47,668	100%					

Over the past 10 years, unemployment rates reflect the impact of major employers relocating or instituting major cutbacks in response to market events or economic trends. The illustration below suggests that Allen County typically experiences higher unemployment rates than that experienced by the State of Ohio or the nation as a whole. After a significant and steady rise from 2012 to 2014, the County witnessed some relief. Unemployment in Allen County dropped below 2010 levels and began to show an equilibrium with those rates of Ohio and The United States through 2019. A significant impact on the unemployment levels came with the shutdown of businesses across the nation in 2020 due to the COVID-19 Pandemic. The full impact of the shutdown is still being determined but it continues to affect the unemployment rates even as we begin to see businesses open back up.



Table 4-13 establishes employment projections through 2045. 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 2045. Data suggest a continuing transition to the service sector along with a gradual increases in the presence of retail and construction services.

TABLE 4-13 2045 EMPLOYMENT BY SECTOR						
	2020	2030	2045			
Manufacturing	9,101	9,101	11,753			
Service	33,992	40,301	37,200			
Retail Trade	7,658	7,137	7,422			
Wholesale Trade	3,378	3,446	2,738			
Construction	2,543	2,647	2,381			
Finance, Insurance & Real Estate	2,122	2,213	1,855			
Transportation & Warehousing	2,012	2,067	2,930			

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 4-14 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 4-14 2020 LAND USE BY TYPE, ACRES & PARCEL										
Land Use TypeTotal AcresPercent of Total AreaTotal ParcelsPercent 										
Agricultural Uses	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 2020 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.										

Map 4-3



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 2020 data as baseline. Future land use activities were projected using linear regression techniques from historical established baseline data over the 2045 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 4-15 through 4-17 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 2045 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

TABLE 4-15 FUTURE LAND USE TREND FOR RESIDENTIAL						
Year	Square Footage	Acres				
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				
2045	60,024,442	42,289				
Change	10,461,154	9,141				
% Change	21.1%	27.6%				

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 10.5 million square feet or 21%. Based on established residential development patterns, residential land use within the model area will consume an additional 9,141 acres by 2045 if current trends continue. As there are currently 4,244 acres of vacant residential land, the future 2045 Land Use Plan will reflect 4,897 additional acres of primarily open space and farmland consumed in residential use, an increase of 28% 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 2045. Note the confidence level of the linear regression analysis.



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 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. 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.

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

TABLE 4-16 FUTURE LAND USE TREND FOR COMMERCIAL					
Year Square Acres					
2020	12,372,323	5,388			
2025	13,198,755	5,744			
2030	14,025,187	6,100			
2035	14,851,619	6,456			
2040	15,678,050	6,812			
2045	16,504,482	7,168			
Change	3,305,728	1,424			
% Change	33.4%	33%			

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 million square feet of development by 2045 will require an additional 1,424 acres of land (Table 4-18). 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 2045 period.





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, 2,151 acres support more than 2.9 million sq. ft. of industrial activities.

future employment Recognizing trends, but cognizant of the industrial base and the historical consumption of land for such uses, projections estimate the need for an additional 411 acres. That being said, 788 acres of industrial land is currently sitting vacant and idle. Although some acres of this acreage are currently engaged in open space and agriculture, its proximity to existing infrastructure and active manufacturing sites support this allocation of land.

TABLE 4-17 FUTURE LAND USE TREND FOR INDUSTRIAL					
Year Square Acres					
2020	3,291,160	2,151			
2025	3,456,542	2,233			
2030	3,621,924	2,316			
2035	3,787,305	2,398			
2040	3,952,687	2,480			
2045	4,118,068	2,562			
Change	826,908	411			
% Change	25.1%	1 <mark>9.1%</mark>			









4.6 Vehicle Registrations & Vehicle Miles of Travel

As presented in table 4-18, motor vehicle registrations in Allen County indicate a stagnant motor vehicle registration rate from 121,189 vehicles in 2018 to 121,110 vehicles in 2022. Consistent with the shutdowns of 2020 due to COVID-19 pandemic, there was a significant decrease in registrations in 2020. However, 2021 saw a jump in registrations following the lifting of COVID-19 protocols and allowing those to register that weren't able to the year before.

TABLE 4-18 MOTOR VEHICLE REGISTRATIONS ALLEN COUNTY 2018-2022							
Year Passenger Commercial Non- Cars Commercial							
2018	77,920	10,180	33,089	121,189			
2019	75,829	10,384	33,267	119,480			
2020	74,324	9,512	33,085	116,921			
2021	021 78,357 10,475 35,696						
2022	2022 76,358 10,204 34,548 <mark>121,1</mark> 1						
Source: Ohio Bureau of Motor Vehicle Registrations							
	* - Estimated						

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 4-19).

TABLE 4-19 TRAVEL SURVEY DATA (IN MILLIONS)								
Type 1977 1983 1990 1995 2001 2009 2017								
Household Vehicle Trips	108,826	126,911	191,682	229,745	233,040	233,849	220,430	102.55%
Household Vehicle Miles of Travel	907,603	1,002,519	1,700,087	2,068,433	2,274,797	2,245,112	2,105,882	132.03%
Person Trips	211,769	224,459	300,997	378,930	384,484	392,023	371,152	75.26%
Person Miles of Travel	1,879,215	1,947,481	2,792,451	3,411,451	3,783,775	3,732,791	3,970,287	111.27%

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 railroads¹³ 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/para transit 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.

¹¹An 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.

¹²The 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).

¹³The 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).

¹⁴The 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.

¹⁵Lima's electric trolley service began operation on July 4, 1887, less than three years after being introduced in Cleveland, O hio (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.

¹⁶The 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 Allen County 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 2021, total roadway system mileage within Allen County entailed 1,328.26 miles, of which 23.12 miles are classified as interstate mileage. Arterial roadways total 102.99 miles and account for 7.75% of total system mileage. Collector roadways total 299.59 miles and account for 22.56% of total system milage. Approximately two-thirds (67.91%) of the roadway system (902.01 miles) are classified as local in nature, and 59.42% of total system mileage classified as rural (789.23 miles). According to 2021 estimates of daily VMT, total system mileage exceeds 3.09 million miles per day in Allen County or 1.13 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

	TABLE 5-1								
ESTIMATES OF VMT BY FUNCTIONAL CLASSIFICATION									
	IN MPO PLANNING AREA								
Functional Classification		Total Centerline Miles 2021	2021 VMT in Millions of Miles per Year	kDVMT					
Rural									
1	Interstate	10.99	123.15	337.40					
2	Freeway	0.00	0.00	0.00					
3	Principal Arterial	21.65	93.22	255.40					
4	Minor Arterial	19.41	44.76	122.63					
5	Major Collector	127.56	96.82	265.25					
6	Minor Collector	56.65	25.23	69.13					
7	Local	552.97	81.61	223.58					
Total Rural		789.23	464.79	1273.39					
Urban									
1	Interstate	12.13	163.04	446.69					
2	Freeway	0.00	0.00	0					
3	Principal Arterial	31.65	116.46	319.07					
4	Minor Arterial	30.28	95.84	262.57					
5	Major Collector	84.36	149.35	409.18					
6	Minor Collector	31.58	27.25	74.65					
7	Local	349.04	109.81	300.84					
	Total Urban	539.03	661.745	1813.00					

MAP 5-1





Map 5-2

MAP 5-3





FIGURE 5-2: ESTIMATED ANNUAL VMT WITHIN URBAN AREAS













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 2002 through 2022 inclusive. Total motor vehicle crashes for the period numbered 73,637 while fatal accidents numbered 240. Examining the setting of crashes during the five-year period of 2018-2022, the Allen County Urbanized Area accounted for nearly three quarters (74.7%) of all crashes. During that same 5-year time period, Allen County experienced a 43.47% fall in crashes that resulted in serious injury, and an analysis of the 10-year period suggests an almost completely static in total crash rate.

TABLE 5-2 ACCIDENT SUMMARY IN ALLEN COUNTY								
			2	2002-202	2			
			njury Crasł	า	Non Inju	iry Crash		
Year	Fatal	Incap.	Visable	Claimed	PDO	Private Property ²	All Crashes	EDPO Index
2002	19	95	444	554	3119	106	4337	3.1
2003	14	109	501	534	3256	132	4546	2.93
2004	9	67	428	550	3225	104	4383	2.73
2005	15	90	383	502	3039	94	4123	2.91
2006	15	93	374	436	2796	23	3737	3.01
2007	13	107	341	4 44	2776	66	3747	2.91
2008	9	93	387	424	2755	86	3754	2.79
2009	12	89	341	455	2526	57	3480	3.01
2010	4	109	317	442	2682	48	3602	2.64
2011	12	83	310	372	2398	61	3236	2.99
2012	7	101	282	414	2310	0	3114	3.24
2013	7	114	253	429	2267	0	3070	3.4
2014	9	83	242	425	2326	0	3085	3.01
2015	8	160	278	463	2633	0	3542	3.64
2016	12	134	275	397	2453	0	3271	3.53
2017	11	104	282	360	2415	0	3172	3.22
2018	9	115	234	406	2327	0	3091	3.35
2019	7	70	373	345	2483	0	3278	2.85
2020	10	62	408	330	2086	0	2896	3.08
2021	23	71	403	341	2282	0	3120	3.19
2022	15	65	336	338	2299	0	3053	2.95
20 Yr Avg	11	96	342	427	2593	37	3507	3.07

Notes: ¹Injury severity reflects the most severe injury sustained within a crash event.








5.1.2 Public Transportation

Allen County is serviced by both intracity and intercity bus service. A full range of charter and taxi services, as well as, paratransit service providers are also available within the community. Bus services are provided by the Allen County Regional Transit Authority (ACRTA), FlixBus(formerly Greyhound) and Barons Bus Lines. 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.

There are several not-for-profit, levy-funded, social service agencies who also provide transportation services within Allen County, including the Allen County Council on Aging, Delphos Senior Citizens, and Marimor Industries. These operators are eligible to receive federal financial assistance to help purchase the necessary rolling stock to offer paratransit services to specific targeted clientele, including the elderly and the disabled.

5.1.2.1 Allen County Regional Transit Authority (ACRTA)

The CY 2022 ACRTA public transportation service population is calculated at 106,331 persons. The ACRTA's service area is 407 square miles. To advance public transportation options across the service area the ACRTA provides fixed route public transit service, paratransit services and demand response services. Fixed route service provides the bulk of public transportation within the Allen County service area. The ACRTA also provides demand response ADA complementary paratransit service, referred to as UPLIFT, and Micro-Transit (began in October 2022) to facilitate the travel needs of the transportationally disadvantaged.

As depicted in Map 5-4 the fixed route radial route network provides reasonable route coverage to residents within the Allen County area with 52.9 percent of the resident population as determined by residency within .25 mile of a fixed route. Uplift paratransit operations provide travel options to approximately 76.5 percent of the population within the Allen County Area using a $\frac{3}{4}$ mile buffer around the fixed routes. Demand response services are available for all within Allen County.

In CY 2022 operational services were provided between the hours of 5:20 a.m. and 10:20 p.m. Monday thru Friday depending on the route and Saturday from 7:50 am to 5:20 pm. No services are provided on Sunday or six (6) major holidays. The ACRTA presently serves ten (10) fixed routes utilizing eight (8) buses at peak travel time and ten (10) vans for demand response also at peak travel time. All fixed route and demand response transit vehicles are served with kneeling capabilities to lower entry/exit steps and utilize ramps or are lift-equipped to meet the travel needs of the mobility-limited citizens in the ACRTA's demand response service.

The fixed route network provides services along most major traffic corridors, targeting retail service centers, institutional facilities (including educational and medical facilities), major manufacturers and other attractive travel generators. All fixed route service emanates from the centralized transfer facility which is located om the City of Lima's Central Business District (CBD).

ACRTA's ADA mandated complimentary paratransit service is provided to mobility impaired residents of Allen County. UPLIFT Program services are available within a ³/₄ mile corridor of the fixed routes and contract agreements with schools of qualifying individuals. The UPLIFT Program service is made available to qualified individuals on the same days and during the same hours as fixed route services. Trip requests for ADA complimentary paratransit services may be scheduled through an answering machine during non-office hours.

ACRTA's microtransit service is a form of demand responsive transport. This transit service offers a highly flexible routing and/or highly flexible scheduling of minibus vehicles shared with other passengers. Microtransit can be summarized as simply "dynamic routing" that can support demand-responsive transport (DRT) or feeder services, which enables a vehicle to create temporary pick-up locations anywhere within a service zone and connect passengers to a central hub. There are 13 zones across Allen County and passenger fares are reflective of the distances traversed. Microtransit service is provided to members of the general public, multiple schools (through contracts), Jobs & Family Services, Find-A-Ride, Allen County Veterans Services, etc. The cost of the service varies depending on zones and contract agreements. Trip requests may be scheduled through the office or through an answering machine during non-office hours.

The number of days of operational service in CY 2022 totaled 305. Total system ridership in CY 2022 reflected 213,000 transports supported by 717,360 miles of services over roughly 39,040 hours. Micro transit services provided 21,890 passenger trips while complimentary paratransit delivered 6,280 passenger trips.

Prefaced in part on federal transportation mandates, the ACRTA has installed Mobile Data Transmission (MDT) units and Ecolane Software to enhance the scheduling and dispatching of passenger trips and support greater efficiency as well as further local coordination efforts with not-for-profit social service agencies. 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 its transfer facility and administrative offices located within the Lima CBD at 218 and 220 E. High St. respectively, and a maintenance facility at 240 N. Central Avenue. Coupled with the acquisition of new transit vehicles, as well as, its increased collaboration with private (both public and not-for-profit) social service agencies and transportation providers the Transit Authority has changed the face of public transportation options. The ACRTA has maintained its rolling stock, expanded its demand response service area and attempted to balance its financial and planning capacities with limited local government funding. Further, the ACRTA has committed to an ongoing strategic planning process; one in which safety, asset management, route productivity and levels of service are being analyzed with findings implemented as warranted.

The ACRTA has implemented an on-going review of its public transportation services. Various analyses have been conducted targeting modal choice, as well as 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;^[9] (2) determined the extent of ADA accessibility of all routes on the fixed routes system;^[10] (3) assessed the availability of service by geographic area and temporal restraints;^[11] (4) reviewed on-time performance measures;^[12] (5) addressed systems operations and management performance;^[13] and, (6) increased coordination.^{[14],[15]}

The CY 2022 budget reflects funding for the Transit Authority is predicated largely upon Federal and State funding (43.93%) and a local sales tax (38.45%) and reflect the bulk of the ACRTA's operating budget. Local fares for services rendered reflect 10.27 percent and advertising, concessions, recoveries and "other" reflect another 7.35 percent of income. Expenditures over the CY 2022 period were less than income received and most effected by labor and fringe benefits which reflected 50 percent of overall costs. Contract services including those for facility maintenance, vehicle maintenance, technology services and EcoLane software maintenance (9.60%), coupled with materials and supplies (fuel, oil, vehicle parts, etc.(12.83%)) reflect another fifth of the budget. Other expenses largely reflect depreciation costs and another fifth (19.2%) of the budget.

Any new route plans or services to be implemented necessarily take into consideration the needs of the transportationally disadvantaged. The Transit Authority has positioned itself to better serve the community by identifying services for an expanded clientele by examining and servicing additional generators with new levels of service. The ACRTA has acknowledged the needs and the diversity of the community and has committed to working with other social service agencies and has committed to meet an expanded role.

^[9]The ACRTA, in conjunction with the MPO, released several documents addressing the Allen County population's demand for public transportation services including: "The LACRTA ADA Paratransit Plan," as amended; and, "Transportation for Special-Needs Populations, 2005; and, the Allen County Public Transit – Human Services Transportation Coordination Plan, amended 2012 thru 2017.

²⁰¹² thru 2017. ^[10]The LACRTA, in conjunction with the MPO, released a report entitled "Accessibility Characteristics of the ACRTA Fixed Route System," 1992. This report provides an update on accessibility with respect to sidewalks and curb cuts in Section 5.1.5.

^[11]The ACRTA, in conjunction with the MPO, released several reports reviewing the service area of both: LACRTA 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 in 2005; and, the Allen County Public Transit – Human Services Transportation coordination Plan, 2008 as amended thru 2017.

^[12]The ACRTA, in conjunction with the MPO, annually review 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 2011-2015 ACRTA Transit Development Plan).

^[13]The ACRTA annually develops a Transit Development Plan to identify capital and operating characteristics of the existing system's services, as well as, to justify requests for continued capital and operational assistance. The document provides baseline information from which existing or proposed services can be assessed. The document is referenced for purposes of inclusion and incorporation herein. The ACRTA undertook an ODOT sponsored Public Transit Index in 2005 and uses the PTI in annual assessments.

^[14] 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 2017. The AAA3 assumed the lead agency role in mobility management in January of 2018.

^[15] In 2017, the MPO completed a comprehensive operations analysis of ACRTA to examine and evaluate the transit system and determine where improvements could be made to increase operational efficiencies and effectiveness.





	TABLE 5-3	·										
		STATISTICS										
ACRIA FIXED												
JANUARY-DECEMBER 2022												
Route Ridership Miles per Day Hours per D												
West Market	18368	98	7									
Eastgate/OSU	27254	156	13									
Lima Mall	24953	168	12									
North Main	17265	98	7									
South Main	41545	168	14									
West North	26678	168	12									
Northeast/Marimor	9514	220	11									
South Shawnee/Apollo	7219	299	13									
Bluffton	1247	190	5									
Delphos	1506	186	6									
Total	175549	1751	100									
Special Services	9281	N/A	N/A									
Paratransit	6280	101	14									
Demand Response/Micro Transit	21890	500	14									
Total	213000	2352	128									

	Table 5-4	1									
2022 ACRTA Budget											
2022 Incom	ie 🛛 🚽	2022 Exp	penses								
Passenger Paid Fares	\$ 142,401	Labor & Fringes	\$ 2,250,376								
Organization Paid Fares	\$ 397,779	Services	\$ 431,531								
Advertising/Concessions	\$ 143,760	Materials &	\$ 576,815								
		Supplies									
Sales Tax	\$ 2,022,940	Utilities	\$49,868								
State Funding	\$209,055	Casualty &	\$ 131,597								
		Liability									
Federal Funding	\$ 2,101,811	Taxes	\$ 17,287								
Recoveries	\$ 125,676	Misc. Expenses	\$ 165,152								
Other Revenues	\$ 117,304	Other Expenses	\$ 871,146								
Total:	\$5,260,726.00	Total:	\$4,493,772.00								

5.1.2.2 Intercity Bus Services

Intercity bus services are provided to the community by FlixBus (formerly Greyhound) and Baron's Bus Lines. Both FlixBus and Baron's share terminal activities and space within the ACRTA Transfer Center located at 218 E. High Street. Buses are equipped with air conditioning, an on-board restroom, reclining seats with headrests, footrests, tinted windows and Wi-Fi. Most major cities in the United States can be reached intercity by connection via FLIX or Baron's. FlixBus generally provides services on north/south routes while Baron's provides east/west services. Four scheduled intercity buses arrive and depart on a daily basis from the ACRTA terminal. Hours of departure for FlixBus are 7:25 am and 9:45 am and Baron's departs at 1:00 pm and 4:55 pm.

5.1.2.3 GoBus

GoBus is a federally subsidized Rural Intercity Bus Program designed to address the intercity bus transportation needs of the entire state of Ohio 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. In January 2023, GoBus operations were assumed by Baron's Bus Lines

5.1.2.4 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 I-75.

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, regional and Class 1 railroads; therefore, a hub of railroad operations and a crossroads where large volumes of rail traffic intersect. The rail system is complicated by history, with mergers and acquisitions, deregulation and abandonment. Compounded by direct ownership of lines, secured trackage rights and short line rail operations sometimes providing local governments with a complicated arrangement of mixed responsibilities.

Lima and Allen County rail infrastructure supports the operations of two Class I railroads, two regional railroads¹⁷ and a short line railroad.¹⁸ The Class I rail carriers include the CSX (17.3 miles) and Norfolk Southern ((NS)(25.2 miles)) railroads. The area is also serviced by the Indiana & Ohio ((I&O)(10.9 miles)), Chicago-Fort Wayne & Eastern ((CF&E)(29.9 miles)) and SPEG (15.8 miles)¹⁹ Map 5-5 depicts the rail system traversing the County. Collectively, these railroads are able to provide access to regional, national and international markets.

These rail lines, built upon 175 individual Allen County parcels consume 1,265 acres to support local and thru rail movements. Several of the rail lines utilize rail yards to store rail cars, maintain locomotives and rail cars, stage/reform trains, house supplies, equipment and vehicles, switch out train crews, and provide limited office space. There are several such rail yards in the community including: the CSX Lima Yard located north of Robb Avenue; the NS Lima Yard located east of Metcalf Street; the CF&E Cole Street Yard; and, the I&O Lima Yard and the Ford Yard located off Sugar Street north of Robb Avenue. Map 5-5 provides a visual reference of area railroads. Map 5-6 depicts rail infrastructure in the Lima urbanized area.

 $^{^{17}}$ The Genesee & Wyoming Railroad – a regional railroad conglomerate owns the Indiana & Ohio Railroad and the CF&E Railroad. The Wheeling & Lake Erie, a regional railroad, operates on secured trackage rights of the I&O RR – 2 trains per month. Due to the nominal impacts of the W&LE it has been excluded from the discussion herein.

¹⁸The acquisition of Conrail by CSX and NS has eliminated the services of a third Class I railroad in 1997 and increased smaller regional and short line rail traffic.

¹⁹ Mileage is calculated based on mainline track di

The CSX mainline provides the majority of rail service in Allen County. On average CSX operates 19.7 trains per day averaging 96 cars in length. thru the community. Two trains operate daily between Lima and Cincinnati daily. The north-south alignment serves Toledo and Cincinnati before moving elsewhere. The CSX is served by 9 miles of double track which allows trains to flow in opposite directions or pass a lower priority train. The CSX operates its Lima Yard in north Lima. The rail yard is located on a 42-acre site equipped with a rail siding and spur tracks to accommodate an estimated 1,000 rail cars.

The NS mainline operates on roughly a quarter of the track in Allen County. The line's orientation runs southwest-northeast. Two trains leave the NS yard per day each averaging 25 cars to serve Fostoria northeast of Lima. R. J. Corman operates on 7.2 miles of the NS line to serve customers to the southwest of Lima using 2 trains of 25 cars per day to provide service to Ft Recovery, Celina, St Mary's and Buckland. The NS Lima Yard in located in south Lima east of Metcalf Street. The NS Lima Yard is located on 33 acres where spur lines are able to support staging and rail car storage estimated at 400 cars.

The CF&E is part of the Genessee & Wyoming family of railroads. The CF&E provides interchanges with the CSX and NS and operates an estimated 4 trains per day thru the community. Its 29.9 miles of rail follows a general east/west orientation with services to Van Wert and Ft Wayne to the west and P&G to the east. The CF&E operates its Lima Cole Street rail yard located on 18 acres in northwest Lima using spur tracks for staging and rail storage estimated at 225 cars.

The I&O operates on less than 11 miles of track in Allen County where the line's orientation runs north/south. The I&O provides for ready transloading at its 2 rail yards in North Lima (and Nelson Packaging) and interchanges with the CSX, NS and the W&LE to serve other destination. The I&O uses trackage rights on the CSX to service Leipsic to the north and southern interests in Jackson Center, Quincy, and Springfield. The I&O operates 2 to 3 trains daily averaging 30 cars. Its Lima Yard (43 acres) and its Ford Motor Yard (48 acres) provide ample space for queuing, storing of railcars (estimated at 400 cars) and transloading operations.

The Allen County portion of the former Spencerville-Elgin Railroad (SPEG) is owned by the Allen County Port Authority (ACPA) and operated by the R.J. Corman Railroad. The ACPA owns roughly 15.8 miles of track from the County line east to the City of Lima. R.J. Corman operates between Elgin and Lima. The SPEG line serves 2 trains per week on average. No rail yard exists in Allen County.

Map 5-5 Railroads



Map 5-6



Table 5-5 RR Crossings in Allen County											
	State						Existing Warning				
DOT #	Rank #	Risk Factor	RR	ADT	Legal Authority	Street/Road Name	System				
155676M	23	0.11868	CSX	7642	CITY OF LIMA	EAST KIBBY STREET	Lights and Gates				
532710G	93	0.07592	CFE	8774	CITY OF LIMA	NORTH MAIN STREET	Lights and Gates				
155665A	114	0.06989	CSX	5269	CITY OF LIMA	WEST FOURTH STREET	Lights and Gates				
155662E	117	0.06965	CSX	4732	SHAWNEE TWP	BUCKEYE RD	Lights and Gates				
155691P	140	0.06366	CSX	1329	CITY OF LIMA	E FLANDERS AVE	Lights and Gates				
155680C	198	0.05134	CSX	417	CITY OF LIMA	E HIGH ST	Lights and Gates				
532686H	235	0.04436	CFE	123	JACKSON TWP	PEVEE ROAD	Lights and Gates				
532720M	304	0.03905	CFE	24177	CITY OF LIMA	NORTH CABLE ROAD	Lights and Gates				
532718L	330	0.03747	CFE	2332	CITY OF LIMA	CENTER STREET	Flashing Lights				
155679H	390	0.03472	CSX	5252	CITY OF LIMA	E MARKET ST	Lights and Gates				
						NORTH EASTOWN					
532722B	536	0.02969	CFE	6472	ALLEN COUNTY	ROAD	Lights and Gates				
155661X	684	0.02668	CSX	10671	SHAWNEE TWP	BREESE RD	Lights and Gates				
532695G	689	0.02661	CFE	1102	JACKSON TWP	RUMBAUGH ROAD	Lights and Gates				
155675F	712	0.02611	CSX	3568	CITY OF LIMA	SAINT JOHNS AVE	Lights and Gates				
532712V	749	0.02532	CFE	2976	CITY OF LIMA	NORTH WEST STREET	Flashing Lights				
155690H	760	0.02519	CSX	2193	CITY OF LIMA	MCKIBBEN ST	Lights and Gates				
258603N	762	0.02516	IORY	7581	CITY OF LIMA	FINDLAY STREET	Lights and Gates				
258611F	822	0.0244	IORY	13967	CITY OF LIMA	BELLEFONTAINE AVE	Lights and Gates				
155668V	872	0.02382	CSX	4193	CITY OF LIMA	S MAIN ST	Lights and Gates				
532707Y	986	0.02247	CFE	7330	CITY OF LIMA	NORTH JACKSON STREET	Lights and Gates				

Studies have supported specific recommendations to improve rail-based industrial development and rail/highway transportation conflicts including: (1) undertaking a comprehensive crossing closure program to improve safety; (2) improving communications between local officials, ORDC and the railroads aimed at minimizing blocked crossings in the City of Lima and Allen County; and, (3) identifying local sites able to support industrial development with rail service. 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 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 the Sugar Street Interlock Project (PID 103648/\$1.7M) which has been given the green light to construct. The Elm St underpass has been constructed since the last plan update 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, (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 Northern Indiana Passenger Rail Association (NIPRA) 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.^{18,19}

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.

