DIRECTION

Looking Forward 2045

Long Range Transportation Plan Update

DIRECTION

Looking Forward 2045

Long Range Transportation Plan Update

Richland County Regional Planning Commission
19 North Main Street
Mansfield, OH 44902
www.rcrpc.org

Prepared in cooperation with the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration, the Ohio Department of Transportation, and local communities

Table of Contents

Long Range Transportation Plan (LRTP)

Table of Contents

Appendices

Compiled Survey Data

Public Involvement Plan

"Richland County will have a transportation system that meets the needs of the 21st Century. A truly multimodal system will operate to move people and goods safely and efficiently throughout Richland County"

Introduction

What is the Long Range Transportation Plan?

A Long Range Transportation Plan (LRTP) is a document that guides policy and funding decision making for the entire region's transportation system over the next 25 years. Federal requirements mandate the plan be updated every 5 years. All transportation programs and projects requesting federal funds within the region must be consistent with this plan.

Each successive update of the LRTP identifies potential improvements to the overall transportation system and provides policy direction so that many individual short range decisions made throughout the county work together to move the county towards its long range transportation and land use goals

Purpose of Updating and Overhauling

Planning is managing change. As our local communities change, so must our plans, requiring regular updating and constant monitoring. Sometimes this update will be more of an overhaul than merely an update.

We believe this update will provide a solid **DIRECTION** ***Looking Forward*** **to 2045.**

History of Transportation Planning in Richland County

In 1959, a group of Richland County community leaders saw the need for planning. They envisioned that the issues a regional planning agency could address would range from infrastructure to zoning. They wanted to deal with issues affecting the development of the region as a whole, or more than one political subdivision within the region, which do not begin and terminate within the boundaries of any single municipality. The City of Mansfield and Richland County Commissioner's jointly created the Richland County Regional Planning Commission (RCRPC) in 1959 to undertake this planning effort.

The federal regulations that provide for transportation planning at the local level pertain to urbanized areas. The Census Bureau delineates urbanized areas (UAs) to provide a better separation of urban and rural territory, population, and housing in the vicinity of large places. An UA comprises one or more places (central place) and the adjacent densely settled surrounding territory (urban fringe) that together have a minimum of 50,000 persons.

The population of the City of Mansfield as determined by the 1960 decennial census was 47,325. In 1965, the Census Bureau conducted a canvas of the annexations to the City of Mansfield from 1960 to 1965. On the basis of the revised boundary, the 1960 population was determined to be 51,418 for the combination of the City and its annexations. The Mansfield urban area therefore was determined to be an urbanized area, and fell under the transportation planning requirements that were described in the *Federal Bureau of Public Roads Policy and Procedural Memorandum (PPM) 50-9.*

In 1966 it was decided that the most appropriate existing agency in Richland County to perform the Comprehensive Land Use and Transportation Study was the Regional Planning Commission. However, due to the fact that there were conflicts in the rules and regulations governing membership on the RCRPC and membership on the Policy Body of the Comprehensive Land Use and Transportation Study, it was necessary that a separate autonomous body, the Coordinating Committee, be formed to oversee this new transportation responsibility. A prospectus and work program were developed and approved, a staff was hired, and the study was underway.

The year 1967 was established as the base year for the study. Social and economic data was collected, and an origin and destinations study was performed during that year. In the following years the data was analyzed, an ultimate land use plan was developed, socio-economic forecasts to 1990 were made, transportation goals and objectives were established, financial resources were analyzed, traffic forecasts were developed and alternative networks were tested. Finally, in 1975, the first *Richland County Long Range Transportation Plan (1990)* and *Transportation Improvement Plan* were adopted.

The initial LRTP was considered to be a realistic plan that concentrated on improvements to existing facilities. This first plan was highway oriented. A major project identified in the initial plan was the completion of missing or connecting links to the US 30 expressway across the county. By the time the plan was completed in 1975, the community's public transportation service had been discontinued, and it did not appear that service would ever be restored to a point that it would affect automobile travel within the area. The planning process found that there were disadvantaged people who needed public transportation, and it was feasible to restore a limited amount; therefore, in December, 1977, a partial reinstatement of public transportation occurred in Richland County.

As a result of federal rules and regulations put into effect in 1975, the transportation planning of the Coordinating Committee of the Comprehensive Land Use and Transportation Study being performed by the RCRPC was designated as the Metropolitan Planning Organization (MPO) by the State of Ohio. This MPO is now called the Coordinating Committee of the *Continuing* Comprehensive Land Use and Transportation Study. It is organized through the RCRPC which operates under the provisions of Sections 713.21 & 713.23 of the Ohio Revised Code. A Transportation System Management element was added to the planning program in 1979. In 1983, the federal rules and regulations recognized the differences between large and small urban areas, and that planning programs should be tailored to meet the areas' varied needs.