¹⁸ A report entitled "Northern Indiana/Ohio Passenger Rail Corridor Feasibility Study and Business Plan" prepared by Transportation <u>Economics & Management Systems, Inc, D</u>ecember 2012.

¹⁹ 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).

5.1.4 Roadway Freight System

Although the reasons are varied, pandemic on-line shopping, disruptions in supply chains, 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 and suppliers have become increasingly international. They have developed a global system of production and distribution based on component costs and access to both resources and markets. As a result, freight consists of an ever-increasing number of partial product assemblies being transported between an increasing number of points.

Supply chain disruptions and 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 as well as local transportation officials. The pandemic accelerated a move toward e-commerce that had been under way for the past several years. All those purchases emptied out retail inventories, prompting a surge of new orders to manufacturers, which themselves had to order new parts and machinery to meet that demand. Getting those goods to homes and factories requires a constellation of warehouses and trucks moving between them. Operating with the "warehouse on wheels" concept has dramatically

increased the number of trucks on area 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 costeffective 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 varies 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 is provided in Table 5-6. In 2022 indicated that, I-75 supported the largest volume of truck VMT in Allen County at 410,938 miles per year, with US 30 (139,975 miles) and the State Routes (70,482 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 5-6 DAILY VEHICLE MILES TRAVELED (VMT) ON STATE ROADS IN MPO PLANNING AREA								
Road Type Total (Daily) VMT Truck (Daily) VMT %Trucks %Truck VMT								
Interstate	1,321,285	410,938	30.5%	66.1%				
US Routes	351,309	139,975	38.2%	22.5%				
State Routes	1,228,759	70,482	5.7%	11.3%				
Total	2,901,353	621,394	29.1%	100.0%				

Map 5-7 shows the percentage and volume of annual average daily truck miles traveled on the major roadways in Allen County for the year 2022 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 I-75 recorded higher than average percent truck volumes of 38.2% and 30.5% respectively, of all vehicle miles traveled among all major roadways in Allen County. In comparison, the state average percent truck volume for both the Interstate and U.S. route systems were 15.45% and 9.20% respectively. The State route system in Allen County is 5.70%, slightly above the state average of 5.20% of all vehicle traffic in 2022.

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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 Allen County Urbanized Area sidewalks cover 202.70 miles 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.



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 2018-2022 pedestrian traffic incidents, the City of Lima has a significantly higher number of pedestrian and bicycle crashes among similar-sized municipalities (population 30,000-40,000).;148 incidences as compared to the second highest, Marion with 98. 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 5-7										
EXISTING & PROPOSED PEDESTRIAN/BICYCLE FACILITIES										
Route Type Present Miles Proposed Miles Total Miles										
Bike Lane	2.62	14.18	16.8							
Bike Route	12.15	111.2	123.35							
Shared Use Path	22.68	39.9	62.58							
Unpaved Path	40.95	0.3	41.25							
United States Bike Route	45.1	0	45.1							
Johnny Appleseed Park Trails	13.51	0	13.51							
Totals	137.01	165.58	302.59							

5.1.6 Aviation System

The Allen County Regional Airport Authority is responsible for maintaining the Lima-Allen County Regional Airport (KAOH) that is located at 700 Airport Road in Lima, Ohio. Located roughly 4.5 miles southeast of the City of Lima the Airport serves Allen County and the surrounding area. The Airport is located on a 722.5-acre tract in Perry Township. The Airport Terminal building takes access off Hanthorn Road which forms its southem boundary. 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, as well as navigational and communication equipment. Aviation related land side facilities include the terminal building with the fixed base operator (FBO) and maintenance buildings, aircraft hangars and automobile usage areas.

The Airport has one 6,000-foot long by 150-foot-wide, grooved runway (Runway 10-28) and associated parallel taxiway with connecting taxiways, navigational aids, and edge lighting. The runway is asphaltic concrete and rated to serve aircraft weighing 60,000 lbs. dual wheel. The runway is serviced by high intensity runway lighting. The runway is also served by a Category I Instrument Landing System (ILS) approach. The Allen County Airport is located just under Class E Airspace. Runway 10-28 is served by a full-length parallel taxiway with 6 connectors.

There are 12 buildings on the Airport including: hangars, maintenance garage, Airport terminal and private commercial entities. The Airport has 36 based aircraft, of which 29 are single engine, 6 are multiengine, and 1 is a jet. The Airport averages 89 operations per day and approximately 32,500 operations per year. Approximately 80% are general aviation, 18% are air taxi operations, and 2% are military. The airport has corporate charters, freight, ambulance flights, and occasional Department of Defense flights. Air freight services have worked to support local industries including Ford, Dana and General Dynamics.

The terminal building, approximately 4,600 sq. ft., offers a modern conference room, private offices, public restrooms, lounge spaces, a weather and flight planning station and a stocked kitchen. The FBO located in the Terminal building offers full-service air and ground services. The FBO has worked hard to support and serve varied needs and interests including: line services, maintenance, pilot instruction, aerial photography services, crop dusting, aircraft rental/sales, and private jet charters. Also located in the terminal building is On Centerline Aviation services which support aircraft acquisitions, sales and appraisals. The Airport offers flight instruction to Lima/Allen County and the surrounding area. Airport staff are NATA certified. Flight instructors are CFII certified. The

Airport Terminal is open between 8 a.m. and 5 p.m. Monday thru Friday with services available between 9 a.m. and 4 p.m. on Saturdays. The terminal is open on Sundays between the hours of 1 p.m. and 5 p.m. Pilots have 24-hour terminal access privileges. The Airport maintenance facility located adjacent to the runway apron houses Achievement Aviation a firm that specializes in Aircraft Maintenance and Avionics. The service provider is a Part 145 FAA Certified Repair Station.^[1]

Recent improvements at KAOH reflect a recently completed runway and taxiway lighting project that included the demolition and installation of airfield lighting equipment including upgraded edge lighting, new taxiway edge lighting, new LED PAPI lights, a lighted windsock and a new electrical vault (\$1.3 M); an apron closure project which reflected a 2" mill & fill of apron area; replacement of sliding hangar doors with new hydraulic tilt back doors; and, a terminal remodel that included new landscaping, side walk replacements, and Wi-Fi upgrades at the terminal building.

5.2 Current Issues: Constraints

Based on a review of the previous data files, several issues warrant local attention: (1) 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 roadways and bridges, and increasing the response time of police, fire and emergency medical services; (4) employment throughout many sectors has declined since the 1980's, between 2020 and 2045 growth rates remain steady and even increase within the manufacturing and service sectors which will help to diversify the local economy; (5) local service and retail centers continue to attract patrons from adjacent counties; (6) the volume of traffic on area roadways has risen 0.4%, 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. The following narratives are provided to better indicate specific issues pertinent to the community's transportation system.

^[1] https://www.airnav.com/airport/KAOH

Insert Map 5-8 Bike Ped



5.2.1 Roadway Component Constraints

Various corridors were identified during the preparation of the 2045 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 drive way 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.

TABLE 5-8 DEFICIENT LOS BY FUNCTIONAL CLASS - 2045									
Functional Class	LOS D Miles	LOS E Miles	LOS F Miles	Total Miles					
Principal Arterial-Interstate	11	8.6	5.5	25.1					
Principal Arterial-Other	1.3	1.3	2.7	5.3					
Minor Arterial	7.4	0	1.8	9.2					
Major Collector	11.3	19.1	4.9	35.3					
Minor Collector	3.5	4.3	1.3	9.1					
Total	34.5	33.3	16.2	84					

Based on the various corridor studies conducted on the federal functional classification system completed to date, there are currently some 84 miles of 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 34.5 miles were identified as LOS D, 33.3 miles were identified as LOS E and 16.2 miles were at LOS F.

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 414 bridges and culverts located within Allen County. Of those bridges and culverts, as illustrated in Table 5-10, 256 (61.84%) are in Good Condition, 146 (35.27%) are in Fair Condition, and 12 (2.90%) are in Poor Condition. Excluding culverts, there are 104 bridges maintained by ODOT, 354 Allen County, 8by the City of Lima, 7 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 \$4.7 million. Over a third (37.4%) of the bridges and culverts are located on higher order roadways while almost 10% 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 delivered 213,000 people in 2022 to area businesses and service centers; and, affords entrepreneurs, service providers and their customers the ability to more fully participate in the community and its economic pursuits. Examining data from 2022 regarding FTAs mandated Transit Asset Management performance measures:^{[8],[9]} the ACRTA met all benchmarks for facilities, but failed to adequately address measures dealing with: the age of mobile lift equipment and generators; and the age of vans beyond their useful life. Near term the Transit Authority has ordered new replacement vehicles to serve the fixed routes and demand response services. It has also worked to secure federal/state funding for renovations at its maintenance facility necessary to ensure the condition and safety of all its vehicles.

Looking forward, the ability to maintain appropriate accessible transportation options to an increasingly larger, aging population will be a challenge if land use and transit options are not coordinated before development/redevelopment occurs. The ability to provide sidewalks needed to access the fixed-route system especially in the suburban and rural areas of Allen County will place more pressure on the demand response services and result in higher costs per transit trip. Shelters along the fixed route system to provide the necessary shelter for transit patrons will also be required. The Transit Authority, MPO, and the City of Lima are working together to collectively ensure that fixed stop locations are accessible and provide adequate mobility using CMAQ funding over the 2024-2027 period. The coordination of sidewalks and shelters at appropriate stops along fixed route system during the development/redevelopment of the community is necessary to minimize future costs from being incurred by the Transit Authority.

^{[8] &}lt;u>https://www.ecfr.gov/current/title-49/subtitle-B/chapter-VI/part-625</u>

^[9] https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title49-

section5329&num=0&edition=prelim#:~:text=%C2%A75329.%20Public%20transportation%20safety%20program%20%28a%29%2 0Definition.-In%20this.this%20chapter.%20%28b%29%20National%20Public%20Transportation%20Safety%20Plan.-





TABLE 5-9 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)	0	-	-	-	-	-	-					
Minor Arterial (FC4)	7	3	42.86%	4	57.14%	0	0.00%					
Major Collector (FC5)	61	32	52.46%	26	42.62%	3	4.92%					
Minor Collector (FC6)	30	19	63.33%	11	36.66%	0	0.00%					
Local (FC7)	259	157	60.62%	93	35.91%	9	3.47%					
Total	414	256	61.84%	146	35.27%	12	<mark>2.90 %</mark>					

TABLE 5-10 BRIDGES (LESS CULVERTS) IN POOR CONDITION												
Road Name	Bridge No.	Location	Restriction	Year Built		Sufficiency Rating	Deck Area	Cost Estimate				
LANDECK RD	150,000	0.19 MI E OF SCHARF RD		7/1/1934		55.7	560	792,400				
ACADIA RD	750,000	0.57 N OF BLOOMLOCK RD	SHV 80%	7/1/1954		46	1206	228,000				
BREESE RD	98,000	0.93 MI W OF SHAWNEE RD		7/1/1967		76.4	2347	225,600				
BLUF - MAIN ST	1,788,000	0.47 MI SW COUNTY LINE		7/1/1925		65	3876	258,400				
BLUF - MAIN ST	850,000	0.46MI SW CO @ AC&Y RR		7/1/1927	1932	66.5	1550	189,600				
HOCH RD	200,000	0.51 MI E OF BECKER RD		7/1/1976		73	312	202,400				
BERRY RD	550,000	0.36 MI W OF COLE ST	EV 50%	7/1/1968		85	1367	189,600				
KERR RD	150,000	0.73 MI N OF AMHERST RD		7/1/1931		66	431	159,200				
SPNCRVLE - 1ST ST	200,000	0.04 MI E OF MULBERRY RD		7/1/1962		72.9	258	159,200				
							Total	\$ <mark>4,736,00</mark>				

* New **SHV** (Special Haul Vehicle) posted load limits include legal weights for the following loads: 15 Ton 2 Axles / 23 Ton 3 Axles / 27 Ton 4 Axles / 31 Ton 5 Axles / 35 Ton 6+ Axles / 40 Ton Tractor Trailer

** New **EV** (Emergency Vehicle) posted load limits include legal weights for the following loads:

15 Ton 2 Axles / 23 Tons 3 Axles

5.2.4 Railroad Component Constraints

Rail is an essential component of the community's transportation system. And 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. Roadway/rail crossings blocked for extended periods of time and low clearance underpasses remain problems for economic development and highway safety. At-grade rail crossing safety and accessibility issues may thwart future development if present site issues cannot be resolved. From a community development perspective, the elimination of blocked crossings, upgrading the functionally obsolete underpasses and nominal grade crossing improvement projects are necessary to adequately address local concerns.

Studies have supported specific recommendations to improve rail-based industrial development and rail/highway transportation conflicts²² including: (1) undertaking a comprehensive crossing closure program to improve safety; (2) improving communications between local officials, ORDC, ODOT and the railroads aimed at minimizing blocked crossings especially on the CF&E near the University of Northwestem Ohio in the City of Lima and American Township; and, (3) identifying local sites able to support industrial development with rail service.

Of considerable importance, several underpasses within Allen County are functionally obsolete providing thru movements with limited horizontal and vertical sight distance, significant height restrictions, and ongoing safety/maintenance concerns. These concerns were recognized in the ORDC's 2019 State of the Ohio Rail Plan.²³ Two of these underpasses are classified major collector roadways; one of which, Bluelick Road, is a critical link between IR 75 and SR 65, and SR 115 and US 30.

At-grade rail crossing safety is always a concern for local governments. There are currently 132 public at-grade rail crossings located in Allen County on 99.02 miles of mainline track. A review of crash reports from 2013 thru 2022 made available by ODOT identified 7 at-grade train-motor vehicle crashes. Crashes occurred in urban and rural settings. There was no apparent relationship based on: month of year, day of week, light conditions, or weather conditions. Six of the 7 crashes occurred at crossings protected by lights and gates. Two of the 7 crashes occurred at the same location 3-years apart, and that particular crossing is served with lights and gates. No injuries were reported in any of the crashes.

 ²² 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.
²³ https://www.rail.ohio.gov/static/Documents/State+of+Ohio+Rail+Plan+Final.pdf



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. Old er 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 study²⁴ 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 2045 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, of the almost 1400 miles or roadway within Allen County sidewalks are only available approximately 15% of the time (202.70 miles worth), with some of the largest gaps extending into areas with high pedestrian interest. Other pedestrian infrastructure (trails, bike lanes, parks, etc....) only account for an additional 137.01 miles of traversable pathway. The cost to construct sidewalks on both sides of the roadways excluding I-75 and U.S. 30 is estimated at \$570 million (\$50 per linear foot for 1083 miles).

²⁴ A study titled "Lima Area Transportation Study" completed by LJB March 2010 proposed various options to address freight movements.

While this agency acknowledges that the installation of sidewalk along every roadway within the county is an unrealistic and unnecessarily lofty goal the effective development of a pedestrian/bicycle network throughout Allen County is of paramount importance. This development is however 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 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 current Airport Layout Plan developed to position KAOH in the competitive world of public-use airports calls for specific improvements to improve safety and reliability. The Airport looks to implement: a repaving of its taxiways, install security fencing, install self-serve aircraft fueling, and to improve drainage areas to minimize wildlife habitat on/near the airport runway.

The Lima-Allen County Regional Airport has historically experienced corporate and jet usage which has implications for runway length as well as the occasional visit of Air Force One. 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 - necessary to service larger corporate planes/loads²³. In addition to GPS approaches to the airport, with runway alignment indicator lights (MALSR) to accompany the existing ILS were also recommended in the Master Plan. 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.

Airport consultants have identified the condition of the asphaltic concrete serving the parallel taxiway and the connector taxiways in need of rehabilitation (\$1.1M). Based on a recent wildlife study of the airport environs, consultants found wildlife encroachment as a potential safety hazard necessitating the construction of perimeter security fencing (\$2.75M) and drainage improvements (\$.77M) to diminish habitat areas for birds and other wildlife. A study also found encroachments into the vertical air space of KAOH. To mitigate the various encroachments necessary land acquisition is estimated at 70 acres (\$850,000). The need to demolish, construct and potentially relocate a new fuel farm was also identified in the Airports Capital Improvement Program (\$700,000). The Program als o identified the design and construction of a Medium Intensity Approach Light System with Runway Alignment Indicator Lights (MALSR(\$1.5M)) to be installed in the airport runway approach zone along the extended centerline of the runway. The Airport also plans to again study the extension of Runway 10-28.

Physical improvements of the Airport terminal building have recently been addressed to support the needs of aviators. Access to municipal water and sewer facilities have also been recognized and addressed. 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 encroachments and establish zoning to support limiting factors. Necessary operating costs are estimated at \$3.29M by 2045.

²³ 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.

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 81,503 by 2050; (2) the population is expected to become somewhat older and more female in orientation by 2045; (3) total vehicle registrations even with an increase the last 3 years has remained relatively constant since a peak of 124,528 in 2021; (4) total transit system ridership was increasing in recent years, but services reductions were necessitated in 2020 because of the COVID 19 pandemic; (5) 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, (6) increase freight demand will dramatically change the traffic composition on area roadways

The previous LRTP was prepared in 2018, 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 2045.

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 2024-2027 TIP allowed future deficient corridors to be identified.

MAP 5-11 PROJECTED DEFICIENT CORRIDORS



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 MPO Transportation Plans are 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 considers the obligation of maintaining the condition and LOS of area roadways. The financial assessment is to identify 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 2045. 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 2045 LRTP.

The financial assessment 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. A forecast of federal funding currently committed for transportation improvements was constructed from actual 2020 thru 2022 funding streams. Section 6.2 provides an overview of federal funding by source and year for the currently committed transportation projects using the methodology provided by ODOT. Additional information is contained in the current TIP 2024-2027 document 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 2024 through 2027 and 2028 through 2045. 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 utilizes 3- and 5-year to year averages to determine annual funding levels 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 LOCAL ANNUAL FISCAL RESOURCES (IN MILLIONS)									
Gas Tax	License Registration	Permissive License Tax	OPWC	CDBG	TID	Total			
8.160	1.874	1.579	1.569	.166	.2	13.549			

6.1.1 Gas Tax Receipts

Ohio Motor vehicle fuel dealers engaged in the use, distribution, or sale of fuel used to generate power for the operation of motor vehicles are required to charge an excise tax. With the passage of H.B. 62, Effective July 1, 2019, the motor fuel excise tax rate was increased to 38.5 cents per gallon for gasoline and 47 cents per gallon for all other motor fuels, except compressed natural gas (CNG). H.B. 62 also expanded the definition of "motor fuel" to include CNG and levied a motor fuel tax on CNG of 47 cents per gallon equivalent, over 5 years reaching maturation effective July 1, 2023. The breakdown of gas tax receipts is 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, \$8,160,653 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 \$1,874,000 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 \$1,579,329 per annum 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.

6.1.4 Ohio Public Works Commission

The Ohio Public Works Commission (OPWC) was created initially in 1987 to administer the State Capital Improvement Program (SCIP) which was soon joined by the Local Transportation Improvement Program (LTIP). The Ohio Public Works Commission relies on several non-General Revenue Fund (GRF) sources. The infrastructure programs reflect the SCIP and the LTIP. SCIP is funded from General Obligation bond proceeds via ballot initiatives to amend Article VIII of the Ohio Constitution. This program, authorized through 2025, is currently \$200 million annually. The LTIP, which is funded from less than one cent of the state's fuel tax revenue, provides another \$50-\$60 million or so annually to each infrastructure funding round. The OPWC also manages the Clean Ohio Program which supports environmental conservation including acquisition of green space, construction of trails and the protection and enhancement of river and stream corridors. These infrastructure programs reflect grant and loan assistance totaling nearly \$300 million across Ohio annually. Eligible projects are for roads and bridges, pedestrian/bicycle facilities, wastewater treatment systems, water supply systems, solid waste disposal facilities, and storm water and sanitary collection, storage, and treatment. OPWC funds are often integrated into larger infrastructure efforts to support affordability and provide overall system enhancements that might not have been included if such funding was not available or used. Some communities phase projects over a multitude of years in order to make financing more affordable. Combined, SCIP, LTIP and Clean Ohio funds generated \$1,570,973 annually in grants/loans to assist local project development over the past 3 years. Because the programs have been so popular, they are considered stable funding for purposes of this financial plan assessment.

6.1.5 Community Development Block Group

The Community Development Block Grant program is a 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. In general, the CDBG program's provide 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, singlecomponent projects such as roads, sewers, waterlines, and other public critical infrastructure component improvements. The Downtown Revitalization programming is geared to target Central Business District improvements and assist with facade 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 \$166,036 to local transportation projects across the region annually. While this funding has been targeted for elimination for decades, herein, for planning purposes this funding source is expected to continue albeit in a somewhat diminished role.

6.1.6 Transportation Improvement District

Under the auspices of HB 74, the MPO worked with the Ohio Department of Transportation, the Allen County Engineer and the Allen County Commissioners to create a local Transportation Improvement District (TID) for Allen County. A Transportation Improvement District (TID) is a form of local government that strives to promote intergovernmental and public-private cooperation of transportation resources and investments. The TID program provides funding for transportation projects that promote economic development in terms of job creation, job retention, and private sector capital investment. TIDs are permitted to submit multiple applications per funding round. The funding provided for each project is limited to \$500,000 per fiscal year. TID program funding can be used on all publicly owned roadways in Ohio. TID program funding can be used for preliminary engineering, detailed design, right-of-way or construction of transportation improvements. For purposes of establishing fiscal restraint, TID program funds are considered reliable and secure. In the last 3-years, TID funding has averaged \$200,086 per annum for local roadway improvements.

6.2 Financial Forecast for 2024 Thru 2027

The MPO 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 TIP. One of the Federal planning requirements 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 2024-2027 time periods is presented in Table 6-2.

6.3 Financial Forecast for 2028 Thru 2045

Pursuant to regulatory requirements, the Plan forecasts the extent of expected federal funding by funding category for implementing projects through the year 2045. Depicted in Table 6-3 are largely flat projections with no increase programmed for Federal funding thru 2045 and small increases projected for 2028, 2029 and 2030 with the out-years remaining flat. 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.

TABLE 6-2 FISCAL CONSTRAINT ANALYSIS 2024- 2027

		2024			2025		1	2026			2027	
Fund Type	Estimated Cost	Estimated Budget	Balance	Estimated Cost	Estimated Budget	Balance	Estimated Cost	Estimated Budget	Balance	Estimated Cost	Estimated Budget	Balance
Federal												
STP	\$1,925,000	\$2,626,015	\$701,015	\$2,225,000	\$2,241,122	\$16,122	\$1,455,000	\$1,587,033	\$132,033	\$1,375,000	\$1,391,097	\$16,097
STP MPO	\$1,925,000	\$2,642,622	\$717,622	\$225,000	\$1,540,107	\$2,032,729	\$655,000	\$1,570,911	\$2,948,640	\$1,375,000	\$1,570,911	\$3,144,55
CRP	\$164,362	\$484,000	\$398		\$167,649	168,047		\$171,002	\$339,049		\$171,002	\$510,051
CMAQ - State	\$1,100,000	\$2,553,275	\$1,453,275	\$550,000	\$2,466,981	\$1,916,981	\$1,070,000	\$2,971,643	\$1,901,643	\$2,650,000	\$2,746,940	\$96,94(
CMAQ - MPO	\$1,466,066	\$1,013,706	\$1,393,275		\$1,033,981	\$2,427,256	\$100,000	\$1,054,622	\$3,381,918	\$2,464,000	\$1,054,662	\$1,972,58(
Federal Preservation		\$8,429,916	\$8,429,916		\$2,459,116	\$10,889,032		\$4,978,880	\$15,867,812		\$8,193,114	\$24,061,02(
Labor - Federal		\$1,226,699	\$1,226,699	1	\$411,788	\$411,788		\$734,501	\$734,501		\$681,565	\$681,56!
NHPP				++	[]		i – – – – – – – – – – – – – – – – – – –					
ТАР		\$25,085	\$25,085		\$28,105	\$53,190		\$31,185	\$86,375		\$31,185	\$115,560
Safety		\$923,393	\$923,393		\$864,474	\$1787,867		\$2,077,260	\$3,865,127		\$2,812,981	\$6,678,108
Subtotal	\$6,508,428	\$19,024,711	\$12,444,283	\$3,000,000	\$11,213,323	\$8,213,323	\$3,280,000	\$15,177,037	\$11,897,037	\$7,864,000	\$18,653,457	\$10,789,457
State/Local												
State Funds		\$7,531,967	\$7,531,967		\$5,408,157	\$5,408,157		\$4,644,720	\$4,644,720		\$6,565,628	\$6,565,628
Local Funds		\$1,387,539	\$1,387,539		\$237,576	\$237,576		\$219,720	\$219,720		\$1,733,450	\$1,733,45(
Labor - State		\$162,608	\$162,608		\$162,608	\$162,608		\$412,908	\$412,908		\$162,608	\$162,608
Labor - Local		ļ			ļ		L					
Fadaval Transit Aganay				J	<u> </u>		<u> </u>		L	<u> </u>	L	
rederal Transit Agency		<u>т </u>		T	Г	,	ГГ	T	Г			
5307 Urban Formula	1,491,646	\$2,828,388	\$1,183,092	\$1,433,395	\$1,371,446	-\$61,949	\$3476,396	\$1,405,732	-\$2,070,644	\$1,520,487	\$1,433,847	-\$86,840
5310		\$1,176,129	\$1,176,129		\$1,176,129	\$2,380,998		\$1,234,308	\$3,615,306		\$1,520,487	\$5,135,793
5339 (Non-ODOT)	\$190,033		\$190,066				1					

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. The 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.