Agency Description

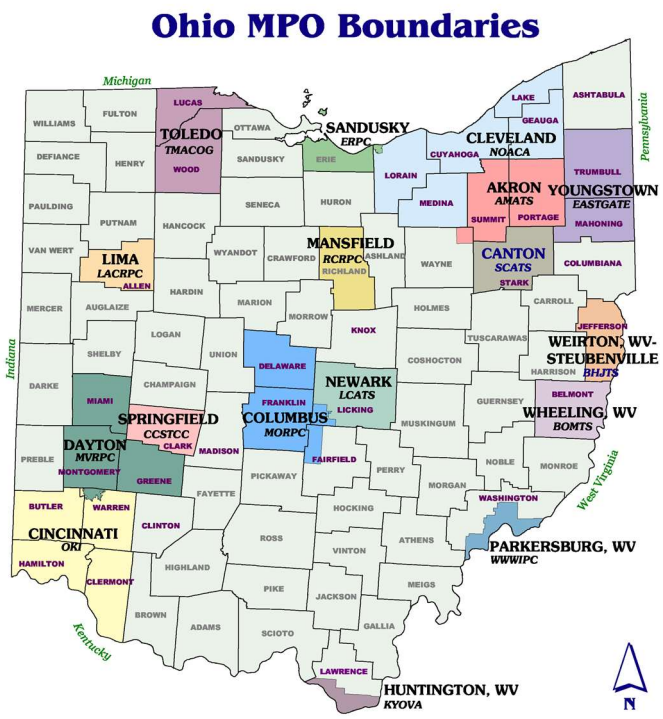
The RCRPC's transportation planning program has continued through the years to be flexible, adapting to changing state and federal requirements, policies, and program emphasis areas while considering local planning needs. This approach supports the concept of the MPO planning, in that local decision makers understand the needs and priorities of an area, and can best decide how to allocate the limited resources available.

There are five core functions of the RCRPC MPO:

1) **Establish a setting**: Establish and provide a fair and impartial setting for effective regional transportation related decision making in Richland County;

2) **Evaluate alternatives:** Evaluate transportation alternatives, scaled to the size and complexity of the region, to the nature of its transportation issues, and to the realistically available options, including funding resources;

3) **Maintain a Long Range Transportation Plan (LRTP):** Develop and update a long-range transportation plan for the area which spans a planning horizon of at least twenty (20) years. This plan should foster mobility and access for people and goods, efficient system performance and preservation, and improved quality of life;



4) **Develop a Transportation Improvement Program (TIP):** Develop a four (4) year project implementation program that is based on the long range transportation plan, and designed to serve the area's goals, using spending, regulating, operating, management, and financial tools;

5) **Involve the Public:** Ensure that the general public, and all of the significantly affected sub-groups, have the opportunity to be actively involved in the core functions that are listed above.

The Richland County Regional Planning Commission employs a staff of professionals to undertake a variety of programs and projects.

Planning Programs and Products Involving the MPO

Product	*Who Develops?*	*Who Approves?*	*Time Horizon*	*Content*	*Update Requirements*
OWP	RCRPC	RCRPC	1 year	Planning Studies and Tasks	Annually
TIP	RCRPC	RCRPC/Governor	4 years	Transportation Investments	Every 2 years
LRTP	RCRPC	RCRPC	20 years	Future Goals, Strategies, and Policies	Every 5 years
STIP	ODOT	FHWA	4 years	Transportation Investments	Every 2 years
LRSTP	ODOT	ODOT	20 years	Future Goals, Strategies, and Policies	Not specified

OWP - Overall Work Program: This document provides an overview of all major work activities and funds expended for the RCRPC in the given fiscal year.

TIP – Transportation Improvement Program: This document presents a fiscally balanced transportation program for the region that includes projects which will receive funding in the next 4 years. It is a requirement of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) that all projects using federal funds be listed in the TIP.

LRTP – Long Range Transportation Plan: This document guides policy and funding decision making for the region's transportation system over at least the next 20 years. Federal requirements mandate the plan be updated every 5 years. All transportation programs and projects requesting federal funds must be consistent with this plan.

STIP – Statewide Transportation Improvement Program: This document presents a fiscally balanced transportation program for the state that includes projects which will receive funding in the next 4 years. It is a requirement of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) that all projects using federal funds be listed in the STIP.

LRSTP- Long Range Statewide Transportation Plan: This document includes a comprehensive inventory of transportation services and infrastructure, forecasts of demand, asset condition and performance and an analysis of the trends affecting transportation in Ohio.

Transportation Planning

Transportation Planning plays a fundamental role in the regional vision for the future. It includes a comprehensive consideration of possible strategies; an evaluation process that encompasses diverse viewpoints; the collaborative participation of relevant transportation related agencies and organizations; and open, timely, and meaningful public involvement.

Transportation helps shape an area's economic health and quality of life. Not only does the transportation system provide for the mobility of people and goods, it also influences patterns of growth and economic activity by providing access to the land. The performance of the system affects public policy concerns like air quality, environmental resource consumption, social equality, land use, urban growth, economic development, safety and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process is more than merely listing highway and transit capital projects. It requires developing strategies for operating, managing, maintaining and financing the area's transportation system in such a way as to advance the area's long term goals.

Transportation planning is a cooperative process designed to foster involvement by all users of the system, such as the business community, community groups, environmental organizations, the traveling public and freight operators through a proactive public participation process.

Transportation Planning involves a number of steps:

- Monitoring existing conditions;

- Forecasting future population and employment growth/decline, including assessing projected land use in the region and identifying major growth corridors;

-Identifying current and projected future transportation problems and needs and analyzing, through detailed planning studies, various transportation improvement strategies to address those needs;

-Developing long range and short range programs of alternative capital improvement and operational strategies for moving people and goods;

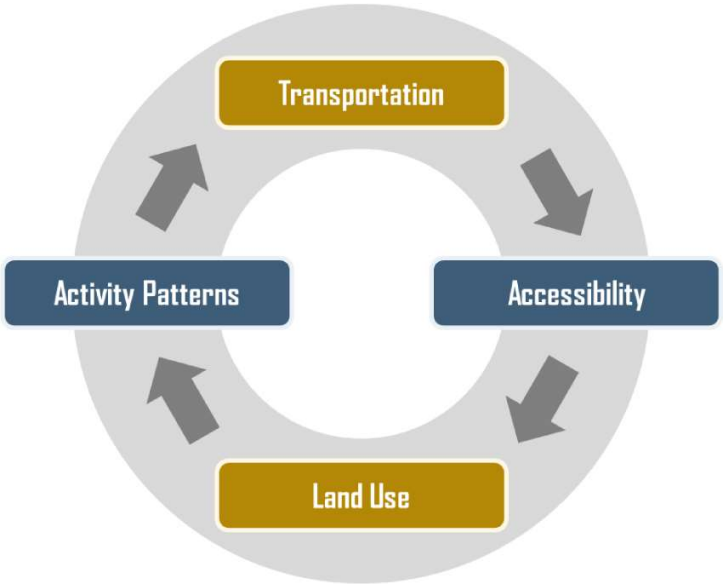
-Estimating the impact of recommended future improvements to the transportation system on environmental features, including air quality;

- Developing a financial plan for securing sufficient revenues to cover the costs of implementing strategies.

Relationship between Transportation and Land Use

The purpose of transportation is to move people and goods from one place to another. The transportation system affects community character, the natural and human environment, and economic development patterns. A transportation system can improve the economy, shape development patterns, and influence quality of life and the natural environment.

Land use and transportation are symbiotic. Development density and location influence regional travel patterns, and in turn, the degree of access provided by the transportation system can influence land use and development trends. Urban or community design can facilitate alternative travel modes. For example: a connected system of streets with higher residential densities and a mix of land uses can facilitate travel by foot, bicycle, and public transportation, in addition to the automobile. Conversely, dispersed land development patterns may facilitate vehicular travel and reduce the viability of other travel modes.



Federal Planning Factors

The MPO transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors:

(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 accessibility and mobility of people and freight;

(5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

(7) Promote efficient system management and operation;

(8) Emphasize the preservation of the existing transportation system;

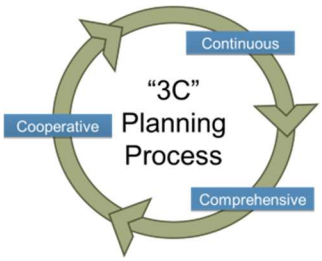
(9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and

(10) Enhance travel and tourism.

As a planning commission, we have concluded that these factors do apply and should be used as basis for our regional goals.

Ongoing Long Range Transportation Plan Updates

This plan is a living document based on a Continuous, Comprehensive, and Coordinated (3C) process involving Richland County Regional Planning Commission and staff, elected officials, local organizations and businesses, visitors and, of course, the residents of Richland County.



Past planning efforts used in development of this update

Access Ohio 2045

Access Ohio is the state of Ohio's long-range transportation plan. It will guide Ohio's transportation policies and investment strategies for the next 20 years by looking at where we could be in 2045. The world keeps changing and Ohio wants to prepare for these changes while making wise investment decisions.

RCRPC Directions Looking Forward 2040

This Long Range Transportation Plan (LRTP) is a document that guides policy and funding decision making for the entire region's transportation system over the next 25 years. Federal requirements mandate the plan be updated every 5 years. All transportation programs and projects requesting federal funds within the region must be consistent with this plan.

Coordinated Public Transit Human Services Transportation Plan

The Coordinated Plan is intended to provide policies, goals, objectives, and techniques used for public involvement, planning and coordination activities to be conducted by the Richland County Regional Planning Commission, the Agency Transportation Advisory Committee and local partner agencies to provide coordinated public transit and human services transportation in Richland County, Ohio. Ultimately, it is meant to broaden the dialogue and support further collaboration between local and regional human service agencies and transportation providers to link people with the transportation services that they want and can use.

Richland County Transportation Safety Plan (DRAFT)

This plan provides a framework for identifying, analysing and prioritizing roadway safety improvements in Richland County.

Active Transportation Plan (DRAFT)

The Active Transportation Plan seeks to create a regional document that: guides and identifies necessary bicycle and pedestrian projects throughout the County; provides guidance on developing programs that educate and encourage residents to walk and bike as healthy, enjoyable and efficient transportation choices; focuses on ways to improve, expand and connect existing bicycle, pedestrian and transit networks.

Public Transportation Agency Safety Plan

The Public Transportation Agency Safety Plan (PTASP) is a plan that must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. The National Public Transportation Safety Plan guides the national effort in managing the safety risks and safety hazards within our nation's public transportation systems. It establishes performance measures to improve the safety of public transportation systems that receive federal financial assistance. The safety performance measures are fatalities, injuries, safety events, and system reliability. ODOT is responsible for certifying the small public transit providers (100 or fewer revenue vehicles and no fixed rail system). These providers must coordinate with their Metropolitan Planning Organization (MPO) and ODOT. The targets shall be included in the TIP and STIP.

The Mansfield Rising Plan
The Richland County Foundation created the plan as a way to improve downtown Mansfield with 39 ideas and strategies to improve the downtown of Mansfield.

Shelby Ohio Strategic Plan 2010-2030
The purpose of this plan is to establish realistic goals and objectives in a defined timeframe, communicate those goals, set priorities, and efficiently use resources. This strategic plan shall serve as a framework for decisions, provide a basis for more detailed planning, be realistic and attainable, stimulate change, and be a building block for the next plan.

The North End Community Economic Development Plan
The North End Community Improvement Collaborative has developed this plan focuses on topics to be improved in the North End of Mansfield such as: Land Use, Housing, Economic Development, Education, Public infrastructure/transit, and Community spaces.

Richland Public Health Community Health Improvement Plan 2017-20
The plan defines is a long-term, systematic effort to address health problems in our community. It is based on the results of the 2016 Community Health Assessment (CHA).

RCRPC Comprehensive Plan
This plan defines the visions and goals for future community development in the Richland County area by analyzing and understanding the cause and effect of regional growth. The plan is developed and modified as a comprehensive plan that is laid out over a long range period of time to outline the different projects and processes that will take place to improve the growth and development of the region.