- Transportation Alternative Program Allen County does not receive a direct allocation of enhancement funds, but competes in the statewide enhancement program. The projections include the amount of enhancement 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.

6.3.1 FTA 5307

FTA 5307 allocations are federal funds earmarked for transit operations. Small urban transit systems have also been able to use such funds for capital expenditures when approved by FTA. FTA 5307 funding are subject to change based on State allocations and federal appropriations. As such, and in an attempt to be as transparent as possible recent FTA 5307 funding levels over the 2020 thru 2022 period averaged \$2,180,228 annually. However, given the increased COVID-related FTA funding received over the FY 2020-2024 period, estimates of future FTA 5307 funding only reach \$1.52M per annum. Using no increase in FTA funding for the period spanning 2028 through 2045, the Transit Authority can be expected to receive only \$27.37M.

6.3.2 FTA 5309

FTA 5309 monies support capital acquisitions of the ACRTA. Availability of, and access to, these funds has fluctuated widely in the past predicated upon Federal/State allocations. Over the CY 2020 thru 2023 period the Transit Authority received \$1,168,974 or \$389,658 annually in FTA 5309 monies. However, given the transition taking place at FTA these funds are not considered stable and are not used in addressing issues of fiscal constraint in this Plan.

TABLE 6-3 FUNDING LEVEL PROJECTIONS 2028-2045											
Year	Federal \$	Growth Factor*	State \$	Total							
2028	\$21,608,539.05	0%	\$18,370,932.38	\$39,979,471.43							
2029	\$21,608,539.05	0%	\$18,462,787.05	\$40,071,326.10							
2030	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2031	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2032	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2033	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2034	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2035	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2036	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2037	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2038	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2039	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2040	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2041	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2042	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2043	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2044	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
2045	\$21,608,539.05	0%	\$18,555,100.98	\$40,163,640.03							
Total	\$388,953,702.90	0%	\$333,715,335.11	\$722,669,038.01							

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 Federal requirement, the MPOs 2045 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.

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 \$ 13.5 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 2024-2027 TIP. Federal funds committed in the FY 2024-2027 TIP total some \$214.7 million. The current TIP also identifies approximately \$7,324,551 in MPO-STP funds through 2027 as well as \$4,156,971 of 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 2028 thru 2045. Table 6-4 reflects the amount of state and federal funding expected to be available for new transportation projects by funding source over the 2045 planning horizon. In Table 6-4, FTA funding can be used for operations or capital item. Local funds are predicated on the last 3-years of budgetary analysis and reflect gas tax receipts, license plate registration fees, permissive license plate fees, programmatic funds administered by the Ohio Public Works Commission, CDBG monies, and funding derived thru the TID. Other Local funds reflect permitting/licensing, transit fares, special services, equipment/fuel sales, reimbursements/recoveries, and varied other revenue streams.

TABLE 6-4 FORECAST FUNDING FY 2024-2045 (000'S)							
Year	Federal	State	FTA Operations & Capital	Local Funds ¹	Other Local ²	Total	
2024-2027	79.94	67.96	5.55	56.70	3.75	213.90	
2028-2045	388.95	333.70	27.37	243.88	71.54	1,076.71	
Total	468.89	401.66	32.92	300.58	75.29	1,278.34	

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¹ Local funds are held flat thru the planning horizon for comparison purposes.

² Other Local reflects a category of: miscellaneous rebates/reimbursements, transit fares, transit contracts, sales of fixed assets/rolling stock, damage to public property, street cuts, street/utility-related permits/fees, interest income, rental/leasing income, concessions, fuel sales, etc. Other local revenue is held flat thru the planning horizon for comparison purposes.

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 increased³² 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 2045 Long Range Transportation Plan (LRTP) Update seeks to reverse the trend.

In concert with federal legislation, the ambition of the 2045 LRTP is to facilitate an intermodal transportation system; one that is safe, efficient, secure, fiscally sound, and environmentally friendly. The 2045 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 goals³³ 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, the legislation requires that the metropolitan planning process establish and use a performance management³⁴ approach to transportation decision making and to use performance measures³⁵ in tracking progress toward targeted goals. The MPO is to develop the goals of its

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).

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 targets³⁸ 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 current legislation, such as the Bipartisan Infrastructure Bill, 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). Current legislation also requires that the metropolitan long-range plan include identification of public transportation facilities and intercity bus facilities.³⁹

Moreover, it 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 The Bipartisan Infrastructure Bill and its predecessors, which have provided the guidance and regulatory requirements, this section looks to frame the locally derived and developed 2045 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.

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(c)(2) & (I)(2) ⁴⁰ 23 U.S.C. 134(h)(1)(I) & (J)

7.1 The 2045 Transportation Plan: Mission & Planning Principals

The MPO necessarily employed the 3C planning process to develop the aspirations, mission, goals and objectives of the 2045 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 economic 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 2045 Transportation Plan. They were targeted goals, designed to be understandable and measurable.

- 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 2045 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 2045 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 2045 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,

^{41 23} USC 134(h)(2).

including, public transit and providers of transportation⁴² in order to develop and maintain an effective short-range capital improvement program (TIP) and Long-Range Transportation Plan.

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 utilizing the 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 2045 period by project types. The No-Build scenario reflected the existing 2018 base roadway network with committed projects 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 2021 roadway network that revealed 30.5 miles operating at an unsatisfactory LOS. In horizon year 2045, VMT is projected to reach 1.32 billion, an increase of 16.9 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 270 percent increase in the number of deficient roadway miles over existing 2021 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 12 cases where such infrastructure was found to be in poor condition. Table 5-11 identifies 12 local bridges identified as being in poor condition as defined by National Bridge Institute (NBI) standards with a total estimated cost of \$4.7 million.

7.3.3 Pedestrian/Bicycle/Trail System Component

The MPO works with a broad base of community organizations and coalitions of elected officials, law enforcement personnel, engineers, health care providers, business leaders,

⁴²23 USC 134(i)(6)(A).

emergency medical service providers, educators, policy advocates, public transit officials, neighborhood associations, and interested citizens to advance overall traffic safety for all of the various user groups. The MPO works thru an ongoing structured planning process to ensure that community is serviced with a coordinated, comprehensive and on-going communicative process to advance transportation and traffic safety.

To advance pedestrian and bicycle safety, the MPO has participated in, and undertaken the development of local ADA Transition Plans and has worked to adopt an Active Transportation Plan. The MPO also reviews pedestrian and bicycle crashes annually to identify problematic locations. Such plans work to support the 2045 Active Transportation Plan and should be considered an integral part of the Long-Range Transportation Plan Update. The MPO works with Activate Allen County to provide opportunities for a healthier lifestyle. The MPO also houses a Safe Community Coalition using Federal 402 monies to provide public awareness and education targeting the elimination of dangerous at-risk behaviors. In addition, the MPO uses various technical advisory committees and a policy committee to prioritize problematic locations and/or behaviors to ameliorate same with federal/state funding. Finally, the Planning Commission works with local officials to develop successful applications for Community Development Block Grants and monies managed by the Ohio Public Works Commission to advance pedestrian and bicycle infrastructure in our local communities.

The MPO acknowledged the safety of pedestrians and bicyclists in the development of the 2045 Transportation Plan Update. Pedestrian amenities were identified and incorporated within 32 projects and accounting for some 41.7 miles of ped improvements and 8.0 miles of bicycle lanes. Almost all of the eligible planned pedestrian projects were located within municipal limits (Beaverdam, Bluffton, Delphos, Lima, Spencerville) with the exception of roughly 4.01 miles of sidewalks to be introduced into American and Shawnee townships, as well as the unincorporated area of Gomer. Such projects are recommended to be implemented over the 2028-2045 timeframe. Only 3 projects integrated/updated bicycle amenities

Currently, however are a number of MPO funded projects bike and pedestrian projects. Now underway and using MPO funding are pedestrian projects in Bluffton, Harrod, Lafayette, Lima and the unincorporated area of Westminster. The City of Lima is currently undertaking a complete street initiative on SR 65 North (Central Avenue) within its Central Business District to slow traffic and improve pedestrian safety. The project reflects the interests of public transit users, motorists, bicyclists and pedestrians (PID 115561/\$4.4 M). The MPO has recently partnered with the Regional Transit Authority and the City of Lima to further improve safety and access of transit users at recently established fixed route stops (PID 119131/\$.7 M). The City is providing the engineering and contract management to ensure sidewalks and boarding/alighting pads are safe and meet ADA standards. The Transit Authority is providing the 20% local match for MPO funding pledged to such projects. The City of Lima has also adopted a road diet incorporating pedestrian amenities (PID 112573/\$6.4 M) to thwart safety concerns on Cable Road serving the University of Northwestern Ohio. Auglaize Township officials have worked with ODOT and the MPO to advance needed sidewalks in Westminster (PID 109435/\$5.4 M).

The Village of Bluffton has an outstanding bicycle and pedestrian system within its corporate limits. Current interests are focused eastward targeting development along SR 103 near I-75. This project (PID 111220/\$1.5 M)

7.3.4 Transit Component

Section 5.1.2.1 provided an overview of transit operations. In 2022, some 213,000 patrons traveled to area employers, hospitals, businesses and service centers on public transit services provided by the Allen County Regional Transit Authority. Such public transit service afforded these residents the ability to more fully participate in life and within the community. The ability to support public transportation was secured only recently after a contentious debate over local funding was settled at the polls that provided the Transit Authority with funding from a 1 mil sales tax levy.

The funding debate was successful on several levels. First, the debate allowed an open discussion regarding the complete absence of any local funding committed to match available federal and state funding for transit service. Secondly, the debate provided local leaders of industry and services to express publicly their interests in seeing public transportation services continued. It also provided the private sector to push public transportation to meet its collective needs band to extend the services hours of operation and provide county-wide services. The net result of events saw the Transit Authority by 2022 to extend its hours of operation to more than 39,000 hours of operation and providing more than 700,000 miles of service and its service area to include all of Allen County using new services tailored to the need of both patrons and industry.

The Public Transportation component of the 2045 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),^[10] and the Comprehensive Operation Analysis of the Allen County Regional Transit Authority (2017)^[11]. Collectively, these documents worked 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 CY 2022 operational profile, annual projected costs^[12] for operating existing transit services are estimated to reach \$137.2 million over the life of the 2045 Plan. Projected costs associated with necessarily updating/replacing rolling stock are estimated at an additional \$27.5 million over the Plan horizon. Section 6 identified the current fiscal projections of FTA 5307 funds at \$28.9 million over the life of the plan. Assuming local funds able to be raised by the Transit Authority are estimated at \$82.1 M, a serious imbalance in available funding is projected at \$6.4 million over the 2024-2045 period.^[13] Of note unless additional federal, state and local monies are identified available public transportation services will need to scale back in terms of: types of service, hours of operation, miles of services, frequency of service, and geographic service area.

^[10] https://www.lacrpc.com/wp-content/uploads/Reports/Transit/West-Central-Ohio-Regional-Transportation-Coordination <u>Plan-COMPLETE-December-2017.pdf</u> ^[11] In 2017, the MPO completed a comprehensive operations analysis of ACRTA to examine and evaluate the transit

^[11] In 2017, the MPO completed a comprehensive operations analysis of ACRTA to examine and evaluate the transit system and determine where improvements could be made to increase operational efficiencies and effectiveness.

^[12] This exercise assumed a compounded 3.0% rate for all projections.

^[13] Recognize, that FTA 5339 monies were excluded from fiscal projections as they were considered discretionary.

Given the recent impacts of COVID and infusion of ARRA funding, public transportation has received a historically disproportionate and unsustainable amount of federal funds. Locally, add the impact of a new sales tax, to the mix of federal funds recently made available, and it should not be surprising that the ACRTA is operating in the black and finances sound. However, scenario planning would suggest that the Transit Authority begin examining the productivity and operational efficiency of its services in order to be able to weather any future Federal funding cuts. Undertaking a comprehensive operational analysis would work to advance the incorporation of metrics being used by FTA and the Transit Authority and to identify the effectiveness of alternative scenarios.

Given new fixed routes and service areas the MPO suggests that the Transit Authority consider the need to examine the accessibility characteristics of the ACRTA fixed route system. The MPO suggests that with the recent surge in improving sustainable transportation options and the updates to the sidewalk and bicycle system undertaken in Lima, Delphos and Bluffton - opportunities exist to improve both transit accessibility and fixed route levels of service. Cooperation would advance planning perspectives/agendas as well as project funding options.^[14] The MPO suggests that collectively, the Transit Authority and local governments could work collectively to advance missing walkways, bikeways, and streetscaping (e.g., bus shelters, benches, street lights, bicycle racks/lockers) thereby, advancing community accessibility and public investments. Such cooperation would advance not only localized ADA Transition Plans adopted by area governments but also improve the comfort of transit patrons, as well as the general public.

Finally, to support existing and future public transportation services and address issues of equity and sustainability, the Transit Authority should be recognized for its ability to provide needed transportation services to those who cannot or choose not to drive independently. The ACRTA should be recognized an active participant in the various components of the community development/re-development process. The ability to serve industrial investments, commercial services and commercial residential complexes are imperative to meeting the mission of the Transit Authority and to secure adequate transportation services to resident housing and employers alike. Certainly, the City of Liam and Regional Planning Commission should recognize the Transit Authority as an interested stakeholder in the ongoing community development process.

This 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 Transit Authority, MPO, and the City of Lima are working together to collectively ensure that fixed stop locations are accessible and provide adequate mobility using CMAQ funding over the 2025-2027 period. The MPO has committed \$350,000 in CMAQ monies (PID 119931) for such improvements with the Transit Authority providing the required federal match and the City of Lima assuming all engineering and administrative management costs. In FY 2026, the MPO has pledged \$570,000 in CMAQ funding (PID 118817) to assist the Transit Authority in the acquisition of a large bus.

^[14] <u>https://www.fhwa.dot.gov/environment/bicycle pedestrian/funding/funding_opportunities.pdf?u=092922</u>

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 2045 Transportation Plan Update and the Community Economic Development Strategy (CEDS).⁴³ 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.

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.

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: Ft. Amanda, Bluelick, Breese, Buckeye, Dixie, Henthorn, 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

Rail traffic is down considerably from 2018 and the resulting operational changes made by rail operators, as well as some significant capital investments, have negated some of the previous complaints from area stakeholders blocked crossings. The impact of the Elm Street Grade Separation project (2020/\$10M) has minimized blocked traffic east of the City's CBD and coupled with the Vine Street Grade Separation project (2013/\$14.9M) and

⁴³ Comprehensive Economic Development Strategy for Allen County, Ohio; LACRPC, 2015.

the Sugar St Interlock project (2018/\$2.6M) have satisfied most stakeholders including 1st responders. But some blocked crossings remain of concern. The extent of blocked crossings on the CF&E line stretching from Cole St to Eastown Rd and the resulting limitations to access the University of Northwestern Ohio and the Lima Mall continue to exacerbate local stakeholder concerns including those of students and emergency service providers. Local officials are working to provide some relief with the Cable Rd Safety Project ((2026)(PID 112573/\$6.4M)) but it will only have a localized affect and additional solutions to the blocked crossings must be sought. In addition, the unique juxtaposition of the CSX line and I-75 off ramps at Interchange 120 coupled with the traffic generated from the Ft Shawnee Industrial Park have previously resulted in traffic backing up onto the I-75 mainline. Whether the problem has been resolved will likely be tested as rail traffic once again resumes to previous levels. Regardless of whether operational improvements are to be made by CSX or highway officials community stakeholders must remain vigilant. The study and deployment of appropriate ITS investments reflecting cameras and dynamic messaging signage is supported by local officials and this Plan (PID 251/80441 now estimated \$1.4M).

The aging and functionally obsolete railroad underpasses around the community including those located on Ft Amanda/Collett St, Serif Rd, Union St (2), Metcalf St and Bluelick Rd are of concern. These bridges pose safety concerns and hamper the movement of freight. The MPO has identified the Bluelick Road Underpass project as a necessary project in the Plan (PID 180 \$20M). It should be noted that dedicated federal/state funding to address on-going, rail-related constraints is inadequate but local governments will continue to work with ODOT and the ORDC to address such issues.

There are currently 132 public at-grade rail crossings located in Allen County on 90.02 miles of track. Many of the passive at-grade railroad crossings are currently in need of attention and rehabilitation to increase highway safety. To be considered at these crossings is the elimination of vegetation currently limiting the necessary sight distance at the crossings, upgraded pavement markings and signage and conversion from passive to active traffic control devices. However, local history reveals an uptick of crashes occurring at active rail crossing as a significant percentage of total crashes. Local officials must identify unnecessary and duplicative at-grade rail/roadway crossings to be considered for closure to improve overall rail/highway systems safety and efficiencies. Officials should partner with state partners to promote public information and awareness of rail safety issues and support local enforcement efforts. Complete engineering costs for improving conditions at each of the public at-grade crossings remains to be documented and costs, therefore, are not available. The MPO has previously studied the NS, CSX, SPEG and I&O at-grade rail crossings and identified possible crossing closures. The ODPS has generously provided Federal 402 monies to address highway safety issues. Local officials should request that rail safety issues should be incorporated into such efforts.

Agricultural, manufacturing, and industrial firms are increasingly interested in having good access to the transportation system. Rail-served properties, especially those that are accessible to multiple Class I rail networks (either through a short line railroad or an industrial park) are considered ideal. Current accessibility issues stem from the limited capacity of the NS line and the current trackage rights enjoyed by CSX and I&O. Examining the largest concentration of industry in the south Lima area the ability to accommodate the necessary queuing space for such firms as Cenovus Energy and Nutrien has become problematic; as is the current CSX and NS stacking, and loading and unloading operations.

The MPO should work with local stakeholders to advance the development of industrial parks capable of integrating rail services within prerequisite: physical site attributes (soil suitability, topography, zoning, and cost); utility infrastructure (availability, capacity, reliability, and cost); and, transportation infrastructure (availability of network access to various modes).

7.3.7 Aviation System Component

The aviation system component of the 2045 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^[3] updates and adopted economic development strategies^[4]. 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.

The Allen County Regional Airport serves as an integral part of Ohio's General Aviation Airport system. The airport supports strong corporate and charter activity 24/7/365. The largest regularly use Lima-Allen County Airport is a mix of corporate aircraft, including Lear Jets, Cessna Citations, Beechcraft King Airs, Sabreliners, and Hawker Siddeleys, as well as Gulfstream, Falcons, and Canadair Challengers.

The Airport is served with municipal water and sewer services and provides a comfortable and appealing services and amenities that further the interests of industry and freight as well as support personal mobility options that are necessary to sustain employment opportunities, health care services, education and recreation. The airports partner services ensure that all avionic needs can be met locally and expeditiously. The Airport is a safe and secure environment that supplies only top-quality services rendered in the reliable and moist cost-effective manner.

The Airport property encompasses more than 700 acres. Its relatively rural setting, close to the highest concentrations of freight-related industries, Interstate-75 and the City of Lima present some interesting opportunities including the ability to develop the available grounds. With the extent of developable land, an airpark could develop to accommodate new industry and warehousing needs. The Airport has the ability to support the need for safe secure truck parking facilities, the ability to partner with Ohio State University to study and support the expanded use of drones and Advanced Air Mobility (AAM) for last mile freight delivery, as well as provide the anchor for emergency medical services including Angel Flights and Air Ambulances (Lifeflight), as well as surgical teams flown into Allen County's two hospitals. Such opportunities should be studied given the airports public nature, relative location and existing/available infrastructure.

7.4 Committed Improvements

^[3] 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.

^[4] 2045 Perry Township Comprehensive Plan; 2015. Comprehensive Economic Development Strategy for Allen County, Ohio; LACRPC, 2021.

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 2045 Plan Update. The TIP document is valid for fiscal years 2024 through 2027. The financial resources and fiscal analysis for these projects was documented in Section 6 of this Plan.

Table 7-1 identifies the 2024-2027 committed infrastructure improvements projects for Allen County. There are 10 committed projects reflecting some \$25 million in total costs.

CMAQ allocations totaling \$920,000 to the Allen County Regional Transit Authority include monies for a replacement rolling stock vehicle and funding for the implementation of fixed stops along its high traffic fixed routes. This will include the addition of ADA compliant sidewalks and signalization.

Also included within the 2024-2027 TIP are allocations for the Allen County engineer to perform Pavement Condition Index analysis along with monies to facilitate the various MPO planning functions.

7.5 Recommended Projects Summary

The Plan's recommended projects are identified in Table 7-2. The project listing containing 88 projects was compiled based on current system deficiencies, alternative analyses and results of travel demand modeling. Planning regulations governing fiscal constraint restricted the 2045 LRTP Update to those funds that could be reasonably expected over the planning horizon and consequently limited the recommended projects list.

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. 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. 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.

	TABLE 7-1 LACRPC 2024-2027 TIP PROJECTS BY YEAR COMMITTED FOR CONSTRUCTION							
Fiscal Year	Location	Project Sponsor	Description	Project Cost	PID			
2024	Central Ave	City of Lima	City of Lima is sponsoring a "complete streets" project located in the City's CBD. The project spans 5 City blocks from Elm St. north to Wayne St. roughly 2,475 lf. Improvements call for the conversion of a 2-lane, 1-way street with parking on both sides to a 1-way, single lane street with reverse angle parking on 1 side and a bike lane on the other. ADA compliant sidewalks and energy efficient lighting upgrades are included.	4,400,000	115561			
	Bluffton SR 103	Village of Bluffton	Construct a shared use path along the south side of SR 103/Jefferson Street from County Line Rd until Wendy's. It will then cross the street and continue east on the north side of SR 103 along Commerce Lane, then turn north and connect to the Lions path.	1,530,000	111220			
2025	Napoleon Rd (Harrod)	Village of Harrod	Reconstruction of S. Napoleon Rd, S. Main St., N. Main St., W 1st St. and Napoleon Rd through the Village of Harrod with curbs gutters sidewalks and lighting upgrades.	2,900,000	118800			
2026	Cable Rd	City of Lima	City of Lima project addresses the reconstruction of some 2,750 lf of Cable Road fronting the University of Northwestern Ohio. The City Engineer is proposing a road diet, signal upgrades and the construction of raised medians/pedestrian islands and sidewalks on Cable Rd between Latham & College Park.	6,400,000	112573			
	Napoleon Rd (Lafayette)	Village of Lafayette	This 1st phase, part of the larger project looks at reconstructing 1100 If High Street in the Village of Lafayette between Main and Jefferson Streets. Curbs, gutters, sidewalks, and drainage improvements to be addressed. Subsequent phasing thru the Village of Lafayette calls for the repaying on High St, Main St & Washington St thru the Village.	1,400,000	118806			
2027	Thayer Rd	Allen County Engineer	Allen County. The County Engineer will reconstruct Thayer Rd between SR 309 and Reservoir Rd approximately 5,280 lf to 24' of pavement with 2' of stone shoulders, improve drainage and construct a new bridge over Lost Creek.	3,200,000	116196			
2027	Breese and Shawnee	LACRPC	The intersection improvement project is to improve safety and improve operation by converting the existing four-legged signalized intersection to a single-lane roundabout. The work would also consist of installing curb and gutter, drainage, traffic control and lighting.	3,000,000	118884			
	Breese Rd	LACRPC	Widen the pavement on Breese Road to 2 - 12' lanes with 2' berms and drainage improvements from just east of Delong Road to McClain Road for a distance of approximately 3,325 linear feet (0.63 mi).	1,500,000	119014			

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.

	RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor			
7	Grand Avenue	Reconstruct 2,800 feet from Union Street to Metcalf Street with 2 lanes with curbs, sidewalks and drainage.	2,956,000	2036	Lima			
8	Cole/Robb	Reconstruct the intersection of Robb Avenue and Cole Street with 5-12' lanes along Robb and 3-11 ' lanes on Cole mast arm signals and left turn lanes with adequate storage, curbs, drainage and sidewalks.	716,000	2034	Lima			
11	Reservoir & Cool Intersection Improvement	Reconstruction of intersection to realign Reservoir Rd and eliminate the offset intersection. Reservoir to be reconstructed from approximately 1,250 If west of Cool Rd to 1,250' east of Cool Rd while Cool Rd would be reconstructed approximately 1,350 If north of Reservoir to the northernmost driveway of P&G and south 250 If of Reservoir Rd.	1,200,000	2029	ACEO			
27	Metcalf Street Reconstruction	Reconstruct 3,000 feet with curbs, sidewalks and drainage from North St. to Grand Avenue.	2,900,000	2029	Lima			
28	Metcalf Street Reconstruction	Reconstruct 3,000 feet from Grand Avenue to Robb Avenue with curbs, sidewalks and drainage.	2,656,000	2037	Lima			
30	Kibby Street	Reconstruct 4,800 feet with 2 - 12' and parking lanes with turn lanes, curbs, sidewalks & drainage from Collett Street to Pine Street.	5,158,000	2030	Lima			
31	Cable Road	Reconstruct 6,150' of pavement & widen to 2 -11' lanes, 28' back/back of curb with gutters, sidewalks and drainage from Shawnee Road to University Boulevard; widen at intersections to provide turn lanes. Capacity analysis pending to determine left/right turn lanes.	4,745,000	2040	Lima			
36	Main Street	Reconstruct 8,200 feet of Main Street from North Street to Northern Avenue with curbs, drainage and sidewalks.	12,633,000	2045	Lima			
40	Thayer Rd Widening - Phase 4	Reconstruct and widen pavement to reflect to 2-12' lanes with 2' stone berms, with drainage and culvert improvements as warranted from SR 309 to SR 117.	4,300,000	2030	ACEO			

	RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor			
45	Elm St.	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 to Eastown.	1,500,000	2035	ACEO			
49	Cable & Diller Intersection Improvement	Convert the existing 3-leg unsignalized intersection to a single-lane roundabout including drainage improvements, curb & gutter, and lighting.	2,700,000	2030	ACEO			
50	Vine Street Reconstruction	Reconstruct 2,300' of roadway to serve 2-11' lanes with 2- 8' on-street parking lanes, 40' back/back of curb, walks and drainage from Metcalf St to Main St.	2,997,000	2042	Lima			
51	Sugar Street	Reconstruct 13,000' of pavement with curbs, drainage and sidewalks (complete streets) from 4 th St to Findlay Rd.	18,601,000	2043	Lima			
58	Cole Street	Reconstruct 4,000 feet for 2 - 12' lanes with curbs, gutters and sidewalks from Brower Road to Diller Road.	3,200,000	2031	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.	2,774,000	2039	Lima			
61	Reservoir Rd. Improvement	Reconstruct and widen 43,000 If of Reservoir Rd to reflect 2-12' lanes with 2' stone shoulders and drainage improvements as warranted from Mumaugh Road to County Line.	2,400,000	2029	ACEO			
62	Cole Street	Reconstruct and widen 4,800 linear feet to 2- 11' lanes with bike lanes, curbs, sidewalks and drainage from Market Street to Elida Rd.	316,000	2039	Lima			
69	Elida Rd. & Elida Ave Intersection	Intersection improvements including the conversion of the existing 3-legged unsignalized intersection to a single-lane roundabout to include curb & gutter, drainage, traffic control, and access management principles to improve intersection operations and safety.	2,700,000	2029	ACEO			

	RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor			
70	Slabtown Rd Reconstruction	Reconstruct and widen pavement to 34,000 linear feet for 2 - 12' lanes with 2' stone shoulder and drainage improvements as warranted from Bluelick to Begg.	2,140,000	2034	ACEO			
71	Cable Rd Reconstruction	Make horizontal alignment correction as needed. Reconstruct 5,400 lf of pavement to accommodate 2-12' lanes with 2' stone berm from Edgewood Dr to Diller Rd. Provide storm sewers and signalization as warranted.	4,140,000	2041	ACEO			
76	Elm St Reconstruction	Reconstruct and widen pavement pavement for 2,875 lf to include 2-12' lanes with L-Turn bays, improved drainage as warranted, with curbs & gutters and sidewalks from Eastown to Stevick Rd.	1,841,000	2040	ACEO			
80	Robb Avenue	Reconstruct and widen 1,400 feet to 3 - 12' lanes with curbs and sidewalks from Main Street to overpass.	1,750,000	2031	Lima			
81	North Street	Reconstruct 750 feet with curbs, sidewalks and drainage from Jackson Street (Ottawa River) to Sugar Street.	2,610,000	2032	Lima			
82	Fourth Street	Reconstruct 2 lanes with curbs, gutters and sidewalks from Metcalf Street to Main Street.	2,612,000	2032	Lima			
83	Grand Avenue	Reconstruct 2 - 12' lanes with curbs, sidewalks and drainage from Metcalf Street to Jameson Avenue.	2,649,000	2033	Lima			
87	Breese Rd. Reconstruction	Reconstruct 7,400 lf of pavement from Shawnee Rd to IR-75 Interchange 120 to reflect 2-12' lanes with existing L-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 curb/gutter, sidewalk, pedestrian lighting and entryway enhancements.	10,149,000	2044	ACEO			
92	1st St - Reconstruction Phase 2	Project limits reflect the railroad tracks on State St east to St. John's Cemetery. The length is 4,300 feet. The is a complete reconstruction of First St. and reflects 2- 12' lanes and 1 8' parking lane between State St and Main St, between Main St and Pierce St traffic will be served by 2-13' lanes and 2-10' parking lanes Broadway, between Pierce St and the Cemetery, the street section will reflect 2-12.' lanes and no on street parking. to include ADA compliant sidewalks, drainage improvements, curb/gutter, traffic signal upgrades and decorative lighting.	15,500,000	2033	Delphos			

RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor		
97	Cole St.& Diller Rd. Intersection Improvement	Convert existing unsignalized T-intersection to a single-lane roundabout including curb & gutter, drainage improvements, and street lighting.	2,700,000	2029	ACEO		
99	Bluelick & Dixie Intersection Improvement	Remove and reconstruct with full-depth pavement replacement and drainage improvements reflecting 2-12' lanes and improved intersection geometrics.	897,000	2036	ACEO		
100	Bluelick & Slabtown Intersection Improvement .	Widen existing intersection with 12' lane and left turn lanes; configuration to accommodate WB-67 vehicle design. Access management principles are to be applied to improve intersection safety. to include 2' stone shoulders, ROW acquisition and utility relocation as necessary.	870,000	2036	ACEO		
104	Dixie & Slabtown Intersection Improvement	Widen existing intersection with 12' lanes and left turn lanes; configuration to accommodate WB-67 vehicle design. Access management principles are to be applied to improve intersection safety. to include ROW acquisition and utility relocation as necessary.	896,100	2037	ACEO		
105	Bluelick & West St Intersection Improvement	Construct roundabout to serve 4-leg signalized intersection with drainage improvements and lighting as warranted.	2,700,000	2037	ACEO/ODOT		
151	Leonard Avenue	Extend Leonard Avenue south 4,500 feet to 4 th St with 2-12' lanes, 30' B/B of curb. Make necessary intersection modifications to accommodate WB-67 vehicle design.	11,210,000	2035	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.	846,000	2036	Lima		
154	State St Resurfacing	Grind and resurface State St. from 5th St. to 1st St. replace curbs & gutters and sidewalks as warranted.	975,500	2040	Delphos		
180	Bluelick Rd. Underpass	Reconstruct underpass to increase vertical clearance and improve horizontal alignment to accommodate WB- 67 vehicle design.	20,000,000	2040	ACEO		

	RECOMMENDED TRANSPORTATION PROJECTS								
PID	Location	Description	Cost	Year	Sponsor				
211	McClain Rd Widening	Calls for widening pavement to ensure 2-12' lanes with 2' stone berms from Breese Rd. to Buckeye Rd. for a total length of approximately 3,600 lf.	677,800	2028	ACEO				
221	Cable Road	Install 2,600 feet of sidewalks and access management modifications from Latham Ave to University Boulevard.	5,145,000	2033	Lima				
222	Market Street	Install sidewalks 5,075 feet from Pears Avenue to Primrose Place.	626,000	2034	Lima				
224	Reservoir Road	Install sidewalks 1,680 feet between Dewey Avenue and Roberts Avenue.	245,000	2035	Lima				
225	Market Street	Reconstruct 6,600 feet with sidewalks from West Corp Line to Woodlawn Avenue.	3,501,000	2038	Lima				
226	Central Avenue	Reconstruct 2,500 feet from Kibby Street to Elm Street with 2, 12' lanes, parking and sidewalks.	2,380,000	2038	Lima				
233	Dixie Hwy Improvement	Reconstruct and widen pavement 5,600 If from Breese Rd to Buckeye Rd with 2-12 lanes and 2' stone berms as well as drainage and culvert improvements as warranted.	412,000	2030	ACEO				
235	SR 81 & Baty Rd Intersection Improvement	Rebuild intersection to provide Left Turn lanes and possible signal.	450,000	2040	ACEO/ODOT				
240	Hanthorn Rd Reconstruction	Reconstruct and widen pavement for 31,000 lf to reflect 2-12' lanes with 2' stone berms and drainage improvements as warranted from McClain to SR 117.	2,809,000	2038	ACEO				

	RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor			
241	Ft Amanda Rd Resurfacing	Widen and resurface 2,700 If of pavement adding 2' stone berms and drainage improvements including culverts as warranted from Buckeye to Adgate Rd.	283,700	2042	ACEO			
243	Shawnee Rd Resurfacing	Widen and resurface 2,750 If of pavement adding 2' stone berms and drainage improvements including culverts as warranted from Buckeye Rd to Adgate Rd.	289,000	2042	ACEO			
244	Breese & McClain Rd Intersection (South)	Traditional intersection improvement or roundabout to effectively serve WB-67 vehicle designate traditional 3- leg stop controlled intersection.	1,000,000	2028	ACEO			
245	Breese & McClain Rd Intersection (North)	Traditional intersection improvement or roundabout to effectively serve WB-67 vehicle designate traditional 3- leg stop controlled intersection.	1,000,000	2028	ACEO			
247	Hanthorn & SR 117 Intersection Improvement	Make necessary roadway intersection improvements to improve alignment and accommodate WB-67 vehicle traffic safely. Add drainage improvements as warranted.	530,000	2041	ACEO			
260	North Main Street & Grand Ave. Intersection Improvement	Intersection improvement at North Main Street and Grand Ave. to address southbound trucks turning right. After this route was reclassified as a state route (SR 65), the truck turning radius at the southwest corner of the intersection does not accommodate right-turning trucks without significant off-tracking.	340,000	2029	Lima			
261	Sugar St. Reconstruction-Phase 1	Grinding & pavement resurfacing necessary to maintain 3-12' lanes for approximately 5,285 If from Bible Rd to Bluelick Rd. includes signal heads and installation of video detection system to replace existing loop detectors. No curb/gutters/sidewalks	478,500	2028	ACEO			
262	Cable Rd. Curb Replacement	Replace all curbs and gutters and reset catch basin tops as necessary; repair 1.5' of pavement in front of each gutter.	414,000	2028	ACEO			
263	Buckeye & Ft Amanda Intersection Improvement	Convert the existing 3-leg unsignalized intersection in to a single lane roundabout.	2,700,000	2028	ACEO			

	RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor			
264	Elida Signal Improvement Project	Design & install upgraded traffic signals, back plates, controllers, and mast arms along SR 309 in Village of Elida. Intersection crossing markings and signage to be included.	200,000	2028	Elida			
265	Robb Ave Resurfacing	Termini of project reflects SR 309 east to Cole St. reflects the planning and resurfacing of approximately 3,310 If of pavement, installation of sidewalks on south side of Robb Ave, replacement of all curbs & gutters, resetting of catch basins and manhole tops as warranted.	1,230,000	2028	ACEO			
266	Sugar St Reconstruction Phase 2	Grinding & pavement resurfacing necessary to maintain 3-12' lanes for approximately 3,965 If from Williams Ave to Bible Rd. includes signal heads and installation of video detection system to replace existing loop detectors. No curb/gutters/sidewalks.	749,000	2029	ACEO			
267	Sugar St Reconstruction Phase 3	Grinding & pavement resurfacing necessary to maintain 3-12' lanes and install curbs and gutters to improve drainage for approximately 3,575 If from SR 81 to Williams St. If the 4 existing lanes are kept, lane widths will be 10.5'-11.0'. If road diet is designed, use 3-12' lanes.	2,008,000	2029	ACEO			
268	Lincoln Hwy. Joint Repair	Grinding and paving Lincoln Highway with 1.5" asphaltic concrete for approximately 20,100 If including full- depth concrete joint removal and replacement. Within Gomer, replace all curbs and gutters, replace catch basins and manholes as necessary and replace sidewalks with new ADA compliant sidewalks	2,285,000	2031	ACEO			
269	Broadway St Reconstruction	Reconstruction of Broadway St. from Corp Line to Corp Line in the Village of Spencerville. reflects pavement, new ADA compliant sidewalks, decorative lighting, curbs & gutters, and stormwater improvements. Roadway course to reflect 2-12' lanes with 8' on-street parking.	10,650,000	2035	Spencerville			
270	Elm & Fraunfelter Intersection	Convert the existing 3-leg unsignalized intersection to a single-lane roundabout including drainage improvements, curb & gutter, and lighting.	2,700,000	2037	ACEO			
271	N Main St Reconstruction Phase 1	Project limits are from Fifth St north to Pohlman Rd. The length is 4,500 feet. The reflects a complete reconstruction of North Main including curb, sidewalk, storm sewer. The existing street lights will remain in place.	13,750,000	2038	Delphos			
272	Main St Reconstruction - Phase 2	Project limits are from Fifth Street south to the railroad tracks. The length is 2,000 feet. The is a complete reconstruction of North Main through the downtown area and includes traffic signal upgrades, decorative street lighting, curb/gutters, ADA compliant sidewalks/ramps, and storm sewer. Reconstruction to include 16' lanes, with existing L-turn bays at 1st, 2nd, 3rd and 5th streets, 2-10' on-street parking lanes, new sidewalks, curbs, gutters and drainage improvements	10,920,000	2043	Delphos			

	RECOMMENDED TRANSPORTATION PROJECTS							
PID	Location	Description	Cost	Year	Sponsor			
273	SR 117 Reconstruction	Reconstruction of the SR 117 alignment in the Village of Spencerville from Corp Line to Corp Line. Alignment follows Spencerville Rd to Fourth St. onward to Main St. before heading west on North St. reflects pavement, new ADA compliant sidewalks, curbs & gutters, and stormwater improvements. Roadway course to reflect 2-12' lanes with on-street parking and lighting	10,300,000	2045	Spencerville			
88421	Bellefontaine & Kibby Improvement	Intersection improvement at 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 TH/RT 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.	20,155,000	2042	Lima			
249 A	Adgate Rd Improvement	Resurface and widen pavement 4,050 lf on Adgate Rd to support 2-12' lanes with 2' stone berms make drainage improvements as warranted to support WB-67 vehicle traffic. Included in the project are intersection improvements at Adgate & Ft Amanda and Adgate & Shawnee to include signal upgrades. Project to be supported with prior bridge work.	1,500,000	2032	ACEO			
32A	St. John's Road	Reconstruct 3,325' with 2 lanes with turn lanes, curbs, sidewalks and drainage from 4th to Pine Street. Left turn lanes maintained at 2nd, 3rd, and 4th streets.	5,529,000	2044	Lima			
43A	Downtown Streetscape Phase 3 - Union Street	Modify 2,000 feet of 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.	4,800,000	2028	Lima			
111220a	SR 103 Reconstruction Phase IV	Project reflects the complete reconstruction of SR103 from the intersection of County Line Road on the west to the interchange ramp for IR 75 to the east (total length = 3,100 ft). The project will introduce a two-way left turn lane across 36' pavement. The project will reduce the vertical crest curve 350 east of the intersection of County Line Road to meet necessary design speeds and improve safety at the intersection. This project will install a 5' wide concrete walk along the entire north side of SR103, connecting into previous pedestrian improvements at the intersection of Dave's Way and making the corridor ADA compliant. The project will also install required traffic signal conduit and traffic signal foundations to be used in the future (when the intersections warrant) at the intersections of Citizens Parkway and Commerce Lane.	4,087,347	2035	Village of Bluffton			
274	North Main St Improvements (Bluffton)	Project will rehabilitate North Main Street from Jefferson Street to Snider Road (total length = 1,810 ft). The project will plane and resurface North Main Street and address deficient/failing storm infrastructure and pedestrian facilities. The project will rebuild all curb, sidewalk, drive entrances, and storm infrastructure to meet current standards and provide a safe connection to the intersection of Snider Road. The project will also reconstruct intersections along North Main Street to ensure ADA compliance.	1,895,242	2035	Village of Bluffton			

	R	ecommended Transportation Proje	ects (TRANS	IT)	
PID	Location	Project Description	Cost	Year	Authority
275	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	525,000	2028	ACRTA
276	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	525,000	2029	ACRTA
277	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	525,000	2030	ACRTA
278	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	525,000	2031	ACRTA
279	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	525,000	2032	ACRTA
280	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	550,000	2033	ACRTA
281	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	550,000	2034	ACRTA
282	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	550,000	2035	ACRTA
283	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	550,000	2036	ACRTA
284	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	550,000	2037	ACRTA
285	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	575,000	2038	ACRTA
286	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	575,000	2039	ACRTA
287	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	575,000	2040	ACRTA
288	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	575,000	2041	ACRTA
289	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	600,000	2042	ACRTA
290	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	600,000	2043	ACRTA
291	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	600,000	2044	ACRTA
292	ACRTA	Maintenance, safety and operating equipment and Rolling Stock	625,000	2045	ACRTA

7.6 Project Funding Summary

The 2045 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.

An examination of the funding reveals that state and federal funding encompass more than half of total funding. 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 \$285 million and available funding exceeding \$500 million, the 2045 Long Range Transportation Plan Update is considered fiscally constrained and meets federal planning requirements.



Map 7-1



APPENDIX A

NATIONAL GOALS, PERFORMANCE MEASURES & SYSTEM PERFORMANCE REPORT: AN ASSESSMENT OF THE 2045 LONG RANGE TRANSPORTATION PLAN



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SECTION 1 NATIONAL GOALS, PERFORMANCE MEASURES & SYSTEMS MANAGEMENT REPORT

In December 2015, Public Law 114-94 was adopted. The FAST Act as it became known pushed forward specific goals to advance the interest of the United States and its's transportation system. The national goals included: (1) Safety - to achieve a significant reduction in traffic fatalities and serious injuries on all public roads; (2) Infrastructure condition - to maintain the highway infrastructure asset system in a state of good repair; (3) Congestion reduction - to achieve a significant reduction in congestion on the National Highway System; (4) System reliability - to improve the efficiency of the surface transportation system; (5) Freight movement and economic vitality - to improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development; (6) Environmental sustainability - to enhance the performance of the transportation system while protecting and enhancing the natural environment; and, (7) Reduced project delivery delays - to reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.¹

As a matter of policy, the FAST Act like its predecessor touted performance management as capable of transforming the Federal-aid highway program and the means to realize the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision making through performance-based planning and programming.² And while performance measures (PM) were addressed in MAP-21, the FAST Act established timelines for specific criteria and standards and required state departments of transportation, MPOs, and other stakeholders to actively participate in the rulemaking, target setting,³ implementation of strategies, programs and policies and regular reporting processes as established.⁴

This appendix looks to establish the MPOs efforts to address the goals established by the FAST Act - examining each in turn. And then looking at the performance management measures, before discussing the systems management report.

1.1 National Goals

As stated previously federal legislation established 7 national goals pursuant to 23 U.S.C. 150(b). The legislation also pushed the MPOs to use a performance-based approach in its decision making to support the national goals. In fact, § 450.300(a) and (b) require the designated MPO to carry out a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process, including the development of a metropolitan transportation plan and a TIP, that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities that support intercity transportation, including intercity buses and intercity bus facilities and commuter vanpool providers) fosters economic growth and development, and takes into consideration resiliency needs, while minimizing transportation-related fuel consumption and air pollution; and, encourages continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth in 23 U.S.C 134(h) and 49 U.S.C 5303 (h).

¹ 23 U.S.C § 150(b)

² 23 U.S.C § 150(a)

³ 23 U.S.C § 150(d)

^{4 23} U.S.C § 150(e)

1.2 Goals & Rulemaking

The FAST Act was passed and signed into law in December 2015. Thereafter, the Federal rulemaking process began – a long and tedious process by which Federal agencies are tasked with formulating laws/statutes adopted by Congress. In this case Congress passed a law – the FAST Act - that directed FHWA to take action toward developing certain goals and to establish a schedule for the Agency to follow in issuing rules.

The rulemaking process invites and allows interested stakeholders to participate by publishing an "Advance Notice of Proposed Rulemaking" in the Federal Register. The Advance Notice is a formal invitation to participate in shaping the proposed rule. The Notice of Proposed Rulemaking is the official document that announces and explains the agency's plan to address a problem or accomplish a goal. All proposed rules must be published in the *Federal Register* to notify the public and to give them an opportunity to submit comments. The process requires a final rule to be published in the Federal Register with an effective date.

The rulemaking process needed to address several inconsistencies between MAP-21 and the FAST Act as written. DOT was required to publish clarifications in the CFR instructing how amendments were added, revised or re-designated regulatory text.⁵ This process inevitably resulted in delays as can be seen in the effective dates established for the State DOTs and the MPOs.

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⁵ http://www.ampo.org/wp-content/uploads/2013/02/23-CFR-450-New-Regulations-Revision-Key.pdf

SECTION 2 GOALS, MEASURES & MPO ROLE

With the conclusion of the rule making process in April 2016, FHWA established certain performance measures for State DOTs and MPOs to use to carry out Federal-aid highway programs and to assess performance in 7 areas; using 20 performance measures. Federal legislation established: 5 federal-aid highway safety measures (number of fatalities, number of serious injuries, rate of fatalities, rate of serious injuries, and number of non-motorized fatalities and non-motorized serious injuries); 4 pavement measures (percent of interstate pavements in good condition, percent of interstate pavements in poor condition, percent of non-Interstate NHS pavements in good condition, percent of non-Interstate NHS pavements in poor condition); 2 bridge measures (percent of NHS bridge deck area in good condition, percent of NHS bridge deck area in poor condition); 2 reliability measures (percent of person-miles traveled on the interstate that are reliable, percent of person-miles traveled on the non-Interstate NHS that are reliable); 1 freight measure (truck travel time reliability index); 2 CMAQ Traffic Congestion Reduction measures (annual hours of peak hour excessive delay, percent non-SOV travel, and total emissions reduction), and 4 Total CMAQ Emission Reduction measures (total CMAQ emission reductions for: particulate matter at 2.5 micrometers – $PM_{2.5}$ / particulate matter at 10.0 micrometers - PM_{10} / oxides of nitrogen - NOx, & volatile organic compounds - VOCs). Specific language regarding the National Performance Management Measures for the Highway Safety Improvement Program can be found in 23 CFR 490 Subpart B. The 5 safety performance measures are identified specifically in 23 CFR 490.207(a)(1-5). Pavement conditions are addressed in 23 CFR 490 Subpart C; the 4 measures are identified in Section 490.307(a)(1-4); Sections 490.309 and 490.311 respectively identify the data requirements and the calculation of pavement metrics. Assessing bridges, 23 CFR Part 490, Subpart D reviews the National Performance Management Measures. Section 490.407(c)(1-2) specifies the performance measures used to assess bridges on the NHS. Travel Time Reliability is addressed in 23 CFR 490 Subpart E with measures identified in Section 490.507(a)(1-2). Freight is addressed in 23 CFR Part 490 Subpart F; Section 490.607 identifies performance measure, while sections 490.609 - 490.613 identify data requirements and calculation metrics. CMAQ traffic congestion reduction measures are addressed in 23 CFR 490.707(a-b), while Total CMAQ emission reduction measures used to assess on-road mobile source emissions are identified in 23 CFR 490.807.

The following MPO Planning requirements^{6,7} are pertinent to the purposes of this Appendix:

- MPOs are required to establish and use a performance-based approach to transportation decision making and development of their respective transportation plans.
- MPOs are required to address the National Goals and performance targets established by FHWA and ODOT to the maximum extent practicable, to ensure consistency with sections 5326(c) and 5329(d) of title 49.
- MPOs will establish performance targets not later than 180 days after the date that the relevant State or public transportation provider establishes performance targets.
- The MPO's long range transportation plan will also include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the established performance targets.
- The MPO's long-range transportation plan will include identification of public transportation facilities and intercity bus facilities.
- The MPO's long range and short-range transportation plans shall provide for facilities that enable an intermodal transportation system, including pedestrian and bicycle facilities intercity buses, intercity bus facilities, and commuter vanpool providers.

⁶ <u>https://www.fhwa.dot.gov/map21/factsheets/mp.cfm</u>

⁷ https://www.fhwa.dot.gov/fastact/factsheets/metropolitanplanningfs.cfm

- The MPO's short range Transportation Improvement Program will include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets established in the Plan, linking investment priorities to the performance targets.
- The MPO's long and short-range plans will include transportation and transit enhancement activities.

The following sections look to discuss more thoroughly the national goals relative to their respective performance measures and a discussion as to the role of the MPO to support FHWA planning requirements relative to the long and short-range plans. The system performance report will be presented in the subsequent section. Table A-1 is provided to ensure a better understanding of what FHWA has accomplished, what ODOT has accomplished and what remains for the MPO to do come into compliance with the planning requirements.

2.1 Highway Safety^{8,9}

FHWA published the Highway Safety Improvement Program (HSIP) and Safety Performance Management Measures Final Rules in the Federal Register on March 15, 2016, with an effective date of April 14, 2016. The HSIP Final Rule updated the regulations established in 23 CFR 924 for purposes of promoting consistency between the latest Transportation Bills and implement actions required by MAP-21. The HSIP Final Rule added Part 490 to 23 CFR to implement the performance management requirements in 23 USC 150.

Collectively, 23 CFR 490 and 23 USC 150 work to address and establish the safety performance measure (PM) requirements needed to assess serious injuries and fatalities on public roads. The intent of the regulations is to improve data; foster transparency and accountability; and, allow safety issues to be tracked at the national, state, and local levels. Moreover, the requirements establish uniform reporting criteria that will support more informed planning, programming, and decision-making by State DOTs and MPOs - deemed necessary to support the greatest possible reduction in fatalities and serious injuries.

The Final Rule supports the data-driven performance focus of the HSIP. The Final Rule establishes five performance measures to carry out the HSIP based on five-year rolling averages for: (1) Number of Fatalities, (2) Rate of Fatalities per 100 million VMT, (3) Number of Serious Injuries, (4) Rate of Serious Injuries per 100 million VMT, and (5) Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries. These safety performance measures are applicable to all public roads regardless of ownership or functional classification. Of note, safety targets are set annually.

2.2 Highway Safety – Role/Commitment of MPO

The MPO is cognizant of and has worked to integrate the safety performance measures into the 3C - metropolitan planning process inclusive of the MPOs Work Program, 2045 Long Range Transportation Plan, and the pending 2018-2021 Transportation Improvement Program (TIP).