Regional Overview

2018 Population

City

Mansfield	46,599
Shelby	9,031
Ontario	6,084

Village

Lexington	4,682
* Crestline	4,425
Bellville	1,931
* Plymouth	1,801
Butler	894
Shiloh	619
Lucas	592

Township

Madison township	10,832	Perry township	1,729
Mifflin township	6,063	Weller township	1,675
Washington township	5,943	Franklin township	1,638
Springfield township	4,361	Bloominggrove township	1,571
Jefferson township	2,481	Sharon township	1,195
Jackson township	2,335	Butler township	988
Worthington township	2,027	Sandusky township	904
Monroe township	2,024	Plymouth township	830
Troy township	2,024	Cass township	806

* Only a portion of village is within Richland County - total County population only reflects area within Richland County

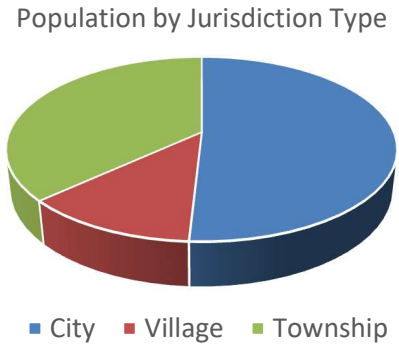
Total County Population
121,324

Median Household Income
$47,346

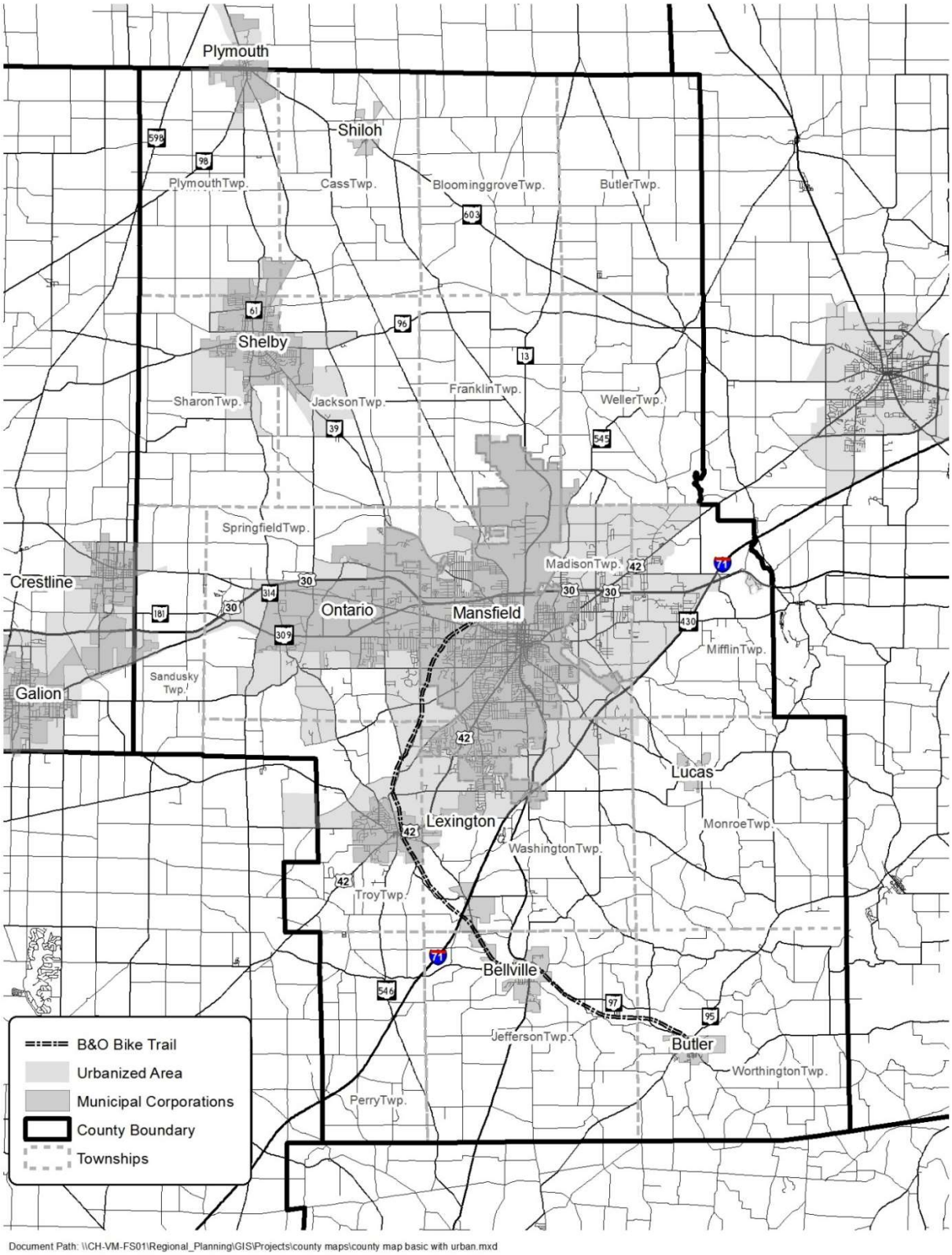
Median Age
41.3

Typical Travel Time to work
22.4 minutes

Typical population in workforce
46%



RCRPC Study Area

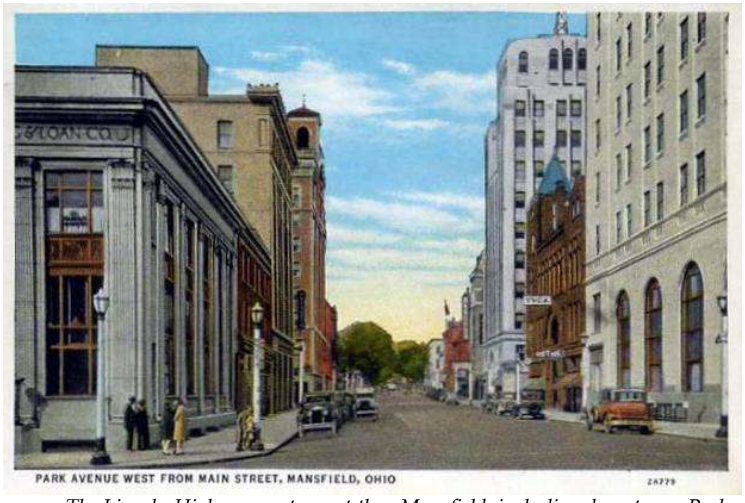


Brief Transportation History

Ohio's location, west of the Appalachians, between the Great Lakes and the Ohio River, lent itself to a large and varied industrial base focused on metal production and machining. These, along with large scale grain production, are export oriented, requiring reliable and inexpensive transportation to large markets.

Mansfield's transportation development history has followed a fairly routine path common to dozens of other Midwest farm and industrial communities without benefit of early water transport:

- Location midway between Cleveland and Columbus
- Inland- couldn't rely upon water travel; rivers or canals
- First railroads
    - By 1860, Ohio had more miles of rails than any other state
    - Richland County and Ohio located between East Coast markets/ports and Midwest farmland
- Electrification- interurban and streetcars had much faster acceleration and cleaner operations than steam rail. Used mainly for passenger travel, but also for local farms good movements



The Lincoln Highway route went thru Mansfield, including downtown. Park Avenue West, shown in a historic photo above, was once the most fashionable street in the city.

- Auto Age; Lincoln Highway routes thru Richland County and Mansfield
- The Shelby Cycle Company manufactured bicycles in Shelby, Ohio from ***1925 to 1953***
- Airplane Age - City purchased land for landing strip in 1925
- Freeway Age
    - Interstate 71 fully supplanted US 42 as an interurban highway in the early 1960s, relegating US 42 to its current role as an ordinary town-to-town surface road
- Rebirth of transit service and later mobility services.

The map represents a vision from the 1960s for several major limited access roadway projects. This was a time when county population numbers were predicted to reach close to 300,000. These include the US 30 extension to Bucyrus, completed in 2005, and several never completed, and no longer contemplated - most notably a Beltway around Mansfield, as well as four-lane extension of Route 13 south of Bellville.

History of Major Regional Projects

Richland B&O Multi-Use Trail

Year complete: 1995
Description: Multi-use trail connecting the Villages of Butler, Bellville, Lexington, and the City of Mansfield

Interstate 71 and SR 39 Interchange

Year complete: 1996
Description: Brand new Interstate interchange at I-71 and SR 39 between Mansfield and Lucas