The 2045 Plan recognizes traffic safety as critical goal and works to integrate the safety performance measures and targets into various modal elements of the Plan. The MPOs annual work program incorporates a major portion of available staffing to identify serious injury and fatal crash locations, while promoting and coordinating traffic safety initiatives, and undertaking or supporting traffic engineering services for local governments. Moreover, the MPO's project selection criteria used in development of the TIP has been revisited to ensure that safety factors

⁸ 23 U.S.C. § 150(b)(1)

^{9 23} CFR 490.207(a)

PERFORMANCE MANAGEMENT PROGRAM & PERFORMANCE MANAGEMENT MEASURES BY SELECT CRITERIA & MPO REPORTING REQUIREMENTS											
	Rule	Time Period Reported	Final Rule Effective	Calculation	Source	ODOT Targets Established	MPO Targets Established	MPO Reporting By			
1	Number of Fatalities ^{1,2}	Annually	4/14/2016	Number of Fatalities	490.207(a)(1)	8-31 annually	9/22/2022	2/27/annually			
2	Rate of Fatalities ^{1,2}	Annually	4/14/2016	Rate of fatalities per 100 million Vehicle Miles Traveled (VMT)	490.207(a)(2)	8-31 annually	9/22/2022	2/27/annually			
3	Number of Serious Injuries	Annually	4/14/2016	Number of serious injuries	490.207(a)(3)	8-31 annually	9/22/2022	2/27/annually			
4	Rate of Serious Injuries	Annually	4/14/2016	Rate of serious injuries per 100 million Vehicle Miles Traveled (VMT)	490.207(a)(4)	8-31 annually	9/22/2022	2/27/annually			
5	Number of Non-motorized fatalities and non-motorized serious injuries	Annually	4/14/2016	Number of non-motorized fatalities and non-motorized serious injuries	490.207(a)(5)	8-31 annually	9/22/2022	2/27/annually			
6	Percentage of pavements of the Interstate System in Good Condition	4-year	5/20/2017	HPMS	490.307(a)(1)	5/20/2018	4/28/2022	8/19/2022			
7	Percentage of pavements of the Interstate System in Poor Condition	4-year	5/20/2017	HPMS	490.307(a)(2)	5/20/2018	4/28/2022	8/19/2022			
8	Percentage of pavements of the non-Interstate NHS in Good Condition	4-year	5/20/2017	HPMS	490.307(a)(3)	5/20/2018	4/28/2022	8/19/2022			
9	Percentage of pavements of the non-Interstate NHS in Poor Condition	4-year	5/20/2017	HPMS	490/307(a)(4)	5/20/2018	4/28/2022	8/19/2022			
10	Percentage of NHS bridges classified as in Good Condition	4-year	5/20/2017	NBI	490.407(c)(1)	5/20/2018	4/28/2022	8/19/2022			
11	Percentage of NHS bridges classified as in Poor Condition	4-year	5/20/2017	NBI	490.407(c)(2)	5/20/2018	4/28/2022	8/19/2022			
12	Percent of person-miles traveled on the Interstate that are reliable	4-year	2/17/2017	NPMRDS - Level of Travel Time Reliability (LOTTR) at each time period<1.50 / Total Person-Miles	490.507(a)(1)	5/20/2018	4/28/2022	8/19/2022			
13	Percent of person-miles traveled on the non-Interstate NHS that are reliable	4-year	2/17/2017	NPMRDS - Level of Travel Time Reliability (LOTTR) at each time period<1.50 / Total Person Miles	490.507(a)(2)	5/20/2018	4/28/2022	8/19/2022			
14	Truck Travel Time Reliability (TTTR) Index	4-year	2/17/2017	NPMRDS - Sum of Maximum TTTR for each reporting segment / total interstate system miles	490.607	5/20/2018	4/28/2022	8/19/2022			
15	Annual Hours of Peak Hour Excessive Delay (PHED) per capita ³	4-year	2/17/2017	NPMRDS - Travel time at 20 mph or at 60% of the posted speed limit for each reporting segment, whichever is greater	490.707(a)	5/20/2018	4/28/2022	8/19/2022			
16	Percent of Non-Single Occupancy Vehicle (SOV) travel ³	4-year	2/17/2017	ACS Data - Percent of non-SOV travel for an entire urbanized area	490.707(b)	5/20/2018	4/28/2022	8/19/2022			
174	Total CMAQ Emission Reductions ³	4-year	2/17/2017	FHWA CMAQ Public Access System – On Road Mobile Source emissions of PM ^{2.5} , PM ¹⁰ , CO, VOC, and NOx	490.807	5/20/2018	4/28/2022	8/19/2022			
Notes: ¹ Safety	Notes: ¹ Safety Targets are calculated with FARS and HPMS data. ² Calculated using 5-year rolling averages										

²Calculated using 5-year rolling averages.

³Based on current MPO area status and size no reporting requirement exists for LACRPC.

⁴ FHWA and US EPA recognize 4 independent performance measures to establish Total CMAQ Emission Reductions using criteria pollutant and applicable precursors (PM_{2.5}, PM₁₀, CO, VOC, and NOx) as per 23 CFR 490.807.

have been fully integrated and weighted appropriately. The MPO houses a safe community coalition and employs the 5Es¹⁰ of traffic safety with 51 active members. The MPO facilitates safety review team meetings to review fatal and serious injury crashes on a monthly basis. The MPO attends ODOT District safety review team meetings as well.

Annually, the MPO compiles and distributes crash summary reports tracking crashes by frequency, location, density, severity, type of units/modes, posted speeds, drivers by age/gender, impairments, and crash variations by time, day of week, month of year, lighting conditions, and roadway conditions. The MPO has also incorporated and facilitated roadside safety audits at problematic intersections. The MPO identifies candidate locations for HSP funding with ODOT and local stakeholders. The MPO has also worked with ODOT District and LTAP personnel to program and correctly install signage on local American, Bath, Perry and Shawnee township roads. MPO staff have actively participated in the development of various school travel plans and the programming of Safe Routes to School. The MPO posts 12 specific crash metrics on its website to advance community awareness of safety and crash impacts.¹¹

2.3 Infrastructure Condition & National Highway Performance Program^{12,13,14,15}

MAP-21 legislation issued a challenge to establish and implement new requirements for performance management across the transportation system. As part of performance management, recipients of Federal-aid highway funds are to make transportation investments to achieve performance targets that make progress toward national goals. The Secretary worked with state DOTs to develop an asset management plan and establish the minimum level of condition for Interstate pavements in May of 2017.

FHWA responded under the FAST Act by establishing performance measures to assess pavement and bridge conditions on the Interstate System and non-Interstate National Highway System (NHS) for the purpose of carrying out the National Highway Performance Program. The four measures to assess pavement condition are: (1) Percentage of pavements on the Interstate System in Good condition; (2) percentage of pavements on the Interstate System in Poor condition; (3) percentage of pavements on the NHS (excluding the Interstate System) in Good condition; and (4) percentage of pavements on the NHS (excluding the Interstate System) in Poor condition. The two performance measures for assessing bridge conditions adopted in February 2017 include: (1) Percentage of NHS bridges classified as in Good condition; and (2) percentage of NHS bridges classified as in Poor condition.

2.4 Infrastructure Condition: Role/Commitment of MPO

The MPO is cognizant of and has worked to integrate performance measures for road and bridge infrastructure into the 3C metropolitan planning process inclusive of the MPOs Unified Planning Work Program, 2045 Long Range Transportation Plan, and the current FY 2024-2027 Transportation Improvement Program (TIP).

The 2045 Plan recognizes system preservation as a principal priority and has worked to integrate the performance measures and targets into the MPOs annual work program and FY 2024-2027 TIP. The MPO has worked with ODOT District to review and assess the pavement condition ratings

¹⁰ Engineering, Education, Enforcement, Emergency Medical Services, & Evaluation

¹¹ <u>http://www.lacrpc.com/transportation/alcohol-impaired-crash-fatalities</u>. The MPO offers this reference as a sample template of 11 available crash metrics updated annually under "topic center" on the Agency's website.

¹²https://www.federalregister.gov/documents/2017/01/18/2017-00550/national-performance-management-measures-assessingpavement-condition-for-the-national-highway

¹³ U.S.C § 119

¹⁴ U.S.C. § 119(e)

¹⁵ U.S.C. § 150(c) under 23 U.S.C. 119(f)

on higher order roadways of the federal functional classification system across as part of the preparation to every long-range transportation plan and TIP it has produced. In fact, the MPO has touted the advantages of adopting pavement management systems to local governments since 2000. MPO staff worked with local governments to integrate pavement management systems into their long range and strategic planning efforts. The MPO conducted Pavement Condition Studies for the entire street systems in the villages of Beaverdam, Cairo, Elida, Harrod, and Lafayette to support same. And the MPO saluted the efforts of the Allen County Engineer's Office when they undertook and completed a pavement condition analysis of their entire county roadway system. Subsequent to those efforts, the MPO worked with local townships and the Allen County Engineer's Office to replicate the pavement condition study conducted on the county system for the township system using MPO/STP funding. As a result, local governments and the MPO will have much better information to assess, prioritize, and program the most appropriate engineering responses to preserving pavement conditions on the Interstate System, non-Interstate NHS, state and local roadway systems.

The MPO has a GIS-based bridge inventory of local bridges on the National Bridge Inventory as well as those local bridges less than 20 feet in length as established by ODOT and the Allen County Engineer. Collectively, the bridge inventories provide a complete profile of all bridges 10 feet or more and the MPO receives regular updates to ensure a basic understanding of their conditions based on sufficiency ratings. The MPO monitors the sufficiency ratings to determine whether the bridge is structurally deficient or functionally obsolete. And while the MPO has worked to integrate bridge conditions/replacements into the Agency's TIP^{16,17} it has not been as effective at integrating the bridge component into the agency's work program. The MPO has monitored bridge projects, issued floodplain development permits when required, reviewed load limits and occasionally reported out to the public on bridge projects/topics but it has not specifically studied same. The MPO will work with local government and the County Engineering staff to identify the most appropriate way forward.

2.5 Congestion Reduction^{18,19,20,21,22}

As a matter of policy, Congress established the "significant reduction of congestion on the National Highway System" as the 3rd goal of the FAST Act. Performance measures to assess traffic congestion were established in February 2017 and included: (a) Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita; and, (b) Percent of Non-SOV Travel. Traffic congestion is to be measured by the annual hours of PHED per capita on NHS roadways. The threshold for excessive delay is to be based on the travel time at 20 mph or 60% of the posted speed limit travel time, whichever is greater measured in 15-minute intervals. Peak hours are defined as 6-10 a.m. on weekday mornings; the weekday afternoon period is 3-7 p.m. or 4-8 p.m., providing flexibility to DOTs and MPOs. The total excessive delay metric will be weighted by vehicle volumes and occupancy with metrics reported annually for mainline highways on the NHS. Currently, there is no reporting requirement to address congestion due to the small size of the community.

2.6 Congestion Reduction: Role/Commitment of MPO

¹⁶ Village of Spencerville - Culvert Construction/Reconstruction/Repair (PID 94426). The existing culvert for petitioned ditch #1138 was undersized and had deteriorated, causing the roadway to flood and deteriorate. The MPO responded with MPO/STP funding to remediate same. The MPO worked with ODOT and the County Engineer to identify appropriate bridges for the Ohio Bridge Project (PID 97506) wherein 7 bridge projects were bundled together, sold and constructed as per 23 U.S.C. § 144(j).

¹⁷ The FY 2018-2021 programmed reveals \$29.7 million of federal/state/local funds have been programmed to specifically replace bridges/culverts. The allocation of MPO funding made available to the LACRPC is limited, most of the bridge/culvert project funding reflect ODOT sponsored projects.

 ¹⁸ U.S.C. § 150(b)(3)
¹⁹ 23 CFR 490.607
²⁰ 23 CFR 490.707

²¹ 23 CFR 490.711

²² 23 CFR 490.713

Motorists sometimes complain of traffic delays in the Central Business Districts of Lima and Delphos or at specific signals or railroad grade crossings. The MPO accepts that congestion is spurred by various reoccurring and non-reoccurring factors including: traffic incidents, the presence of work zones, weather and special events. The Agency also recognizes that each can be problematic to residents and businesses; and the MPO accepts the need to work with community stakeholders in order to address same. But the MPO has historically focused most of its resources (annual work program, strategic capital improvement programming (TIP) and more long-range planning) to address physical highway features and bottlenecks that cause intermittent disruptions in traffic flow.

The MPO routinely addresses congestion. Annually the Agency documents 24-hour traffic volumes, establishes vehicle turning movements, and establishes the level of service (LOS) experienced at specific problematic intersections. Thereafter, the MPO analyzes traffic crashes at these intersections and conducts sign, signal warrants, and signal timing recommendations as appropriate, before forwarding same to ODOT and the local officials with roadway jurisdiction and responsibilities for their perusal. On a 3-year revolving basis the MPO undertakes Speed & Delay studies of the Interstate, non-interstate NHS, state route and the Federal-Aid eligible urban and rural roadway system to identify potential hot spots for congestion. Thereafter the MPO compares the results of the Speed & Delay studies to the volume to capacity ratios established by the travel demand model before it conducts safety studies on the corridors experiencing congestion to offer additional insights. The MPO has not documented vehicle occupancy independently of Census data.²³ Nor, has the Agency participated in emergency incident management activities.

However frequent/infrequent, the MPO is cognizant of and has worked to mitigate reoccurring congestion across political subdivisions with local government officials and ODOT. The current TIP will reflect projects and financial commitments of the MPO and ODOT to improve/address traffic flow on SR 65,²⁴ SR 309,²⁵ SR 66 and SR 190.²⁶ The MPO also continues to work with and support local, ODOT, ORDC and PUCO officials to improve safety, reduce blocked crossings, identify functionally obsolete railroad bridges, and construct railroad underpasses to address safety and traffic flow concerns. The current TIP will reflect projects and financial commitments of the MPO, ODOT and ORDC to improve/address traffic flow problems related to necessary rail services.²⁷

2.7 System Reliability^{28,29,30}

System Performance Management regulations require State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to establish Travel Time Reliability targets for two performance measures to improve the efficiency of the surface transportation system including: (1) Interstate Travel Time Reliability defined as the percent of person-miles traveled on the Interstate that are reliable; and, (2) Non-Interstate Travel Time Reliability defined as the percent of person-miles traveled on the non-Interstate NHS that are reliable. The level of

²³ ACS 2012-2016 5-Year Estimates; Commute to Work Table: 8.3% carpooled.,5% public transportation.

²⁴ PID 87188 SR 65 Grand to SR 115 in concert with ODOT, City of Lima, American & Bath townships.

²⁵ PID 107748 signal upgrades along SR 309 with ODOT, ACEO and Village of Elida.

²⁶ PID 108373 corridor upgrades in Delphos, with ODOT and City of Delphos.

²⁷ PID 80441 reflects the Elm St Railroad Grade Separation Project and delays experienced on SR 309. PID 104666 reflects safety upgrades at I-75 Interchange 120 and CSX grade crossing at Breese Road. PID 103648 improves IT/communications between the I&O Railroad and the CF&E RR to eliminate delays on SR 309, SR 81 and SR 65.

^{28 23} U.S.C. 150(b)(4)

^{29 &}lt;u>https://www.federalregister.gov/documents/2016/04/22/2016-08014/national-performance-management-measures-assessing-performance-of-the-national-highway-system</u>
Travel Time Reliability is defined as the ratio of the longer travel times (80^{th} percentile) to a "normal" travel time (50^{th} percentile), using data from the Federal Highway Administration's National Performance Management Research Data set. Data is collected in 15-minute segments during four peak periods defined as 6-10 a.m. on weekday mornings; a midday period between 10 a.m. - 4 p.m. weekdays, a weekday afternoon period 4-8 p.m., and weekends 6 am – 8 p.m. The measures are the percent of person-miles traveled on the relevant portion of the NHS that are reliable with 1.5 Travel Time Reliability being reliable and more than 1.5 being considered unreliable.

2.8 System Reliability: Role/Commitment of MPO

Land use in the MPOs planning area is roughly 69 percent agricultural or rural residential. Traffic volumes are well documented; and, both peak hour travel and roadway levels of service are fairly well established for the Interstate, non-Interstate NHS and state route systems. However, employment expansion, and output has resulted in VMT growth in isolated areas. Such factors coupled with limited available roadway capacity is negatively affecting travel time reliability on certain roadway segments. Frustration levels are mounting with respect to those manufacturers and freight operators dependent upon just-in-time time processes.

The MPO has targeted localized congestion with updated signal timing or the integration of left turn lanes; it has also worked with transit to improve on-time reliability of its routes. But the MPO has historically looked at change over longer periods of time and developed plans/projects over longer periods. Addressing daily or hourly variability in travel time has not been targeted. And the MPO has been somewhat remiss in this performance area.

Vehicle based travel time data has exploded across fleet management devices, navigation units and cell phones. And, INRIX and NPMRDS now have the ability to deliver travel time data, averaged over 5 minutes by day, month. Travel times are available for freight-only and for all traffic. However, data reliability is suspect across most of Allen County roadways due to density constraints. The MPO has not developed the internal technical capacity to establish or track travel time in real time. Additional resources will need to be focused on this area of performance management. The MPO will need to tap commercial data using fleet and GPS travel times resources to assess the duration, geographic extent and sources of delay. The MPO will need to address travel by variations in speed and directional flows by day and hour rather than simply volumes.

2.9 Freight Movement & Economic Vitality^{31,32,33}

Collectively, MAP-21 and the FAST Act targeted freight movements and economic vitality as a national goal and the improvement of the National Highway Freight Network, essential to strengthening the ability of rural communities to access national and international trade markets, and support regional economic development. Freight movements on the Interstate System are to be assessed with 1 performance measure: Percent of the Interstate System Mileage Providing for Reliable Truck Travel Time. National Goals 3, 4 and 5 are intrinsically linked. Each look at the Interstate and Non-Interstate NHS system. Each examine aspects of congestion and travel time. And each look to maximize the transportation system's efficiency and effectiveness.

³¹ 23 U.S.C. 150(b)(5)

³² <u>https://www.federalregister.gov/documents/2016/04/22/2016-08014/national-performance-management-measures-assessing-performance-of-the-national-highway-system</u>

2.10 Freight Movement & Economic Vitality: Role/Commitment of MPO

The Interstate and Non-Interstate NHS system is severely restricted in Allen County and ODOT is charged with jurisdictional responsibility for each of the roadway classifications. But the MPO is cognizant of freights importance to the region. The MPO has reviewed the State Freight Plan. The MPO has recognized the importance of the freight in the distribution of goods and services in its long-range transportation plans and corridor plans. The MPO has identified and mapped the freight shippers and suppliers, manufacturing and warehousing activities, mapped freight movements and tracked truck crashes. The MPO is also keenly aware that freight movements are multidimensional and include a variety of public and private stakeholders with different perspectives.

The MPO is currently engaged in documenting the extent of freight movements on specific corridors and has worked to document and establish intermodal connectors with ODOT in the MPOs planning area. More recently the MPO has looked to minimize the cinch points in the local and state route system to enhance freight movements. The 2045 Transportation Plan reflects \$219.8 million of freight-friendly projects.

2.11 Environmental Sustainability^{34,35}

The sixth goal of the Fast Act was perhaps the broadest of the goals as it looked to enhance the performance of the transportation system while protecting and enhancing the natural environment. This goal was supported by the foundation established under previous Transportation Bills and the implications of the Clean Water Act, the Clean Air Act and NEPA.

System performance was captured under the performance measures established under goals 1 thru 5 which worked to define safety, infrastructure conditions, and congestion, as well as travel time reliability and delay. In this case and in light of the 7th goal - the natural environment is more strictly interpreted as measures of air quality, automobile emitted pollutants and CMAQ funding to address NAAQS in areas designated as in non-attainment or maintenance. The performance measure for the purpose of carrying out the CMAQ Program and for State DOTs to use to assess on-road mobile source emissions is "Total Emissions Reduction," which is the 2-year and 4-year cumulative reported emission reductions, for all projects funded by CMAQ funds, of each criteria pollutant and applicable precursors (PM_{2.5}, PM₁₀, CO, VOC, and NOx). Currently, there is no reporting requirement to address air quality as the community is currently in attainment.

2.12 MPOs Interests in Environmental Sustainability³⁶

As stated earlier, the Agency supports a number of functions within its planning area including: (1) land use reviews/permitting of zoning, subdivision, exterior maintenance - codes; (2) environmental reviews/permitting of floodplain, stormwater, wetlands, historic and cultural resources, health, and air quality issues; (3) transportation studies regarding traffic impact studies, corridor and intersection level of service analyses, crash analysis, transit operations, pedestrian safety, bicycle plans, etc. These areas of involvement have provided the MPO a unique opportunity to work to advance transportation and a more livable and sustainable region. Examples of the MPOs efforts and support are documented in the Agency's annual work program, short range transportation improvement program, and long-range transportation plan.

^{34 23} U.S.C. 150(b)(6)

³⁵ <u>https://www.govregs.com/regulations/title23 chapterl part490 subpartH section490.807</u>

³⁶ The MPO prepared the Comprehensive Operational Analysis for the ACRTA (2017) and adopted the West Central Ohio Regional Transportation Coordination Plan (2017) for local paratransit and transit operators. The MPO has also adopted a 2040 Active Transportation Plan (2017) that identifies pedestrian and bicycle travel as a critical component of the transportation system and highlights public transportations as a supporting partner.

The Agency accepts its responsibilities to address air quality and serves Allen County Public Health, the Local Emergency Planning Committee, the Allen County Emergency Management Office and the MPO by monitoring source and non-point source emissions. Agency staffers serve in various environmental capacities. And although, the MPO planning area is currently in conformity with NAAQS and both the 2024-2028 TIP and 2045 Transportation Plan meet the budgets established by State Implementation Plan (SIP) the Agency does not take the NAAQS/SIP benchmarks/requirements lightly.

The MPO has actively supported transit and paratransit operations and active transportation in its work program in order to enhance and expand access to transportation services touting public transportation, ridesharing and mobility services as the means to: (1) Provide additional affordable transportation options; (2) Reduce demand for fuel and reduce vehicle emissions; (3) Promote active transportation modes beneficial to public health; (4) Decrease combined transportation and housing costs; (5) Reduce dedicated parking and support more compact development and walkable land use patterns; (6) Minimize the need for vehicle ownership; (7) Improve reliability of highway travel by minimizing traffic congestion and improving air quality; and, (8) Improve community attractiveness and enhance travel and tourism in the CBDs and parks. These points are advocated by members of Activate Allen County to which the MPO is a founding member.

More recently, the MPO has also expressed interest in using mobility services to blend both traditional public transit with taxis, nonprofit transportation paratransit service providers, private for-profit mobility services, and bike sharing services. The MPO believes that the ability to blend and integrate services will result in: (1) a more equitable distribution of federal funds and transportation services; (2) enhanced mobility for all disadvantaged persons regardless of ability; reduction of air pollutants; (3) increased modal choices; (4) a more sustainable urban and suburban design; (5) an enhanced level of personal mental/physical health; and, (6) quite possibly a more sustainable revenue model for public transportation in which the Transit Authority would be able to support 3rd party vendors. The MPO looks to advance these issues in the near future in an effort to maximize mobility and the efficiency of transportation options while minimizing environmental impacts associated with vehicle emitted pollutants. The 2045 Transportation Plan reflects \$83.8 million in funding in support of public transit and active transportation projects which maintain existing transit services and will add some 83.8 miles of public walkways, paths and bicycle facilities.

2.13 Reduced Project Delivery Delays^{37,38,39}

The last national goal looks to reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices. The FAST Act is replete with references to accelerating project delivery especially those targeting the review of natural, cultural, and historic resources and the approval process involving multiple federal agencies. FHWAs Office has worked to streamline the review process and make the project delivery process more efficient and cost effective thru its Office for Innovative Program Delivery. The Program is centered on (1) Delivering programs and initiatives that build transportation career awareness and improve workforce development, capability and diversity of our nation's transportation workforce; (2) Providing national training

³⁷ <u>https://www.transportation.gov/fastact/project-delivery-factsheet</u>

³⁸ <u>https://www.fhwa.dot.gov/fastact/factsheets/accelprojdelfs.cfm</u>

³⁹ <u>https://www.fhwa.dot.gov/innovativeprograms/</u>

and technical assistance networks to help local governments, tribes and land management agencies enhance roadway networks and create economic opportunity; (3) Providing technical assistance, tools and training in the use of innovative finance and revenue strategies to bridge funding gaps and accelerate project implementation; and, (4) Fostering the accelerated adoptions of innovation across the transportation community. There are no performance measures explicitly tagged to this goal. But that State DOTs, MPOs and local governments were encouraged to review, utilize, adopt, implement and transform previously established practices with new proven, market-ready technologies and innovations.

2.14 MPO's Commitment to Minimizing Delays in Project Delivery

The MPO works to establish an environment of collaboration amongst local governments, ODOT and project stakeholders. The MPOs annual work program and TIP reflect efforts to support project development thru the planning and preliminary engineering stages to include environmental assessments, final engineering and project construction. The MPO works with local project sponsors from the initial idea thru data collection needed for the scoping process.

ODOT District personnel work to expedite the project using a project initiation package and/or LPA scope document. ODOT, the MPO and local project sponsors work to develop the preferred alternative as quickly as possible by pulling preliminary and environmental engineering into the review of alternatives at the onset of the project. If needed, the use of feasibility studies and alternative evaluation reports allow for a quick determination of the complexity of the engineering/documentation processes moving forward. The MPO works with project sponsors, ODOT District and Central Office personnel to establish cost estimates, available funding streams, and to commit MPO STP/CMAQ funding to the project thru the TIP planning process inclusive of project stakeholders.

ODOT has also worked to minimize delays in the right-of-way plans incorporating legal descriptions early to allow the Agency time to review same and avoid delays prior to acquisition. Pushing right of way early in the project development moves up any NEPA clearance and allows federal funding to be spent on right-of-way if approved by the MPO. The MPO works with ODOT Central Office, ODOT District and the project sponsors to ensure that projects are moving forward as expected to meet plan submission, sale and construction dates. ODOT has been a very supportive partner in this process.

SECTION 3 HIGHWAY SYSTEMS PERFORMANCE REPORT

MPOs are required to establish and use a performance-based approach to transportation decision making. Given such MPOs, in cooperation with the State and public transportation operators, shall develop both a long-range transportation plan and short-range Transportation Improvement Program (TIP) through a performance-driven, outcome-based approach.⁴⁰ The MPOs long range transportation plan shall, at a minimum, include: a description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with the MPO planning factors⁴¹ and, a system performance report and subsequent updates evaluating the condition and performance of the transportation in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data.⁴² The MPO will submit safety target data to ODOT annually to support the ODOT reporting requirements, in a manner that is documented and mutually agreed upon by both parties. Based on such criteria the following information is offered as a Systems Performance Report.

3.1 Highway Safety Performance Measures & Targets

Table A-1 identified the effective dates of the various performance measures. Based on the actions of FHWA and ODOT, the MPO established targets for each of the five measures within the HSIP. The MPO worked with ODOT to establish baseline safety conditions and crash severity by mode over the last decade. The MPO worked with ODOT and FHWA to ensure that estimates of VMT and the methodology needed to establish a quantifiable rate and target was fact-based and grounded in the efforts of the MPO and ODOT.⁴³

A Performance Measure Target Setting Tool was provided to the MPOs by ODOT to ensure that crash severity reflecting fatal and serious injuries sustained could be examined across a number of metrics, modes and years. The MPO used the tool and annual mileage MVMT reported by ODOT in its "County Summary: Adjusted County kDVMT's by Functional Class" report to calculate fatality and serious injury rates per 100 MVMT on the Allen County roadway system over 5-year rolling averages. The MPO established the 2022 baseline measures using ODOT driven MVMT and subsequently examined targets of 1%, 2%, and 5% before committing to a 2% target reduction suggesting the targets identified in Table A-2.

TABLE A-2 LACRPC CURRENT FEDERAL-AID HIGHWAY SAFETY PERFORMANCE TARGETS								
Performance Measure	CY – 2023 Performance Target							
Number of Fatalities	12							
Rate of Fatalities	0.92							
Number of Serious Injuries	82							
Rate of Serious Injuries	6.29							
Number of Non-motorized Fatalities and Non-motorized Serious Injuries	9							

^{40 23} CFR 450.306(a)

⁴¹ 23 CFR 450.306(d)

⁴² Table A-1 reveals the performance measures and reporting timelines for each. Of note, given the submission date of this Transportation Plan Update only the Safety Performance Measures are required to be integrated within the document. FTA 5310 operators required to submit Asset Mgmt and Safety Plans will be included by October 2018.

Illustrations reveal the extent of the data provided and used by the MPO to establish the targets for the 5 safety performance measures. Figures A-1 thru A-7 reflect the efforts. Pertinent crash data is presented in subsequent pages.

3.2 Non-Applicable Performance Measures & Targets

Based on Federal guidelines and ODOT guidance the MPO is not required to address air quality performance measures related to reductions in CO, VOC, NOx, PM^{2.5} or PM¹⁰. The MPO is also not required to establish any CMAQ targets, reflecting PHED or non-SOV targets.

3.3 Remaining Highway Performance Measures

The MPO is currently working with ODOT and local stakeholders to establish MPO targets for the remaining performance measures addressing Pavement Condition, bridge condition, NHS travel Time Reliability, and Freight Travel Time Reliability. The MPO is working with the local Transit Authority to address Transit Assets, and safety performance measure targets. Such measures will be addressed as required in subsequent system performance reports, short range transportation improvement programs and long-range transportation plans.













			Injury Cra	sh	Non	Injury Crash		
Year	Fatal	Incap.	Visable	Claimed	PDO	Private Property ²	All Crashes	EDPO Index
2002	19	95	444	554	3119	106	4337	3.1
2003	14	109	501	534	3256	132	4546	2.93
2004	9	67	428	550	3225	104	4383	2.73
2005	15	90	383	502	3039	94	4123	2.91
2006	15	93	374	436	2796	23	3737	3.01
2007	13	107	341	444	2776	66	3747	2.91
2008	9	93	387	424	2755	86	3754	2.79
2009	12	89	341	455	2526	57	3480	3.01
2010	4	109	317	442	2682	48	3602	2.64
2011	12	83	310	372	2398	61	3236	2.99
2012	7	101	282	414	2310	0	3114	3.24
2013	7	114	253	429	2267	0	3070	3.4
2014	9	83	242	425	2326	0	3085	3.01
2015	8	160	278	463	2633	0	3542	3.64
2016	12	134	275	397	2453	0	3271	3.53
2017	11	104	282	360	2415	0	3172	3.22
2018	9	115	234	406	2327	0	3091	3.35
2019	7	70	373	345	2483	0	3278	2.85
2020	10	62	408	330	2086	0	2896	3.08
2021	23	71	403	341	2282	0	3120	3.19
2022	15	65	336	338	2299	0	3053	2.95
20 Yr Avg	11	96	342	427	2593	37	3507	3.07

TABLE A-8									
2022 Crashes – Crash Types by Crashes & Person Injury Severity									
	Cra	ashes		People	_				
Crash Type	Total	% Total	Fatalities	Injuries	All People				
Rear End	543	18%	1	266	1630				
Angle	471	15%	1	296	1307				
Sideswipe - Passing	326	11%	0	73	900				
Backing	147	5%	0	3	316				
Sideswipe - Meeting	1	0%	0	0	2				
Head On	57	2%	0	31	146				
Left-Turn	159	5%	0	83	470				
Right-Turn	88	3%	0	22	229				
Unknown	26	1%	0	4	143				
Collision with Two Plus Vehicles	1818	60%	2	778	5143				
Fixed Object	443	15%	8	156	567				
Animal	443	15%	0	34	666				
Parked Vehicle	225	7%	0	30	273				
Pedestrian	26	1%	2	24	57				
Other Object	17	1%	0	1	19				
Bicycle	10	0%	0	8	20				
Train	1	0%	0	0	1				
Collision with One Vehicle	1165	38%	10	253	1603				
Other Non-Collision	37	1%	0	6	48				
Overturning	33	1%	3	34	46				
Not Stated/Unknown/Other	0	0%	0	0	0				
Other Non-Moving Vehicle	0	0%	0	0	0				
Falling From In/On	0	0%	0	0	0				
Non-Collision	70	2%	3	40	94				
Totals	3053	100%	15	1071	6840				

Map A-1



SECTION 4 PUBLIC TRANSPORTATION – SYSTEM PERFORMANCE REPORT

MAP-21 legislation established the MPO & Statewide Planning Rule to assist public transit operators establish performance-based planning processes and to set targets to measure results driven by TIP/STIP investments. The performance management approach initiated in MAP-21 includes establishing performance measures and setting targets to approximate system performance. Under the FAST Act, FTA worked to better define the State of Good Repair Rule, establish performance measures, and enable targets to be set and tracked as to progress and quantify how well a transit system is performing.

Federal legislation requires public Transit Authorities and MPOs to develop and use a performance-based approach to transportation decision making. In cooperation with the State and public transportation operators, the MPO is to support public transportation in the implementation of long-range and short-range strategic planning efforts. For purposes of this section, the term "public transportation" is defined at 49 U.S.C. 5302 and means regular, continuing shared-ride surface transportation services that are open to the general public or o pen to a segment of the general public defined by age, disability, or low income.

FTA has established a number of performance-based initiatives targeting public transportation including Transit Asset Management and Safety Plans. To date, ODOT has facilitated the flow of information governing the development of performance areas and performance measures and planning requirements from FHWA and FTA to the ACRTA and the MPO. Currently, however, only the Transit Asset Management area has been fleshed out with performance measures, targets and reporting requirements.

4.1 Transit Asset Management

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) mandated—and in 2015 the Fixing America's Surface Transportation Act (FAST) reauthorized—FTA to develop a rule to establish a strategic and systematic process of operating, maintaining and improving public transportation capital assets effectively through their entire life cycle. The TAM final rule requires transit providers and group TAM Plan sponsors to set state of good repair (SGR) performance targets within three months after the effective date of the final rule [49 CFR § 625.45 (b)(1)].

Transit Asset Management (TAM) is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit properties in order to keep our transit networks in a State of Good Repair (SGR). TAM Plan elements generally include an: Inventory of Capital Assets; Condition Assessment; Decision Support Tools; Investment Prioritization; TAM and SGR Policy; Implementation Strategy; List of Key Annual Activities; Identification of Resources; and, an Evaluation Plan. The TAM process anticipates: improved transparency and accountability; optimized capital investment and maintenance decisions; more data-driven maintenance decisions; and, potential safety benefits. The TAM rule applies to all recipients or subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used in the provision of public transportation. Table A-4 is provided to ensure a better understanding of what FTA and FHWA has accomplished, what ODOT has accomplished and what remains for the Transit Authority and the MPO to accomplish.

	TABLE A-4 TRANSIT ASSET MANAGEMENT – STATE OF GOOD REPAIR ACRTA/MPO TAM PLANNING TABLE								
Rule		Time Period Reported	Final Rule Effective	Calculation	Source	ACRTA Targets Established	MPO Targets Established	ODOT Reporting By	MPO Reporting By
1	Rolling Stock	Annually, or 1-4 years	10/01/2016	The percentage of revenue vehicles (by type) that exceed the useful life benchmark.	49 CFR 625.43	1/1/2017	8/23/2018	LRSTP & STIP Updates or Amendments after 10/1/2018	MTP & TIP Updates or Amendments after 10/1/2018 & Annually by January 1 st 2019 Thereafter
2	Equipment	Annually, or 1-4 years	10/01/2016	The percentage of non-revenue vehicles that exceed ULB.	49 CFR 625.43	1/1/2017	8/23/2018	LRSTP & STIP Updates or Amendments after 10/1/2018	MTP & TIP Updates or Amendments after 10/1/2018 & Annually by January 1 st 2019 Thereafter
з	Facilities	Annually, or 1-4 years	10/01/2016	The percentage of facilities (that are rated less than 3.0 on the TERM Scale.	49 CFR 625.43	1/1/2017	8/23/2018	LRSTP & STIP Updates or Amendments after 10/1/2018	MTP & TIP Updates or Amendments after 10/1/2018 & Annually by January 1 st 2019 Thereafter
4	Infrastructure ¹	Annually, or 1-4 years	10/01/2016	The percentage of track segments that have restrictions. Track segments are measured to the nearest .01 mile.	49 CFR 625.43	1/1/2017	8/23/2018	LRSTP & STIP Updates or Amendments after 10/1/2018	MTP & TIP Updates or Amendments after 10/1/2018 & Annually by January 1 st 2019 Thereafter
Not	e: ¹ The Transit Au	uthority has no	track-type serv	ices or infrastructure.					

4.2 ACRTA Roles & Responsibilities

The Allen County Regional Transit Authority (ACRTA) is a Tier II provider. The ACRTA developed an inventory, condition assessment and investment prioritization process for future investments inclusive of all capital assets including service vehicles, rolling stock, passenger/maintenance facilities, support/parking facilities, and equipment greater than \$50,000 in value owned by the Agency (whether purchased with federal funding or not). The Transit Authority used the FTA Transit Asset Management Guide for Tier II Providers as a tool to develop their TAM Plan and performance measure targets. The Transit Authority used their asset inventory sheets, inspection checklists outlining preventative maintenance activities, internal reports on asset conditions, manufacturers manuals and warranty information for original equipment, existing SOPs, and replacement policies/protocols for vehicles and equipment to develop conditions and replacement costs for its assets by class and forecasts to support a prioritization of warranted investments/projects. The Transit Authority developed a fiscally constrained TAM Plan based on "useful life" benchmarks established by FTA. The ACRTA has shared the performance targets, condition assessment and investment strategies with ODOT and the MPO. The Transit Authority

submitted the SGR Targets in November 2017. Table A-5 identifies the various Performance Measure Targets for the 2019 thru 2023 period.

TABLE A-5 PERFORMANCE TARGETS & MEASURES									
Asset Category - Performance Measure	Asset Class	2019 Target	2020 Target	2021 Target	2022 Target	2023 Target			
REVENUE VEHICLES		1	10.800		101800	10.900			
Age - % of revenue vehicles	BU - Bus	15%	20%	25%	15%	20%			
within a particular asset class that	MB - Mini-bus	45%	45%	45%	25%	25%			
have met or exceeded their	MV - Mini-van	5%	10%	25%	25%	50%			
Useful Life Benchmark (ULB)	VN - Van	5%	25%	25%	25%	25%			
EQUIPMENT									
Age - % of vehicles that have met or exceeded their Useful	Non Revenue/ Service Automobile	5%	10%	15%	25%	100%			
Life Benchmark (ULB)	Trucks and other Rubber Tire Vehicles	10%	20%	50%	100%	100%			
FACILITIES						•			
Condition - % of facilities with a	Administration	10%	10%	20%	20%	50%			
condition rating below 3.0 on the	Maintenance	100%	100%	100%	50%	50%			
Requirements Model (TERM)	Parking Structures	100%	100%	100%	50%	50%			
Scale	Passenger Facilities	20%	20%	25%	25%	50%			

4.3 MPO Roles & Responsibilities

The MPO and ACRTA staff are collectively monitoring vehicle conditions and available funding to maintain transit services and facilities to ensure a safe and reliable vehicle fleet/services. The TAM was developed to support capital improvement investments and to be updated regularly to coincide with the MPOs Transportation Improvement Program (TIP) and the ODOT TIP (STIP). The MPO routinely prepares a Comprehensive Operational Analysis⁴⁴ for the Transit Authority detailing performance by type of service. Within the report the MPO establishes an overview of capital assets including rolling stock by age and mileage. The MPO works with the Transit Authority to develop a 5-year capital improvement plan for its assets – often referenced as a Transit Development Plan. The COA provides the rationale and justification for projects to move onto the MPOs fiscally constrained TIP. As such the MPO has tracked the ACRTAs investment strategies and capital improvement program for integration within the MPOs TIP and 2045 Transportation Update. Table A-6 identifies warranted investment priorities.

TABLE A-6 INVESTMENT PRIORITIES									
Project Year Project Name Asset Category Asset Class Cost Priority									
2025	Fixed Stops	Facilities	Facilities	350,000	Medium				
2026	Bus Acquisition	Acquisition Revenue Vehicles		570,000	High				
2027	Fixed Stops	Facilities	Facilities	350,000	High				

4.4 Remaining Transit Performance Measures

The ACRTA and the MPO are currently working with ODOT and local stakeholders to address and establish transit security issues, potential risks and targets to support development of the public transit safety plan. Such measures will be addressed as required in subsequent system performance reports, short range transportation improvement programs and long-range transportation plans.

⁴⁴ <u>http://www.lacrpc.com/pdfs/FY%202018-2022%20Comprehensive%20Operational%20Analysis%20and%20Management%20Plan</u> --COMPLETE.pdf

APPENDIX B

SOCIAL, ECONOMIC AND ENVIRONMENTAL JUSTICE ANALYSIS: AN ASSESSMENT OF THE 2045 LONG RANGE TRANSPORTATION PLAN



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SECTION 1 INTRODUCTION

This Social, Economic and Environmental Justice Analysis is offered to provide additional insights into project impacts based on the characteristics of each of the projects to satisfy federal planning and regulatory standards. The purpose of this appendix to the 2045 Long Range Transportation Plan Update is to support Environmental Justice (EJ) regulatory requirements in light of Executive Order 12898, as well as aspects of Title VI of the Civil Rights Act of 1964 (Title VI)¹ and the National Environmental Policy Act of 1969 (NEPA).^{2,3}

The primary objective of this document is to present pertinent information regarding social, economic and environmental issues within Allen County that might impact transportation plans, program or projects. This assessment is a general overview - a tool to be used specifically for highway system analysis. The document does not substitute for Environmental Impact Studies (EIS) required for individual projects/programs. This assessment does not provide recommendations or conclusions regarding any specific project, plan or program. This assessment is to provide basic descriptions of the environmental setting, and/or a preliminary identification of possible environmental impacts and insights as to environmental mitigation. The assessment is simply a tool to be used to assist the transportation planning process; identifying potential impacts and the need for alternatives long before the projects are programmed.

This analysis is threefold: (1) to present a demographic profile of the transportationally disadvantaged populations; (2) to assess the performance of the Plan over the 20-year horizon period in terms of regional accessibility to employment opportunities; and, (3) to review the impact of the Plan on identified populations in order to address disproportionate adverse impacts. The analysis concludes with findings and recommendations aimed at improving future analyses.

1.1 Metropolitan Planning Organizations Planning Requirements

Metropolitan Planning Organizations (MPOs) are intended to serve as the primary forum where transit providers, local agencies and the public develop local transportation plans and programs that address a metropolitan area's transportation needs. MPOs are charged with assisting local communities understand how the Clean Air Act, Clean Water Act, Title VI, EJ, and NEPA can improve the planning and decision-making process. In order to affect this understanding, MPOs have the responsibility of: (1) enhancing their analytical capabilities to ensure that transportation plans, including Transportation Improvement Programs (TIPs), comply with NEPA and EJ requirements; (2) identify archeological, cultural or historical sites as well as floodplains, wetlands, prime farm ground or other environmentally sensitive areas are located relative to local transportation projects; (3) identify residential, employment, and transportation patterns of low-income and minority populations so that affected/interested parties can fully participate in the planning process, their needs can be considered and the benefits and burdens of transportation improvement process to include interested stakeholders including low-income and minority populations in the decision making process.

¹ 42 U.S.C. 2000(d)(1)

² 42 U.S.C. 4321

³23 CFR Part 771



TABLE B-1 DEMOGRAPHIC SUMMARY OF CENSUS TRACTS									
Census Tract	Total Population	Percent Minority	Percent over 65	Percent Mobility Limited	Percent Below Poverty Level	Percent HH w/ No Vehicle Available			
Allen County	102,206	21.0%	17.7%	7.80%	14.8%	8.4%			
101	4,126	5.1%	23.5%	7.0%	2.7%	3.1%			
102	3,812	1.9%	16.7%	5.3%	5.4%	0.5%			
103	1,600	1.6%	21.0%	5.4%	2.0%	2.3%			
106	5,128	3.4%	17.4%	7.6%	7.8%	7.6%			
108.01	4,453	6.2%	26.4%	6.7%	4.2%	2.9%			
108.02	3,602	19.0%	18.0%	5.8%	5.3%	7.1%			
109	4,545	13.3%	23.8%	10.9%	11.5%	7.6%			
110	5,437	29.2%	16.4%	6.2%	27.0%	13.0%			
112	2,843	25.7%	10.5%	7.0%	15.1%	3.8%			
113.01	4,538	9.9%	21.5%	3.7%	12.7%	3.6%			
113.02	2,771	6.8%	9.4%	2.5%	1.7%	3.7%			
114	3,143	1.6%	17.8%	6.4%	5.3%	3.0%			
115	2,757	2.3%	17.7%	7.2%	4.9%	0.9%			
116	2,579	6.5%	23.0%	11.5%	10.7%	5.4%			
118	2,298	12.3%	21.0%	6.6%	4.4%	0.4%			
119	3,089	7.9%	22.2%	9.4%	5.5%	9.9%			
120	2,593	7.6%	23.6%	3.8%	1.9%	2.3%			
121	3,438	17.9%	16.0%	5.3%	2.2%	1.7%			
122	3,338	34.7%	17.5%	10.6%	22.4%	16.5%			
123	3,893	23.5%	14.6%	12.2%	12.0%	12.3%			
124	2,466	25.5%	12.9%	13.3%	24.6%	12.5%			
126	1,742	28.2%	12.8%	8.5%	29.4%	4.2%			
127	1,481	25.5%	11.0%	9.8%	31.3%	17.9%			
129	1,668	41.5%	11.4%	9.3%	48.5%	21.4%			
130	4,005	28.5%	17.6%	11.5%	17.6%	11.5%			
131	2,343	21.2%	12.2%	8.3%	3.2%	3.9%			
132	1,827	28.1%	10.5%	3.4%	7.3%	2.0%			
133	1,352	40.4%	21.9%	8.9%	22.1%	10.8%			
134	2,124	39.6%	10.6%	12.8%	40.2%	27.7%			
136	1,182	57.9%	8.7%	13.8%	33.8%	22.0%			
137	1,095	49.6%	10.8%	19.0%	41.5%	23.5%			
138	2,614	65.9%	13.9%	11.3%	20.3%	17.2%			
139	3,313	0.8%	19.6%	13.1%	8.7%	4.7%			
140	3,316	5.9%	23.1%	10.9%	5.4%	5.8%			
141	1,695	37.5%	16.2%	14.8%	28.1%	34.0%			
13*	5,391	4.3%	16.0%	4.7%	8.5%	2.1%			
205**	3,127	11.7%	17.5%	8.5%	11.1%	3.8%			

** Van Wert County Census Tract

1.2 The Federal Regulatory Framework: NEPA & EJ

Today, with the evolution of the transportation planning process, planners must assess the impact of project programming with respect to various interdependent and supporting federal policies. NEPA requires that a "systematic, interdisciplinary approach" be implemented to assure that environmental and community factors are considered in the decision-making process. But guidance is abstract.⁴ Planners need to be careful to consider the importance of providing for a "safe, healthful and aesthetically pleasing surrounding" as required by NEPA when federal funds are utilized.⁵ Collectively, these regulatory policies ensure that every transportation project considers the human environment both built and natural.⁶

1.2.1 Environmental Justice Requirements⁷

A 1994 Presidential Executive Order directed federal agencies to make EJ part of their mission by identifying and addressing the effects of all programs, policies, and activities on "minority populations and low-income populations." The United States Department of Transportation (USDOT) EJ initiatives expect to accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility. More recently, there has been a call for full and fair public participation in the transportation planning process to prevent the denial of, or reduction in, benefits to minority and low-income populations, and the minimization of disproportionately high and adverse social, economic and/or environmental impacts of transportation services, programs or projects on minority and low-income populations.

In 1997, USDOT issued its final "Order to Address Environmental Justice in Minority Populations and Low-income Populations" to summarize and expand upon the requirements established earlier under Executive Order 12898. The USDOT final Order requires full and fair public participation in the transportation planning process⁸, prevents the denial of, or reduction in, benefits to minority and low-income populations, and the avoidance of disproportionately high and adverse social, economic and/or environmental impacts of transportation services, programs or projects on minority and low-income populations.⁹ Rules released in the Spring of 2000 expanded EJ regulations to other populations which include those suffering disabilities, the elderly and those discriminated against because of gender or sexual orientation.¹⁰ In June 2012 FHWA released a directive regarding the analyses and testing of programs and policies to prevent disproportionately high and adverse effects on minority and low income populations and to achieve a more equitable distribution of benefits and burdens. ¹¹

The USDOT order applies to all policies, programs and activities that are undertaken, funded, or approved by the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) or other USDOT components including systems planning, metropolitan and statewide planning, project development, National Environmental Policy Act (NEPA) reviews, right-of-way, construction, operations and/or maintenance. Federal agencies are expected to ensure that EJ considerations are integral to all Surface Transportation Programs (STP). FHWA and FTA are to ensure that EJ requirements are

⁴ https://www.osti.gov/biblio/6107844-systematic-interdisciplinary-approach-nepa-compliance-programs ⁵ 42 U.S.C. 4331(b)(2)

⁶ https://www.fhwa.dot.gov/publications/publicroads/16marapr/02.cfm

⁷ https://www.transportation.gov/sites/dot.gov/files/docs/eo12898.pdf

⁸ CFR 450.316 (a)

 $^{^{9}} https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/index.cfm$

 $^{^{\}rm 10}\,https://www.fhwa.dot.gov/legsregs/directives/orders/664023a.cfm$

¹¹https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/

understood and implemented in statewide and metropolitan planning activities. The federal agencies are also to take actions to identify effective practices, potential models and other technical assistance resources to promote the integration of EJ in all planning, development and implementation activities. As State Departments of Transportation (DOT) allocate resources from various federal-aid programs they are to ensure that State Transportation Improvement Programs (STIP's) satisfy the letter and intent of EJ principles. State DOT's are charged with the responsibility of developing technical capabilities to assess the benefits and/or adverse effects of transportation projects and to develop procedures and measures to further EJ analyses.

1.3 Public Transit Agencies & Environmental Justice

Public transit providers offer mobility to all citizens whether they own a motor vehicle or not. Public transit provides an essential service for many low-income, elderly, disabled and minority populations who have no other way to travel to work, shopping, child care, medical appointments or other destinations. Transit providers are offered the following guidance from USDOT on EJ requirements: (1) ensure that new investments and changes in transit facilities, services, maintenance, and vehicle replacement deliver equitable levels of service and benefits to minority and low-income populations; (2) avoid, minimize or mitigate disproportionately high and adverse effects on minority and low-income populations; and, (3) enhance public involvement activities to identify and address the needs of the minority and low-income populations in making transportation decisions.

The MPO and Transit Authority carry out the metropolitan planning process in a coordinated and collaborative manner. ODOT and the Transit Authority recognize the value of the planning conducted by the MPO and transportation and have supported the metropolitan transportation planning process financially. As evidence of its commitment to the metropolitan transportation planning process, the MPO prepared the coordinated public transit-human services transportation plan for west central Ohio12 as required by 49 U.S.C. 5310.

¹² http://www.lacrpc.com/pdfs/West%20Central%20Ohio%20Regional%20Transportation%20Coordination%20Plan--COMPLETE--December%202017.pdf; and, http://www.lacrpc.com/pdfs/Appendices--COMPLETE--December%202017.pdf

SECTION 2 SEE ANALYSIS OF THE 2045 TRANSPORTATION PLAN UPDATE

Based on the available guidance from USDOT, as well as information from FHWA and ODOT, the Lima-Allen County Regional Planning Commission (LACRPC), as the MPO, and the Allen County Regional Transit Authority (ACRTA), as the Public Transit Agency, are expected to address several points pertinent to EJ, NEPA and Title VI requirements including: (A) whether the planning process has developed a demographic profile of the metropolitan area which incorporates the location of various socio-economic groups encompassing low income and minority populations; and, (B) whether the planning process has developed an analytical operation to assess benefits/burdens of transportation system investments; and, (C) whether disproportionate benefits are borne by the various socioeconomic groups. In order to comply with the stated expectations, the following analysis: (1) identifies each of the projects recommended in the 2045 Transportation Plan; (2) presents a demographic profile of the transportationally disadvantaged populations with respect to the 2045 Plan's recommended projects; and, (3) identifies potentially high and adverse social, economic and/or environmental impacts of the 2045 Transportation Plan's recommended projects.