Cook Road Extension

Year complete: 1997
Description: Cook Road/Illinois Ave extension between Mansfield Lucas Road to Woodville Road

Stanton Transit Center

Year complete:1998
Description: Construction of Mansfield's first transit center

Interstate 71 Widening to 6 Lanes

Year complete: multiple projects from 2004 thru 2007
Description: 4 lane pavement replacement and lane addition in each direction.

Illinois Avenue Railroad overpass

Year complete: 2008
Description: Construct grade separation for Illinois Avenue over Norfolk Southern RR tracks

US 30 Major Rehabilitation

Year Sold: 2020
Description: Pavement reconstruction, interchange improvements and reconfiguration.

Illinois Ave/Cook Road/Mansfield Lucas Rd Roundabout

Year Development:2019 – Construction Year 2022
Description: Development of project to construct a roundabout at this high crash intersection

Progress since Last Update

The following are the goals that were in the LRTP – DIRECTION Looking Forward 2040.

Goal #1 - **Safety**
Goal Statement: **Transportation modes and facilities in the region will be safe for all users**

Goal #2 - **Economic Vitality**
Goal Statement: **A regional transportation system that supports and furthers economic vitality**

Goal #3 - **System Preservation and Reliability**
Goal Statement: **Preserve, operate, and manage an efficient transportation system**

Goal #4 - **Public Involvement**
Goal Statement: **Public participation in the Long Range Transportation Plan and other MPO planning activities that reflect the needs of the region, particularly those that are traditionally underserved**

Goal #5 - **Quality of Life**
Goal Statement: **Enhance quality of life and promote sustainability**

These goals were met within the period of the last Long Range Plan. The goal and the goal statement will remain the same, although various strategies used to achieve these goals have been updated in this plan. The Transportation Improvement Program (TIP) results in a yearly average of between $15-$20 million being spent on regional transportation projects. The MPO has a yearly allocation of $1 to $1 ½ million to designate to projects and assists with Safety applications to continue to bring transportation funding to the region.

Transit Routes were combined due to financial concerns which resulted in a reduced number of fixed routes. Most of the Mansfield/Ontario Urban area is are still serviced by Transit.

Existing Transportation System

"Improving the roadways will produce jobs, reduce travel time, increase public safety, and generate economic development for Richland County."

The bulk of travel, and goods movement, occurs over the roads and bridges that make up the majority of our transportation system. This system accommodates a wide variety of modes and trip purposes.

Roadway

Richland County has approximately 1,576 miles of roads with 212 miles being Interstate, US, and State Routes. The remaining roadways fall under the jurisdiction of the county, townships, and municipalities.

Highway Functional Classification System

All roadways are classified under the Highway Functional Classification system. This information continues to be used for the basis of federal funding eligibility. Functional Classification is divided into two basic systems: rural and urban. There are 6 subcategories in each of these systems.

Rural System	*miles*	*Urban System*	*miles*
Interstate	11	Interstate	10
Principal Arterial	13	Freeway and Expressway	20
Minor Arterial	16	Principal Arterial	30
Major Collector	138	Minor Arterial	73
Minor Collector	77	Collector	127
Local	635	Local	426
Total	***890***	***Total***	***686***

Richland County's highway system is approximately 56.5% classified Rural and 43.5% classified Urban.

Bridges

Richland County has 639 structures. ODOT maintains 211; Richland County is responsible for 359; and the remaining are the responsibility of local jurisdictions, Ohio Department of Natural Resources, and others.

Daily Vehicle Miles Traveled Report (DVMT)

Daily Vehicle Miles Traveled (DVMT) is a simple mechanism to measure how much traffic is flowing along a roadway during an average 24 hour period. This formula multiplies Average Annual Daily Traffic (AADT) by the length of the roadway.

*For example; if a roadway was 2 miles in length and the AADT was 4000 vehicles per day the DVMT would be computed by multiplying 2*4,000 =8,000 or 8,000 DVMT*

	2005	2010	2015	2018
Richland County	3,473,050	3,593,350	3,889,270	3,671,680
Statewide	305,575,060	310,968,810	322,818,820	309,206,540

Richland County currently carries 1.19 % of the statewide Vehicle Miles Traveled (VMT).

In Richland County 64.5% of the VMT takes place on the urban system, Statewide this is 69.3%.

Passenger Rail Service

Amtrak, the national rail operator, connects destinations in the US over 21,000 route miles in 46 states, the District of Columbia and three Canadian provinces. Amtrak operates more than 300 trains each day at speeds up to 150 mph to more than 500 destinations. Amtrak also is the operator for state-supported corridor services in 15 states and for four commuter rail agencies.

Passenger trains once crisscrossed the state, serving several famous NY and Washington to Chicago routes. Now only two routes exist to serve passengers in Ohio, neither within Richland County. Service is available to:

Amtrak stations within 80 miles of Mansfield

1. *Elyria, OH (ELY)* *47 miles*
2. *Sandusky, OH (SKY)* *48 miles*
3. *Cleveland, OH (CLE)* *67 miles*
4. *Alliance, OH (ALC)* *75 miles*

A long stalled plan linking Cleveland, Columbus and Cincinnati by passenger service, called Ohio Hub/3C, while not directly connecting to Mansfield, would potentially provide, with shuttle, a nearby rail connection for the county.

Passenger Air Service

Mansfield Lahm Municipal Airport currently does not offer commuter or commercial flights. However, charter services are made available from the fixed-base operator. The region is well-served by three equidistant airports providing direct or one stop connections to most US and foreign destinations:

Major Passenger Airline Service Airports – Distance from Mansfield

1 *Port Columbus International Airport (CMH)* *68 miles*
2 *Cleveland Hopkins International Airport (CLE)* *70 miles*
3 *Akron Canton Regional Airport (CAK)* *71 miles*

Passenger Bus Service

Greyhound

Mansfield is served by Greyhound Lines, Inc., the largest provider of US intercity bus transportation with more than 3,800 destinations across North America.

Greyhound, like passenger rail, has dramatically curtailed both its route miles and frequency of service to a dwindling number of sparser destinations. Mansfield in particular has been hard hit, as Greyhound has reduced the number of buses serving Mansfield, and relocated its passenger terminal outside downtown to a location adjacent to Interstate 71 to improve operational efficiency. However, discussions are underway with Greyhound to return to the transit passenger station.

Greyhound currently has direct bus service to Cleveland, Akron and Columbus, with connections to the rest of the US, Canada and Mexico.

Greyhound Bus pick up / Station locations – Distance from Mansfield

1	I-71 / SR13 pick up	--
2	West Salem pick up	29 miles
3	Columbus station	66 miles
4	Cleveland station	80 miles
5	Akron station	63 miles

GoBus

This bus service provides transportation between cities and rural areas in the state of Ohio. With connections to national bus lines for extended trips. There are currently 2 stops daily, 7 days a week at the RCT Stanton Transit Center.

Bike Lanes / Shared Lanes

A 5.7-mile bike loop route in signed through downtown Mansfield. The route passes three parks, three schools and the the B&O Trail.

Pedestrian Facilities

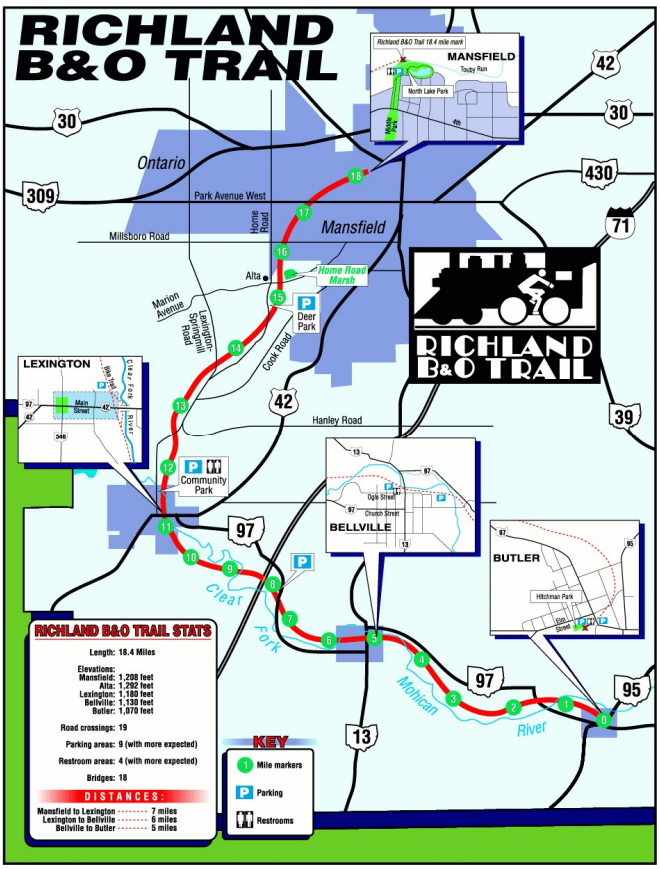
Sidewalks are a key component to a balanced transportation system. They provide connectivity in neighborhoods and to transit stops, recreation, shopping, and employment. They also promote walking as an alternative to driving for short distances.