2.1 The Lima Urbanized Area & the Transportationally Disadvantaged

Transportationally disadvantaged populations were identified and targeted for analysis to assess Title VI, NEPA and EJ regulatory compliance. Targeted populations included minority groups, the elderly, low-income residents, persons with mobility limitations, and persons without access to motor vehicles. Various demographic indices compiled at both political subdivision and the census tract level for the Lima Urbanized Area. Data contained in this analysis reflects 2020 Decennial Census estimates. Subsequent maps establish the concentrations of the transportation disadvantaged with respect to specific projects recommended in the 2045 Transportation Plan projects within the Lima Urbanized Area.

2.1.1 Minority Populations

For purposes of this analysis, minority populations were identified as those persons who were: Black, Hispanic, Asian, American Indian/Native Alaskans or "Other." Using 2020 Decennial Census data, statistics of minority populations were calculated for each census tract location. Further inspection of the data reveals that the proportion of minority populations at the County level was 22.03%, respectively. However, Lima's minority population was much larger at 40.81% of the total population. Map B-1 identifies the 2045 Transportation Plan's recommended projects within Lima's Urbanized Area with respect to the proportion of the minority population by census tract.

2.1.2 Elderly Population

Elderly persons (those persons aged 65 years or older) were also identified for purposes of this analysis and assessed at various geographic levels. In 2020, the elderly population accounted for roughly 17% of Allen County's total population. Map B-2 identifies the 2045 Transportation Plan's recommended projects within the Urbanized Area with respect to the proportion of elderly persons by census tract.

2.1.3 Mobility Limited Population

For purposes of this analysis, the total number of mobility impaired residents was identified as those persons who suffered from a disability for at least 6 months, which made it difficult to travel outside of the home alone. It should be noted that mobility limitations reflect only those non-institutionalized persons 5 of age or older. Roughly 17% of Allen County is considered mobility impaired. The City of Lima however, had an even higher proportion of its residents identified as having a mobility limitation at 19.5%. Map B-3 identifies the location of the mobility limited population by census tract for the Lima Urbanized Area.

2.1.4 Population below the Poverty Level

The data regarding poverty status was developed from a matrix based on family size or the total number of unrelated individuals against total income; reflecting poverty thresholds at higher incomes for larger family units. The average poverty threshold for a family of four persons is \$24,600 in 2020. Poverty status was determined for all persons except institutionalized persons, persons in military quarters/college dormitories as well as individuals under 15 years of age. According to the 2020 Decennial Census estimates the proportion of persons living below the poverty level in Allen County is 13%. Map B-4 identifies the plan's recommended projects by poverty status using census tract boundaries.

2.1.5 Population without Access to a Motor Vehicle

This analysis indicates those persons residing in households without access to a motor vehicle in order to better address their transportation needs and concerns. For this analysis, the number of households with a specified number of operable cars, vans and trucks of one ton or less and available for use by the household were recorded. It should be noted that the vehicle availability data was collected from the 2020 Decennial Census. In 2020, 7.5% of households in Allen County were without access to a motor vehicle. Tabulations for the City of Lima indicated 14.7% of households without access to a motor vehicle. Map B-5 recognizes the 2045 Plan's recommended transportation projects by vehicle accessibility at the census tract level.











2.2 Project Characteristics & Impact

In accordance with federal policy requirements, a project utilizing federal funding must be assessed in terms of its impact on specific, target demographics. It should be noted that the characteristics of the project as well as the scope of the project may affect the criteria used to perform the assessment as well as the resulting assessed impact of the project. Transportation projects can integrate various components which improve or detract accessibility for motorists, bicyclists as well as pedestrians. For example, a project to increase vehicular capacity might include the addition of roadway lanes, which may increase the average daily traffic (ADT) but decrease pedestrian accessibility due to the increase in vehicular traffic. Conversely, if provisions for pedestrians are incorporated into the project such as appropriate signalization for pedestrian or the addition of pedestrian crosswalks, pedestrian accessibility could be improved regardless of the increase in vehicular capacity. Furthermore, roadway rehabilitation projects may also incorporate curbs, gutters and sidewalks, which can improve the roadway for means of vehicular travel while subsequently increasing pedestrian accessibility and safety, as well. Roadway improvements such as the widening of a roadway or the addition of bicycle paths has shown to increase bicyclist safety and accessibility to the larger transportation system. In addition to roadway improvements, projects that improve area lighting can lead to an increase in pedestrian accessibility by offering a sense of safety and security.

2.2.1 Project Characteristics

Project characteristics are categorized as capacity, safety, transportation systems management and operations (SMO) and/or enhancement. Capacity projects are those which are expected to increase vehicular traffic flow, improve travel time and minimize delay. Capacity projects include those projects where additional through lanes are added, or intersection receive additional lanes. Safety projects have been identified as deficient based on the frequency of crashes or the rate of crashes. SMO projects are those projects which do not add additional lanes but rather target deficient roadways/intersections with respect to surface condition or lane width; SMO projects target system efficiency and can include signalization improvements. Enhancement projects are categorized as those projects which enhance accessibility by modes other than motor vehicles or where improvements would enhance the safety, health and/or aesthetics of the resident population. Transportation projects incorporating various characteristics can support various modes. Several projects identified in the 2045 Long Range Transportation Plan integrate signals, sidewalk installations including curbs and ramps pursuant to ADA requirements, and overhead lighting to facilitate pedestrian and transit modes.

Transportation projects by their inherent qualities (transit, pedestrian, bicycle, bridge, traffic operations, traffic capacity, roadway rehabilitation projects) can be used to establish the project characteristics but not necessarily the parameters of the project's impact. Due to the nature and scope of a particular project its introduction into the larger transportation system may have a larger impact than the project termini. For example, the completion of an absent link within the sidewalk system or the introduction of a transit route may have a larger impact on commuter travel than simply the termini of the project.

2.2.2 Project Impacts

Transportation projects will also impact the social, economic and environmental aspects of the community. Social impacts are categorized as those which affect the common welfare of a group including their day-to-day activities. Economic impacts are those which impact the production, distribution or consumption of wealth or the satisfaction of material wants and needs of people. Environmental impacts are those which influence one's immediate surroundings and/or future development opportunities. A project's impact can be benign, positive and/or negative depending on the type, scope and location of a project.

Social impacts address the livability of the community. From this perspective, traffic projects can be assessed as to whether they support, hinder or have no impact on existing facilities/communities. Traffic projects can also have mixed impacts. For example, traffic projects could provide increased accessibility to a certain park allowing a larger segment of the population to participate in recreational activities while compromising the relative tranquility of a neighborhood adjacent to the park. Traffic projects aimed at increasing capacity could improve the response time of law enforcement and emergency medical personnel in specific neighborhoods and thereby improve the quality of life within the respective neighborhood, as well. In this analysis, oil and gas transmission lines are identified as economic assets because various economic activities are directly related to their presence and location. Electric and gas transmission infrastructure is established along corridors which typically enjoy restricted movements and where future transportation corridors may be developed. However, pipeline and transmission lines may pose difficulties for roadway widening or alignment projects. Freight facilities also have a major economic impact on the local community enabling the distribution of goods across the community. Truck routes are used to facilitate heavy traffic and also pose implications for roadway expansion projects including increased lane width, turning radii, air quality and noise/vibration. The larger freight facilities have implications for the overall transportation system and the livability of certain neighborhoods. Economic impacts were also assessed, documenting project specific impacts at the regional and local level.

Other areas of particular interest are those areas susceptible to hazardous flooding and erosion. Wetlands are delineated according to the USDI and recorded in the National Wetlands Inventory, and floodplains are those areas that pose a risk for hazardous flooding identified by the Federal Emergency Management Agency (FEMA). The mapped results of the USDI Wetlands Inventory (1994) are based upon survey work conducted by the United States Fish & Wildlife Service using remote sensing and information obtained from United States Geological Survey (USGS) quadrangle maps. On May 2, 2013 the Allen County Commissioners adopted the updated Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Maps (FIRMs). The FIS and FIRMs are predicated on detailed reports compiled by Allen County, in partnership with FEMA and the United States Geological Survey (USGS), as part of the Flood Map Modernization Program. Because of the nature and size of the respective floodplain delineations, many of the wetlands areas are indistinguishable from the larger floodplain. The map fails to identify high hazard floodplain areas within the City of Lima. Flooding has been confined largely to areas outside of the City since the flood of 1913 when thereafter channels of the Ottawa River were realigned and new bridges built minimized flooding.



2.3 Regional Accessibility in Terms of Employment

The second objective of this analysis is to assess the performance of the 2045 Plan Update over the 20-year horizon period in terms of regional accessibility to employment opportunities. Herein, accessibility is defined as the nature and scope of movement between locations, or the effort exerted in terms of time expended traveling between one location and another. Accessibility is offered as a means to quantitatively evaluate the effectiveness of the Plan and its potential impact on targeted populations. The primary factors which determine accessibility to employment opportunities are roadway system characteristics and the location of employment opportunities. Accessibility offers a measure of the potential job pool able to be reached in a specific amount of time from a given residential location.

This exercise is predicated on the identification and location of the targeted populations as documented in Section 2.1. This exercise also relies upon the TDM for the Allen County Planning Area developed by ODOT to document travel time between Traffic Analysis Zones (TAZ's). Accessibility is offered as a measure that captures both travel demand and land use impacts. Such an analysis traditionally employs variables such as population, employment, land use and roadway characteristics. Accessibility can then be measured in terms of travel time between locations by trip purpose. This exercise analyzes travel time between residency and employment.

Mean travel time is defined as the total number of minutes that it usually took a person to get from home to work. The elapsed time includes time spent waiting for public transportation, picking up passengers in carpools, and time spent in other activities related to getting to work. Travel time data represents commuting time for workers 16 years of age or older. As stated earlier, the travel time incurred between one's place of residency and employment is in large measure determined by the distance between the two locations, land use and roadway characteristics. The mean travel time for residents living and working inside and outside the County was calculated by the TDM at 18.3 minutes.

As a measure of the Plan's performance over the 20-year horizon period, modeling activities utilized projected population and employment figures by TAZ and the 2045 roadway improvement project schedule as developed during the Plan's public involvement process. With those recommended projects implemented, it is clear that the 2045 project schedule has an overall positive impact on the commute times for those living and working in Allen County. Table C-5 outlines the changes in commute time over the 2010-2045 period by TAZ and target populations.

TABLE B-2											
			BY TAZ BY TA		ATION & C		0-2045 PE IG CHARA	CTERISTICS			
Traffic Analysis	Change in	Target P	opulation	Less Than 18 Mean Commu	3.3 Minute uting Time	Traffic Analvsis	Change in	Target P	opulation	Less Than Mean Com	18.3 Minute muting Time
Zone (TAZ)	Commute Time (min)	Poverty Concentration	Minority Concentration	Current System	2040 Build	Zone (TAZ)	Commute Time (min)	Poverty Concentration	Minority Concentration	Current System	2040 Build
1	-0.135	Х	x	Х	х	95	-0.044	Х	Х	Х	Х
92	-0.501	Х	x	х	х	96	-0.011	х	Х	Х	х
42	-0.342	х	x	Х	х	97	-0.124	Х	Х	Х	Х
12	-0.331	х	X	Х	х	98	0.095	Х	Х	Х	Х
180	-0.241	х	X	Х	Х	108	0.185	Х	Х	Х	Х
9	-0.236	х	x	Х	Х	109	0.194	Х	Х	Х	Х
171	-0.192	х	x	Х	х	110	0.203	Х	Х	Х	Х
6	-0.170	Х	x	Х	х	111	0.000	Х	Х	Х	Х
93	-0.170	Х	X	Х	Х	112	-0.018		Х	Х	Х
59	-0.168	Х	X	Х	Х	113	0.013	Х	Х	Х	Х
57	-0.148	Х	X	Х	Х	114	0.183	Х	Х	Х	Х
13	-0.146	Х	X	Х	Х	115	-0.049		Х	Х	Х
35	-0.139	X	X	Х	Х	130	-0.009	Х	Х	Х	Х
74	-0.139	X	X	Х	Х	131	-0.093	Х	Х	Х	Х
169	-0.130	×	X	X	X	132	-0.020	X	X	X	X
56	-0.128	X	X	X	X	133	0.091	X	X	X	X
77	-0.124	X	X	X	X	134	-0.020	X	X	X	X
97	-0.124	*	×	×	~ 	135	0.148	×	×	~ 	×
2	-0.115	×	×	×	×	136	-0.009	×	×	~ X	×
3	-0.106	×	×	x	x	137	-0.011	x	x	×	x
70 60	-0.099	×	×	x	x	138	-0.015	x	x	x	x
121	-0.095	X	X	X	X	140	-0.071	X	X	X	X
11	-0.093	×	x	X	x	140	-0.022		X	X	X
139	-0.071	×	x	Х	x	144	0.024	X	Х	Х	Х
14	-0.064	x	x	Х	x	145	0.007	X	Х	Х	Х
5	-0.062	X	x	X	х	146	-0.002	X	Х	Х	Х
75	-0.060	х	х	х	х	147	0.031	Х	Х	Х	Х
170	-0.060	х	X	Х	х	163	-0.002	Х	Х	Х	Х
175	-0.053	х	x	Х	Х	164	0.033	Х	Х	Х	Х
115	-0.049		x	Х	х	165	0.068	Х	Х	Х	Х
55	-0.044	Х	х	Х	х	166	0.066		Х	Х	Х
95	-0.044	Х	Х	Х	Х	167	-0.002		Х	Х	Х
19	-0.042	Х	X	Х	Х	169	-0.130	Х	Х	Х	Х
27	-0.042		X	Х	Х	170	-0.060	Х	Х	Х	Х
78	-0.038	X	X	Х	Х	171	-0.192	Х	Х	Х	Х
7	-0.033	X	X	X	X	175	-0.053	X	X	X	X
53	-0.026	X	X	X	X	176	-0.024	X	X	X	X
190	-0.026	X	X	X	X	177	0.115	X	X	X	X
176	-0.024	× ×	×	×	× ×	178	0.172	×	X	×	×
140	-0.022	×	X	×	× ×	1/9	-0.004	×	X	×	×
132	-0.020	×	×	×	×	180	-0.241	×	x	×	×
134	-0.020	×	× ×	×	×	101	0.000	×	×	×	×
112	-0.018	~	x	x	x	182	0.009	X	x	X	x
128	-0.016	Х	x	x	x	18/	0.055	x	x	X	x
54	-0.013	X	x	X	x	185	0.119	X	X	X	X
34	-0.011	Х	Х	x	x	186	0.135	x	х	х	x
96	-0.011	Х	х	x	x	187	0.106	x	х	х	x
137	-0.011	Х	X	х	x	188	0.004	х	Х	Х	x
198	-0.011	Х	Х	Х	х	189	-0.009	Х	Х	Х	х
130	-0.009	Х	х	х	х	190	-0.026	Х	х	Х	х
136	-0.009	Х	х	х	x	191	-0.004	х	х	Х	х
143	-0.009		Х	Х	х	194	0.031	Х	Х	Х	х
189	-0.009	Х	Х	х	х	196	-0.007	х	х	Х	х

TABLE B-2 (cont)											
						E OVER 2	010-2045 F		•		
			BIIAZBIIA		LATION 8			RACTERISTIC	5		
Traffic Analysis	Change in Commute	Target Po	opulation	Less Than 18 Mean Comm	3.3 Minute uting Time	Traffic Analysis	Change in Commute	Target P	opulation	Less Than Mean Com	18.3 Minute muting Time
Zone (TAZ)	Time (min)	Poverty Concentration	Minority Concentration	Current System	2040 Build	Zone (TAZ)	Time (min)	Poverty Concentration	Minority Concentration	Current System	2040 Build
196	-0.007	Х	Х	Х	х	197	0.004	х	Х	Х	Х
179	-0.004	Х	Х	Х	х	198	-0.011	Х	Х	Х	Х
191	-0.004	Х	Х	Х	х	204	0.031	х	Х	Х	Х
146	-0.002	х	Х	Х	х	208	0.011	х	Х	Х	Х
163	-0.002	Х	Х	Х	х	135	0.148	Х	Х	Х	Х
167	-0.002		X	Х	Х	178	0.172	Х	Х	Х	Х
17	0.000	X	Х	Х	Х	114	0.183	Х	Х	Х	Х
111	0.000	X	X	X	X	108	0.185	X	X	X	X
18	0.004	X	X	X	X	109	0.194	X	X	X	X
38	0.004	~	X	X	X	110	0.203	X	X	X	X
188	0.004	×	X	×	×	61	0.221	×	×	×	X
197	0.004	×	×	X	×	58	0.395	X	X	X	X
29	0.007	X	X	X	X	-					
145	0.007	~	× ×	~ 	~ ~						
43	0.009	×	×	×	×						
182	0.009	×	×	x	×	-					
208	0.011	×	×	x	x	-					
112	0.011	×	x	x	x	-					
20	0.013	×	x	x	x	-					
20	0.018		x	x	x						
37	0.020	х	X	X	X						
144	0.024	X	X	X	x						
15	0.029	x	×	x	x						
62	0.031	x	×	x	x						
147	0.031	x	×	X	x						
194	0.031	x	x	x	x						
204	0.031	х	х	Х	х	-					
164	0.033	Х	Х	Х	х						
21	0.035	Х	х	Х	х						
4	0.038	х	х	Х	х						
28	0.038		х	Х	х						
10	0.042	х	х	Х	х						
25	0.042	х	х	Х	х						
94	0.044	Х	х	Х	х						
82	0.049	Х	х	Х	х						
184	0.049	Х	Х	Х	X						
183	0.053	Х	Х	Х	X						
84	0.055	Х	Х	Х	X						
39	0.057		Х	Х	X	-					
22	0.060	Х	X	X	X						
166	0.066		X	X	X						
83	0.068	X	X	X	X	-					
165	0.068	X	X	X	×						
8	0.071	Å	× ×	×	× ~	-					
30	0.073	Y	× ×	^ X	× ×						
101	0.000	X	x	x	x						
122	0.001	X	X	x	x						
127	0.095	X	X	x	x						
79	0.115	Х	х	x	x	-					
177	0.115	Х	x	x	x						
80	0.119	Х	Х	x	x						
185	0.119	Х	Х	x	x						
186	0.135	Х	Х	х	x						
81	0.137	Х	х	x	х						

2.4 Disproportionate Impacts on Target Populations

The last objective of this analysis is to review the impact of the 2045 Plan's recommended project listing on identified populations in order to address EJ requirements. Although there are a number of measures that could be employed to address the aforementioned regulatory requirements, the assessment of disproportionate benefits/burdens of transportation projects to the various target populations may best be measured by the overall change in accessibility; a direct result of the implemented transportation improvements. In transportation planning there are traditionally 5 groups comprising the transportationally disadvantaged including; the disabled, elderly, those of minority status, individuals under the poverty level and those households without a vehicle. Section 2.3 attempts to address accessibility to employment opportunities from the current network conditions and the 2045 horizon year. Given the rationale of this exercise, changes which result in less accessibility to job opportunities are considered as burdens while gains in accessibility are viewed as benefits.

Based on accepted planning activities, the TDM does recognize changes in population and residency as well as employment opportunities over the course of the planning horizon. The model also acknowledges changes to the transportation system. For purposes of testing for disproportionate impacts, maps identifying the two largest segments of the transportationally disadvantaged population, minority and poverty, were assessed with respect to accessibility. Each of the disadvantaged population groups were identified by census tract, while, commute time to work within the TDM under existing conditions and future conditions (2045) were mapped by TAZ. Those TAZs portrayed in red have the lowest accessibility to jobs in the model area.

Accessibility is identified by the percentage of workers who can access their jobs performed in the Allen County Planning Area within the TDM derived mean commute time of 18.3 minutes. An improvement occurs when the completion of proposed projects is compared to the no build alternative, and results in an increase in the percentage of workers who can get to work within the mean travel time or faster. A decrease indicates a decline in the percentage of workers who can access available employment within the mean commute time. An increase in commute time can reflect an increase in traffic volume or a decrease in available routes to travel to work upon. It can also reflect a projected change in location of identified employment opportunities locating or relocating further from the TAZs in question.

Each of the 2045 Plan's projects were also identified and assessed against the targeted population groups in order to better reveal the nature and scope of the projects impacts upon the respective populations. The model analyses did not project the geographic location of the targeted populations in the year 2045 and therefore, the test for disproportionate impacts utilizes their current residency only. Despite data limitations, there was considerable debate as to whether increased employment or residential opportunities would actually shift said populations geographically equally; therefore, the decision to use current locational considerations was determined prudent.

After comparing the current travel times versus 2045 it becomes evident that commute time to available jobs is virtually unchanged by 2045 within the model area when applying the 18.3 mean travel time. However, when transportation projects are implemented, the assessment finds improved commute times in more than 256 of the 395 TAZ's located within the MPO planning area by 2045. Over 50 percent of all available jobs within the planning area experience an improvement in the commute time by the year 2045.
Analysis of table B-2 shows an improvement in commute times for 56 TAZ's located in areas of high poverty. The minority population also witnessed increased accessibility over the 2045 planning horizon in 61 TAZ's, all located within the Lima Urbanized Area. Averages in increased commute time to work were very minimal and represented less than 10 seconds. Overall, 256 TAZ's had a positive response to the completion of those projects proposed within the 20-year planning horizon.

2.5 Social, Economic & Environmental Analysis

Transportation planning has historically incorporated an analysis of project impacts on an area's social, economic and environmental (SEE) resources. Potential environmental impacts that affect the community include: floodplains, wetlands, rivers, archeological sites, historical sites and farmlands.

As documented in Section 7 of the 2045 Transportation Plan, recommended projects are those projects that the community has identified as important and supported for consideration of future federal funding. Such projects receive priority consideration for programming in future federally funded TIPs. Recommended projects were not required to have a Major Investment Study (MIS) or a NEPA mandated environmental assessment or environmental impact statement to become eligible for inclusion within the MPO's Transportation Plan. The review process required by FHWA/ODOT fails to require projects to submit such environmental analysis prior to inclusion in the STIP/TIP and does not initiate the environmental scoping until the third step of the Transportation Development Process.

Pursuant to the combined implications of EJ, NEPA and Title VI regulatory policies each project is to be assessed independently as to its potential to disproportionately affect minority and low-income populations or the local environment in an adverse manner. The effect of such projects and the necessary tests to determine project impacts have not been completed by the MPO further than the cursory review. The MPO will assume that the necessary SEE impact assessments will be initiated during Step 3 of the Transportation Development Process and that all final environmental documents will be submitted to, and approved by ODOT and FHWA prior to the time when the federally funded projects are to be sold. The MPO will assume that for projects to come to fruition that project sponsors shall necessarily complete the required environmental reviews and properly conduct and document their public involvement process. The MPO will recognize further ODOT/FHWA guidance on the matter as it becomes available.

SECTION 3

OVERVIEW

Navigating the framework of federal regulatory policies requires the MPO to be sensitive to various principles during the transportation planning process. The continued federal emphasis on minimizing disproportionate burdens borne by targeted populations, eliminating discriminatory and prejudicial practices based on color, race, religion, national origin or sexual orientation, and establishing a balance between economic development and environmental harmony have combined to compel planners to increase public participation and the disclosure of relevant information during the transportation planning process. Only through such an open public planning process is it possible to prevent the denial of, or reduction in, benefits to minority and low-income populations, and minimize the disproportionate and adverse social, economic and/or environmental impacts of transportation services, programs or projects. This analysis was prepared to provide a cursory review of the social, economic and environmental impacts of the recommended projects identified in the 2045 Long Range Transportation Plan Update.

The 2045 Long Range Transportation Plan Update was developed with considerable public input and involvement. The public comment period met the minimum federal standards and extended for a period of 21 days. It is important to note that targeted populations were provided the opportunity to participate in the planning process, did participate in the planning process and accepted the project listings as submitted/amended by the project sponsors. The transportation planning process and the MPO's attempts to solicit public involvement is more fully addressed in Appendix D of the Plan; public comments are enclosed therein.

The analysis contained in this Appendix identified the population groups that have been historically underserved, as well as those needed transportation projects identified across the community and recommended for federal funding through the year 2045. Those targeted population groups included the minority community, those residing below the poverty level, the residents over the age of 65 years, households without access to a vehicle, and the population suffering from a mobility limitation. The demographic analysis contained herein identified the target populations by location of the respective transportation project and helped identify not only the affected parties but also the potential social, economic and environmental impacts.

Recommended projects were not required to have a major investment study (MIS) or a NEPA mandated environmental assessment or environmental impact statement to become eligible for inclusion within the MPO's 2045 Long Range Transportation. Project sponsors will be expected to further assess impacts on specific environmental characteristics and the targeted populations as the respective project progresses through the transportation planning process.



MAP 1 2045 TRANSPORTATION PLAN PROJECTS BY CENSUS TRACT

APPENDIX C

AIR QUALITY CONFORMITY ANALYSIS AND INTERAGENCY CONSULTATION : AN ASSESSMENT OF THE 2045 LONG RANGE TRANSPORTATION PLAN



The United States Environmental Protection Agency (US EPA) monitors and sets National Ambient Air Quality Standards (NAAQS) for several transportation-related pollutants. The agency is responsible for determining whether each county in the United States is in attainment or non-attainment for each of those pollutants. Currently in Ohio, the pollutants include nitrogen oxide (NOx), volatile organic compounds (VOC) and particulate matter 2.5 micrometers or smaller in size (PM^{2.5}). It is possible that a county was once in non-attainment for a particular pollutant but then achieved levels that brought it back into attainment. These are referred to as maintenance areas.

If any county within an MPO region is designated as a non-attainment or maintenance area for one or more of these criteria pollutants, an air quality conformity analysis of the projects programmed in the TIP must be performed. This analysis ensures that the region's projects will have either a neutral impact on, or lead to a reduction in, the region's pollutant levels.

According to the US EPA's "Green Book," there are no counties within the Lima/Allen County Regional Planning Commission region designated as "non-attainment" or "maintenance" areas for one of the criteria pollutants. Therefore, an air quality conformity analysis is not required.