Currently there is no county wide inventory of sidewalk/pedestrian facilities or a condition database of these assets. RCRPC sees the need to develop a process for maintaining a pedestrian facility inventory. The sidewalk inventory would show where existing sidewalks are located, condition of that facility, and critical gaps in coverage.

Richland B & O Multi-Use Trail

The Richland B & O Trail is a paved 18.4 mile trail built on the railroad bed of the former Baltimore & Ohio Railroad. Connecting Butler, Bellville, Lexington, and Mansfield, the trail has multiple entry points for parking and trail access. The trail is open year-round during daylight hours for bicycling, in-line skating, walking, jogging, and also cross-country skiing.

Despite originally being part of an extensive rail network plan continuing North, South and Westward, the B & O is a stand-alone trail, isolated from nearby routes which connect much of Ohio.



The north end of the Richland B & O Trail is approximately 43 miles from the North Coast Inland trail, a 50-mile asphalt path that runs along the Huron River from Genoa in Ottawa County to Elyria in Lorain County. The south end of the Richland B & O Trail is within 16 miles of the Ohio to Erie Trail, an asphalt and crushed stone trail network stretching from Cincinnati to Cleveland. (This trail ranked 39th Best Trail in America by complex magazine) http://www.complex.com/pop-culture/2012/05/the-50-best-bike-trails-in-america/

Trimble Road Multi-Use Trail

The Trimble Road multi-use trail in the City of Mansfield is a paved 1.4 mile trail in the Trimble Road/Marion Avenue/Cook Road area.

Richland County Transit

Public transportation services in Richland County are provided under the authority of the Richland County Transit Board which was established in 1978. Services are currently operated and managed by a management company under contract to the board.

The following services are available to the residents of Richland County

1 Fixed Route Bus Service – 9 Routes
Monday through Friday 6:00 am to 6:00 pm
Mostly hourly routes

2 Dial a Ride - Service for persons with disability
Monday through Friday 6:00 am to 6:00 pm
Door-to-door service
Covers all areas within 1 mile of a fixed bus route

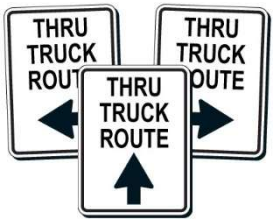
3 RCT Plus – Service for specific shopping locations for seniors over 60 years old
Specific Days by location
Door-to-door service

4 Shelby Taxi Services – RCT partners with the City of Shelby to provide taxi service
Tuesday through Friday 8:00 am to 4:00 pm

5 Coordinated Transportation Services – arranged trips for various human services agencies
Seniors, Veterans, and Disabled
RCRPC schedules trips with local transportation providers

Richland County Taxi Services

Currently several private taxi companies operate in Richland County. The number of companies has increased in the last several years.



Truck Freight

A multitude of truck freight companies operate in the region.

Primary Richland County truck freight routes:

North South

Interstate 71 - northwest from the Morrow County Line to Ashland County Line
Trucks account for 25% to 28% of the total traffic, making this route a primary truck corridor.

State Route 13 – north from Knox County line through Mansfield to Huron County Line. Truck ADTs vary widely from 4% to 15% of traffic with largest counts at SR 13 and US 30.

East West

US 30 from Crawford County through Richland County to Ashland County. Truck ADTs account for 14% to 23% of US 30 traffic.

Rail Freight

Ohio ranks 4th nationally in total miles of rail
Ohio ranks 6th nationally in number of railroads

CSX

Line running from Greenwich (Huron County) to Crestline

Norfolk Southern

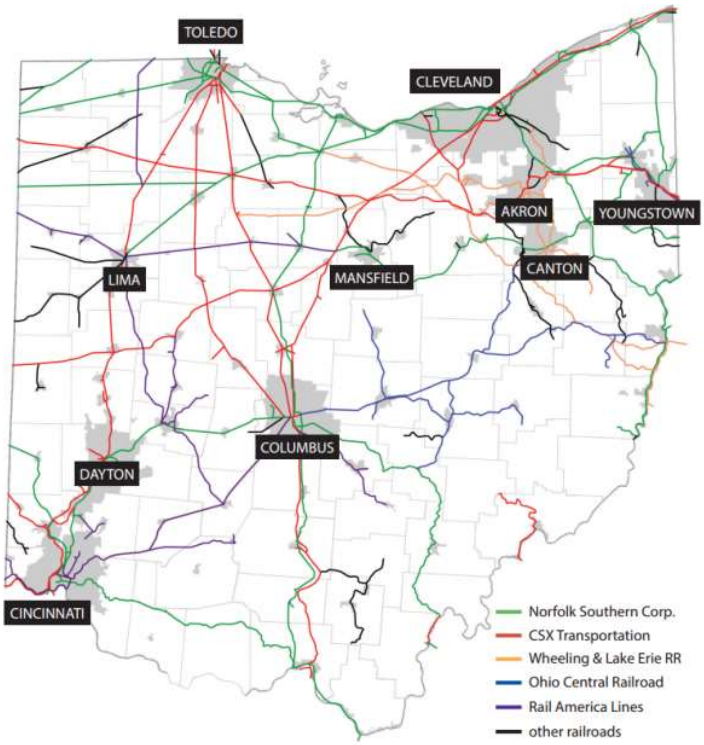
East West line through Richland County

Ashland Railway

Providing Freight service to Ashland, Mansfield, Shelby, Plymouth and Willard, Ohio
Recently upgraded Mansfield – West Salem line to class II (25 mph) condition