The US EPA designated Allen County Ohio as Maintenance Area pursuant to the 1997 8-Hour National Ambient Air Standard (NAAQS) effective July 20, 2013. The US EPA subsequently revoked the 1997 8-Hour NAAQS on April 6, 2015.^[1] These US EPA actions initially determined that the LACRPC Transportation Plan and Transportation Improvement Program were no longer required to demonstrate "transportation conformity" to Ohio EPA's State Implementation Plan (SIP) describing how Allen County would continue to meet – maintain – the 1997 8-Hour NAAQS.

On February 16, 2018 the US Court of Appeals for the District of Columbia Circuit issued a decision, in the *South Coast Air Quality Management District v. EPA* case.^[2] This case challenged portions of US EPA's 1997 8-Hour Ozone NAAQS revocation. The Court ruling upheld US EPA's 1997 8-Hour Ozone NAAQS revocation, but stated that transportation conformity continues to apply to 1997 Ozone Standard Maintenance Areas, such as Allen County. These areas are also now being referenced as 1997 Ozone Standard "Orphan" Areas.

Responding to the Court ruling, US EPA and US DOT issued guidance directing Orphan 1997 Ozone Areas to make qualitative air quality Transportation Plan and TIP conformity determinations pursuant to the transportation conformity criteria embodied in 40 CFR 93.109. The LACRPC is accordingly making a 2045 Transportation Plan and FY 2024-2027 TIP qualitative transportation air quality conformity determination, as follows:

Attainment Status:	1997 8-hour Ozone Maintenance Area
Geography:	Allen County, OH (LACRPC MPO area)
SIP Status:	Ohio 8-Hour SIP Resignation Plan Final Rule – Budgets revised for MOVES – 78
	FR 34906 - June 11, 2013

^[1] <u>https://www3.epa.gov/airquality/greenbook/gbcty.html</u>

^[2] https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100VQME.pdf

- Latest Planning Assumptions.^[3] The LACRPC maintains current travel demand model socio-economic variables and both highway/transit networks used to develop the MPOs' Transportation Plans and Transportation Improvement Programs. The LACRPC and ODOT have reviewed and agreed that the following model network years are on file for AQ analysis: 2018, 2020, 2030 and 2045.
- Latest Emission Model. The MPO is served by a newly updated travel demand model, that combined with the latest planning assumptions, is used to generate emissions in Allen County. The new travel demand model was validated in 2017. The 2018, 2020, 2030 and 2045 roadway networks/operating conditions were established for the MTP conformity analysis, and reflect the phased implementation of the 2045 Transportation Plan. The conformity analysis used for the TIP and the 2045 Transportation Plan employed the US EPA's MOVES3 emissions software. Should a future quantitative emission analyses be needed, the MPOs and ODOT will submit to its use.
- **Conformity Process Schedule.** The LACRPC has developed an extensive public involvement process. The MPO began to develop the 2045 Long Range Transportation Plan (LRTP) in the winter of 2022. The MPO began the formal public involvement process for the 2045 LRTP in July 2023. To support full transparency the MPO released thru both electronic and print media a DRAFT LRTP that integrated information relevant to air quality and the conformity analysis/determination across a broad distribution list of MPO and ACRTA stakeholders. Thereafter, the MPO conducted a public review of its 2045 LRTP of the 1997 Ozone Standard "Orphan" area conformity determination information. The MPO and ODOT scheduled a joint Open House to review the 2045 LRTP and Conformity Analysis on July 18, 2023. The formal public involvement period closed on July 31, 2023.
- **Consultation Requirements**. ODOT and the LACRPC requested Ohio's Transportation Conformity Interagency Consultation Partners review the relevant information and provide written concurrence and/or comments so that the documentation herein meets the requirements for advancing qualitative 1997 Ozone Standard "Orphan" Area Transportation Plan and 2045 Long Range Transportation Plan conformity determinations.

Interagency Consultation:

The conformity analysis is being undertaken with the support and collaboration of the USEPA, Ohio-EPA, Ohio-FHWA, Ohio Department of Transportation (ODOT) and the MPO. ODOT's Office of Statewide Planning & Research provided guidance and its Office of Modeling & Forecasting has historically worked to demonstrate conformity with the National Ambient Air Quality Standards (NAAQS) and compliance with the State Implementation Plan (SIP) designed to achieve and maintain NAAQS across Ohio.

^[3] 40 CFR 93.110.

1997 Ozone Standard "Orphan" Ohio MPO Areas Long Range Transportation Plan Conformity Analysis Summary

Summary:

The Lima-Allen County Regional Planning Commission (LACRPC) Ohio MPO, located within US EPA designated 1997 Ozone Standard "Orphan" Area, is seeking a conformity determination on its 2045 LRTP.

As a 1997 Ozone Standard "orphan area" the MPO will advance qualitative LRTP conformity determination, consistent with US EPA's November 29, 2018 guidance, resulting from the South Coast II Court Case (40 CFR 93.109(c)).

Affected MPO/Air Quality Areas:

	New LRTP Conformity Determination				
МРО	1997 Ozone NAAQS Geography	MPO LRTP Adoption Date	Current USDOT Conformity Date	2045 LRTP Due Date	MPO Policy Board Conformity Determination Resolution Date
Lima / LACRPC	Allen County, OH	08/23/2018	09/22/2022	08/23/2023	08/17/2023

Qualitative Conformity Determination Criteria (40 CFR 93.109):

- Latest planning assumptions The MPO maintains current travel demand model, socioeconomic variables, and highway/transit networks that were used to develop the MPO's LRTP.
- Latest emissions model Should a future quantitative emission analyses be needed, LACRPC and ODOT will use US EPA's MOVES3 emissions software
- TCMs The Ohio SIP does not include any TCMs
- MPO Conformity Tests and Emissions Budget
 - 1997 Standard Ozone "Orphan Area" qualitative conformity determination pursuant to 40 CFR 93.109(c).

Products:

• ODOT and the MPO listed above request Ohio's Transportation Conformity Interagency Consultation Partners review the information above and provide written concurrence/comments that the documentation meets the requirements for advancing qualitative 1997 Ozone Standard "Orphan" Area LRTP conformity determinations. **Transportation Conformity Determination Report for the 1997 ozone NAAQS**

Lima-Allen County Regional Planning Commission

2045 Long Range Transportation Plan



V/R, **Colleen Barry** Assistant Planner Lima/Allen County Regional Planning Commission (419) 228-1836 Ext. 4707

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Acknowledgements

This *Transportation Conformity Report* for the **2045 Long Range Transportation Plan**, Metropolitan Transportation Plan (MTP) was prepared by **Lima-Allen County Regional Planning Commission (LACRPC)**. Individuals from the following agencies contributed their efforts towards the completion of the Transportation Conformity Determination Report. They include:

- Marietta Anthony, United States Environmental Protection Agency
- Lawrence Hall, Ohio Federal Highway Administration
- Deidre Wesley, Ohio Federal Transportation Administration
- Paul Braun, Ohio Environmental Protection Agency
- Jordan Whisler, Ohio Department of Transportation Office of Statewide Planning and Research
- Rebekah Straub Ohio Department of Transportation Office of Modeling and Forecast

Executive Summary

As part of its transportation planning process, **LACRPC** completed the transportation conformity process for the **2045 Long Range Transportation Plan**. This report documents that the **2045 Long Range Transportation Plan** meets the federal transportation conformity requirements in 40 CFR Part 93.

Clean Air Act (CAA) section 176(c) (42 U.S.C. 7506(c)) requires that federally funded or approved highway and transit activities are consistent with ("conform to") the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that transportation activities will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones. 42 U.S.C. 7506(c)(1). EPA's transportation conformity rules establish the criteria and procedures for determining whether metropolitan transportation plans, transportation improvement programs (TIPs), and federally supported highway and transit projects conform to the SIP. 40 CFR Parts 51.390 and 93.

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (*"South Coast II,"* 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019. The **Allen County, Ohio** was **Maintenance** at the time of the 1997 ozone NAAQS revocation on April 6, 2015 and was also designated attainment for the 2008 ozone NAAQS on May 21, 2012. Therefore, per the *South Coast II* decision, this conformity determination is being made for the 1997 ozone NAAQS on the MTP and TIP.

This conformity determination was completed consistent with CAA requirements, existing associated regulations at 40 CFR Parts 51.390 and 93, and the *South Coast II* decision, according to EPA's *Transportation Conformity Guidance for the South Coast II Court Decision* issued on November 29, 2018.

1.0 Transportation Conformity Process

The concept of transportation conformity was introduced in the Clean Air Act (CAA) of 1977, which included a provision to ensure that transportation investments conform to a State implementation plan (SIP) for meeting the Federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments of 1990. The transportation conformity regulations that detail implementation of the CAA requirements was first issued in November 1993, and have been amended several times. The regulations establish the criteria and procedures for transportation agencies to demonstrate that air pollutant emissions from metropolitan transportation plans, transportation improvement programs and projects are consistent with ("conform to") the State's air quality goals in the SIP. This document has been prepared for State and local officials who are involved in decision making on transportation investments.

Transportation conformity is required under CAA Section 176(c) to ensure that Federally-supported transportation activities are consistent with ("conform to") the purpose of a State's SIP. Transportation conformity establishes the framework for improving air quality to protect public health and the environment. Conformity to the purpose of the SIP means Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding and approvals are given to highway and transit activities that will not cause new air quality violations, worsen existing air quality violations, or delay timely attainment of the relevant air quality standard, or any interim milestone.

The Allen County, Ohio Ozone Area (39/003) was designated as maintenance as of June 15, 2007. The NAAQS has since been revoked.

2.0 2045 Long Range Transportation Plan

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 2045 Long Range Transportation Plan (LRTP) 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 2045 LRTP 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.

3.0 Transportation Conformity Determination: General Process

Per the court's decision in *South Coast II*, beginning February 16, 2019, a transportation conformity determination for the 1997 ozone NAAQS will be needed in 1997 ozone NAAQS nonattainment and maintenance areas identified by EPA¹ for certain transportation activities, including updated or amended metropolitan MTPs and TIPs. Once US DOT makes its 1997 ozone NAAQS conformity determination for the 2045 Long Range Transportation Plan MTP and 2024-2027 TIP, conformity will be required no less frequently than every four years. This conformity determination report will address transportation conformity for the 2045 Long Range Transportation Plan MTP and 2024-2027 TIP.

4.0 Transportation Conformity Requirements

4.1 Overview

On November 29, 2018, EPA issued Transportation Conformity Guidance for the South Coast II Court Decision¹ (EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked, but were designated attainment for the 2008 ozone NAAQS in EPA's original designations for this NAAQS (May 21, 2012).

For the 1997 ozone NAAQS areas, transportation conformity for MTPs and TIPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, or budget or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS for can be demonstrated by showing the remaining requirements:

- Latest planning assumptions (93.110)
- Consultation (93.112)
- o Transportation Control Measures (93.113)
- Fiscal constraint (93.108)

5.0 Latest Planning Assumptions

In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP.

The Ohio SIP does not include any TCMs (see Section 5.4).

5.1 Consultation Requirements

The consultation requirements in 40 CFR 93.112 were addressed both for interagency consultation and public consultation.

Interagency consultation was conducted with OEPA, ODOT, FHWA, FTA, and EPA. ODOT and LACRPC initiated transportation conformity interagency consultation of the current Long-Range Transportation Plan (LRTP). Interagency consultation was accomplished via a series of email streams and conference calls (as necessary).

ODOT and LACRPC requested interagency consultation email review of the 1997 Ozone Orphan Area Conformity Summary and requested responses with questions, comments, or confirmation that the 1997 Ozone Standard MPO can advance qualitative LRTP conformity determinations.

Interagency consultation was conducted consistent with the Ohio Conformity SIP.

Public consultation was conducted consistent with planning rule requirements in 23 CFR 450. LACRPC staff presented the Transportation Conformity Report to the agency's Transportation Advisory Committee (TAC), Transportation Coordinating Committee (TCC), and Citizens Advisory Committee (CAC). The Transportation Conformity Report was made available on agency social media outlets such as Facebook, Twitter, and LACRPC's website.

5.2 Timely Implementation of TCMs

The Ohio SIP does not include any TCMs.

5.3 Fiscal Constraint

Transportation conformity requirements in 40 CFR 93.108 state that transportation plans and TIPs must be fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR part 450. The 2045 Long Range Transportation Plan is fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR part 450.

Conclusion

The conformity determination process completed for the **2045 Long Range Transportation Plan** demonstrates that these planning documents meet the Clean Air Act and Transportation Conformity rule requirements for the 1997 ozone NAAQS.

Appendix:

A1.0 2045 Long Range Transportation Plan Approval and conformity determinations:

A2.0 Public Involvement Documents

A3.0 Interagency Consultation Documents

Colleen Barry

ANTHONY.HILL@dot.ohio.gov
Tuesday, April 11, 2023 \$6:07 AM
Thomas Mazur, Colleen Barry
Jordan.Whis er@oot.ohio.gov: Tara Reyholds
FW: LACRPC 2045 MTP AQ Conformity IAC

Тhonı,

Below is the only comment that was received during IAC for LACRPC's LRTP update. Please make the changes to the qualitative air quality analysis FHWA has pointed out, record the comment for LACRPC's records, and add the correspondences to the qualitative air quality analysis document.

If there are any questions, please feel free to reach out to me.



From: Hall, Lawrence (FHWA) <lawrence.hall1@dct.gov> Sent: Thursday, April 6, 2023 7:37 AM To: Hil, Anthony <ANTHONY.HIL.@dot.ohio.gov>; maietta.anthony@epa.gov; Braun, Paul <paul.braun@epa.ohio.gov>; Thomas Mazur <tmazur@lacrpc.com>; Tara Reynolds-Bales <treynoldsbales@lacrpc.com>; Straub, Rebekah <Rebekah.Straub@dot.ohio.gov> Cc: Whisler, Jordan <Jordan.Whisler@dot.ohio.gov>; cbarry@lacrpc.com; Long, Timothy (FHWA; <timothy.long@dot.gov> Subject: LACRPC 2045 MTP AQ Conformity IAC

Anthony,

Regarding the email you sent to FHWA Ohic on March 28th about Lima-Allein County Regional Planning Commission (LACRPC) all quality analysis, FHWA concurs that it is appropriate for LACRPC to use the qualitative approach to conformity determination once these comments are addressed for clarity:

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From:	Hail, Lawrence (FHWA) <lawrence.hall1@dot.gov></lawrence.hall1@dot.gov>
Sent:	Thursday, April 6, 2023 7:37 AM
То:	ANTHONY.HILL@dot.ohio.gov; maietta.anthony@epa.gov; paul.braun@epa.ohio.gov;
	Thomas Mazur; Tara Reynolds; rebekah.straub@dot.ohio.gov
Cc:	Jordan.Whisler@dot.ohio.gov; Colleen Barry; Long, Timothy (FHWA)
Subject:	LACRPC 2045 MTP AQ Conformity IAC

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- 2. In the LACRPC 2045 LRTP document, in the acknowledgements on page 3, replace Andy Johns with Lawrence Hall.

Please let me know if you have any questions or concerns.

Thank you,

Lawrence Hall Community Planner Federal Highway Administration Ohio Division (614)280-6848

From: Sent: To: Cc: Subject: ANTHONY.HILL@dot.ohio.gov Tuesday, April 11, 2023 10:07 AM Thomas Mazur; Colleen Barry Jordan.Whisler@dot.ohio.gov; Tara Reynolds FW: LACRPC 2045 MTP AQ Conformity IAC

Thom,

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If there are any questions, please feel free to reach out to me.

Have a great day, **Anthony Hill** Transportation Planner ODOT Office of Statewide Planning & Research 1980 W. Broad Street, Columbus, Ohio 43223 (p) 614.752.2965 transportation.ohio.gov



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To: Hill, Anthony <ANTHONY.HILL@dot.ohio.gov>; maietta.anthony@epa.gov; Braun, Paul
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From:	ANTHONY.HILL@dot.ohio.gov
Sent:	Tuesday, March 28, 2023 12:37 PM
То:	andy.johns@dot.gov; Ohio.FHWA@dot.gov; Wesley, Deidre (FTA);
	maietta.anthony@epa.gov; paul.braun@epa.ohio.gov; Thomas Mazur; Tara Reynolds;
	Rebekah.Straub@dot.ohio.gov
Cc:	Jordan.Whisler@dot.ohio.gov; Colleen Barry
Subject:	LACRPC 2045 MTP AQ Conformity IAC
Attachments:	1997 Ozone Standard Conformity Analysis Summary - LACRPC.pdf; LACRPC 2045 LRTP
	US DOT 1997 Ozone Areas Conformity Documentation.pdf

Ohio AQ Interagency Consultation Partners,

ODOT and one of our MPO partners (Lima-Allen County Regional Planning Commission - LARPC) is initiating transportation conformity interagency consultation of their new 2045 Long Range Transportation Plan (LRTP). Interagency consultation will be accomplished via a series of email streams and conference calls (if needed). The LACRPC MPO area is solely designated as 1997 Ozone Standard "Orphan" Area. Pursuant to US EPA November 2018 Transportation Conformity Guidance for the *South Coast II* Court Decision (https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100VQME.pdf) LACRPC will be advancing a qualitative conformity determination (40 CFR 93.109(c)).

Attached is the conformity summary for the 1997 Ozone "Orphan" LACRPC Area. The summary identifies LACRPC, their respective air quality area geography, LRTP adoption date, current conformity determination date, conformity update date, and the 40 CFR 93.109 conformity criteria.

Also attached is a filled-out pdf of US DOT's 1997 Ozone Area Conformity Template. US DOT has suggested MPOs can edit this template to record the results of their LRTP conformity processes.

ODOT and the affected MPO requests interagency consultation email review of the attached 1997 Ozone Orphan Area Conformity Summary.

Please respond with questions, comments, or confirmation that the 1997 Ozone Standard MPO can advance qualitative LRTP conformity determinations by **April 11, 2023**.

As stated above, a conference call can be scheduled, as needed.

Thank you and have a good day, Anthony Hill Transportation Planner ODOT Office of Statewide Planning & Research 1980 W. Broad Street, Columbus, Ohio 43223 (p) 614.752.2965 transportation.ohio.gov



From: Sent: To: Subject: Colleen Barry Monday, March 27, 2023 2:40 PM Thomas Mazur RE: LACRPC LRTP Conformity Determination

Will do

Colleen Barry

Assistant Planner Lima/Allen County Regional Planning Commission (419) 228-1836 Ext. 4707

From: Thomas Mazur <tmazur@lacrpc.com> Sent: Monday, March 27, 2023 2:39 PM To: Tara Reynolds <Treynoldsbales@lacrpc.com>; Colleen Barry <cbarry@lacrpc.com> Subject: FW: LACRPC LRTP Conformity Determination

Ladies -

FYI... Colleen please hold onto this for your records. TMM

From: Thomas Mazur Sent: Monday, March 27, 2023 2:36 PM To: <u>ANTHONY.HILL@dot.ohio.gov</u> Subject: RE: LACRPC LRTP Conformity Determination

Anthony -

Just talked with the new director and explained the issues to her. We will acknowledge March 28, 2023 as the start of the interagency consultation. And... April 11th as the end date of the interagency consultation comment period.

TMM

From: <u>ANTHONY.HILL@dot.ohio.gov</u> <<u>ANTHONY.HILL@dot.ohio.gov</u>> Sent: Friday, March 24, 2023 1:51 PM To: Thomas Mazur <<u>tmazur@lacrpc.com</u>> Cc: Colleen Barry <<u>cbarry@lacrpc.com</u>>; Jordan.Whisler@dot.ohio.gov Subject: LACRPC LRTP Conformity Determination

Hello Thom,

As you are aware the LACRPC is a US EPA 1997 Ozone Standard "Orphan" Area. You are also aware that LACRPC's LRTP has an update cycle of every five years with an update air quality conformity due date of 08/23/23.

ODOT will be initiating air quality interagency consultation (IAC) with US EPA, US DOT, and OEPA via email or call if desired, to confirm that your area will be advancing a **qualitative conformity determination**. Attached you will find the 1997 Ozone Orphan Area conformity summary document

ODOT will use to initiate consultation. Before IAC is initiated, please review the document and provide any comments or questions.

If you concur with this IAC process, please respond to this message with the date your Policy Board will approve the MPO LRTP conformity determination and ODOT will get the IAC process kicked off. As a reminder, the date of the Policy Board approval will need to be at least 45 days in advance of the conformity due date (08/23/23) to allow for review by Federal and other state partners. As always, if you have any questions, please feel free to reach out to me.

Thank you and have good day, Anthony Hill Transportation Planner ODOT Office of Statewide Planning & Research 1980 W. Broad Street, Columbus, Ohio 43223 (p) 614.752.2965 transportation.ohio.gov



From:	ANTHONY.HILL@dot.ohio.gov
Sent:	Friday, March 24, 2023 1:51 PM
То:	Thomas Mazur
Cc:	Colleen Barry; Jordan.Whisler@dot.ohio.gov
Subject:	LACRPC LRTP Conformity Determination
Attachments:	2023 LRTP US DOT 1997 Ozone Areas Conformity Documentation.pdf

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Thank you and have good day, Anthony Hill Transportation Planner ODOT Office of Statewide Planning & Research 1980 W. Broad Street, Columbus, Ohio 43223 (p) 614.752.2965 transportation.ohio.gov



ANTHONY.HILL@dot.ohio.gov
Friday, March 24, 2023 12:36 PM
Colleen Barry
RE: IAC Initiation Documentation

Colleen,

There are a couple minor tweaks:

 Is the following a carryover from the last time the plan had conformity determination done on it: Section 5.3 references that "The 2045 Long Range Transportation Plan is fiscally constrained, as demonstrated in Table 6-2 (p. 6-1) of the 2045 Long Range Transportation Plan." You would be fine eliminating the highlighted text.

2.) The appendixes reference the TIP, please change those to 2045 LRTP.



From: Colleen Barry <cbarry@lacrpc.com> Sent: Friday, March 24, 2023 12:19 PM To: Hill, Anthony <ANTHONY.HILL@dot.ohio.gov> Subject: IAC Initiation Documentation

Anthony,

Attached is the Transportation Conformity Determination report for the 1997 Ozone NAAQS as it pertains to the Lima Allen County Regional Planning 2045 Long range Transportation Plan

Please take a look and let me know if you need any additional information.

If all is well, then the LACRPC would like to initiate the IAC process beginning March 27, 2023 and continue to April 10th 2023.

V/R,

Colleen Barry

Assistant Planner Lima/Allen County Regional Planning Commission (419) 228-1836 Ext. 4707

From: Sent: To: Cc: Subject: ANTHONY.HILL@dot.ohio.gov Monday, March 20, 2023 10:04 AM Colleen Barry Thomas Mazur RE: Long Range Plan Interagency Consultation

Good Morning Colleen,

I wanted to follow up on this to see if there is anything that LACRPC needs from me.

Have a good day, **Anthony Hill** Transportation Planner ODOT Office of Statewide Planning & Research 1980 W. Broad Street, Columbus, Ohio 43223 (p) 614.752.2965 transportation.ohio.gov



Sent: Monday, March 6, 2023 11:05 AM To: Colleen Barry <cbarry@lacrpc.com> Cc: Thomas Mazur <tmazur@lacrpc.com> Subject: RE: Long Range Plan Interagency Consultation

Hello Colleen,

Before we can initiate IAC, I will need LACRPC to fill out the attached 1997 Orphan Area Template with the information. The template is the same template that was filled out for the TIP; LACRPC will just need to fill in the new LRTP info.

I will need to know what is the date that LACRPC would like to start IAC? Typically, IAC for the 1997 Ozone Orphan Areas happens via email and lasts about two weeks. I can send out an email to the AQ partners to get the process started. The email will be similar to the one that was sent out for the TIP IAC. I have included the language below. If LACRPC could please fille in the missing information, it would be helpful:

Ohio AQ Interagency Consultation Partners,

ODOT and one of our MPO partners (Lima-Allen County Regional Planning Commission - LACRPC) is initiating transportation conformity interagency consultation of their new

V/R, **Colleen Barry** Assistant Planner Lima/Allen County Regional Planning Commission (419) 228-1836 Ext. 4707

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From: Hill, Anthony Sent: Monday, March 6, 2023 11:05 AM To: Colleen Barry <cbarry@lacrpc.com> Cc: Thomas Mazur <tmazur@lacrpc.com> Subject: RE: Long Range Plan Interagency Consultation

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INSERT YEAR HERE Long-Range Transportation Plan (LRTP) **(INSERT NAME OF LRTP IF THERE IS ONE HERE)**. Interagency consultation will be accomplished via a series of email streams and conference calls (if needed). The LACRPC MPO area is solely designated as 1997 Ozone Standard "Orphan" Area. Pursuant to US EPA November 2018 Transportation Conformity Guidance for the *South Coast II* Court Decision (<u>https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100VQME.pdf</u>) LACRPC will be advancing a qualitative conformity determination (40 CFR 93.109(c)).

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As stated above, a conference call can be scheduled, as needed.

Once LACRPC has filled out the template and filled in the blanks, I can go ahead and initiate IAC for the upcoming LRTP.

Have a good day, **Anthony Hill** Transportation Planner ODOT Office of Statewide Planning & Research 1980 W. Broad Street, Columbus, Ohio 43223 (p) 614.752.2965 transportation.ohio.gov



From: Colleen Barry <<u>cbarry@lacrpc.com</u>> Sent: Monday, March 6, 2023 10:49 AM To: Hill, Anthony <<u>ANTHONY.HILL@dot.ohio.gov</u>> Subject: Long Range Plan Interagency Consulation

Anthony. Per Tom we need to start the IAC process for our LRP. Can you assist?

From: Sent: To: Cc: Subject: ANTHONY.HILL@dot.ohio.gov Tuesday, April 11, 2023 10:07 AM Thomas Mazur; Colleen Barry Jordan.Whisler@dot.ohio.gov; Tara Reynolds FW: LACRPC 2045 MTP AQ Conformity IAC

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