Operate Mansfield Railport, a warehouse built to meet steel industry needs

Rail yard north of Mansfield continues to assist rail traffic in the area



15.4 million
ADDITIONAL TRUCKS
would be needed to handle the 276.4 million tons of freight rail that originated in, terminated in or moved through Ohio in 2010.
Data supplied by the Association of American Railroads

EVERY RAIL JOB
supports an additional
4.5 JOBS
Data supplied by the Association of American Railroads

Airports

KMFD

Mansfield Lahm Airport

3 miles north of Mansfield
1340 acres
2 asphalt runways
14/32 9001′ x 150′
5/23 6795′ x 150′
Asphalt Helipad
24′ X 24′

Aircraft based on the field: 82
Aircraft operations: average 50/day
21% local general aviation
20% military
59% transient/other

Home of Ohio Air National Guard
179th Airlift Wing
200th Red Horse
Occupies approximately 290 acres with
350,000 square feet of facilities
C130 Hercules transport aircraft

Employs
Active Guardsmen
Part time Guardsmen
State Employees
Technicians (DoD Civilians)

12G
Shelby Community Airport

2 miles west of Shelby

1 asphalt runway
18/36 3174′ x 50′
1 turf runway
3/21 1890′ x 125′

Aircraft based on the field: 12
Aircraft operations: Average 39/week
75% local general aviation
25% transient/other

KGQQ
Galion Municipal Airport

3 miles northeast of Galion

1 asphalt runway
5/23 3504′ x 75′

Aircraft based on the field: 28
Aircraft operations: Average 119/week
71% local general aviation
29% transient/other

Local Trends and Projections

Preface

1971 Richland County Long Range Transportation Plan

"Richland County is no longer a rural community. With or without its consent, it has been changed into a "metropolitan region" dominated by the City of Mansfield. As the County becomes more urban, the undirected physical building which is spreading through it is becoming less acceptable as a living environment. As people live and work closer together, it becomes necessary to obtain order out of the growing disorder and to provide public improvements never before necessary. Without these, Richland County will strangle in its own congestion, blight and pollution."

We look back on the past, as well as forward to the future. If current trends hold, the following is a list-of conditions we may see in Richland County

Our population continuing to slightly decrease. We forecast total population to be slightly less at 115,030 in 2045 than that of 1960 at 117,761.

A higher percentage of our population is predicted to be elderly. The percentage of population over the age of 65 is expected to increase from 18.5% percent in 2015 to 21.0 % in 2045Our percentage of population within the municipalities ~~is~~ remaining relatively constant;

We are going to need fewer households or dwelling units, indicating possible vacancies or demolitions Our young adults are moving away and we do not seem to have the type of community that attracts others;

Employment in the service, education and health fields are increasing.
The effect of COVID-19 and "Stay at Home" orders on the region's transportation system is generally unknown at this point. We will continue to monitor emerging trends caused by the situation like;

- Increased home delivery services
- Reduced Vehicle traffic
- Reduced tourist activity in the region
- Work from home options of some employers
- School requirements – classroom/busing

Although no one holds a crystal ball, the leaders and planners of the communities are equipped to consider past and current trends to construct educated forecasts. We have the tools to ponder different scenarios and to develop policies, formulate plans, and implement programs to achieve the goals of this plan.

Transportation Industry Trends

"A truly functional transportation infrastructure system isn't just about how many cars we can fit on a particular stretch of highway; it might be, for example, about how we can allow trucks to deliver along busy retail corridors, or how we can best facilitate customers being able to reach their local businesses, no matter where they are in the world."
- David Abney, CEO of United Parcel Service (UPS),

How the Urban Transportation System is Likely to Change in the Future

A good synopsis of the future in general for transportation systems is captured in a 2011 report from the National League of Cities, "Understanding Urban Transportation Systems: An Action Guide for City Leaders."

"Change will not be absolute or quick, but here are some likely directions for change over the next 20 years. The demand for urban transportation will grow and change.

Most analysts expect the U.S. population and economy to grow in the long run. In-migration will continue to cause growth in metropolitan areas, even as some current metropolitan residents exit for smaller cities, which will also grow. Some metropolitan areas will grow geographically (suburbanize); others already have such large boundaries that their development will have a larger component of infill (urbanize). All will get more polycentric (the central city downtown will still be important, but its share of metropolitan employment will probably decrease).

In that context, there will certainly be a public voice for more transportation facilities in urban areas. But, for reasons discussed earlier, the composition of those facilities may change. Highways will continue to receive the largest share of total transportation funding (though a greater share of highway money will go to maintenance), but their relative share will probably decrease as more money goes to transit, bicycle and pedestrian facilities. More attention will be given to surface-transportation connections (commuter rail) between metropolitan cities in 'mega-regions.'

Transportation demand will change with advances in telecommunications and logistics.
People will be more able to work from home. Internet purchases will consolidate shopping trips by individual consumers into deliveries to multiple consumers by service trucks. Those and related communications advances will reduce the need for travel. But many other factors (e.g., growth of population, incomes and economic activity) will encourage more travel. The net effect is likely to be growth in all measures of transportation usage unless there are big changes in market conditions (e.g., the price of fuel) or public policy (e.g., larger gas taxes, more tolling)."
[http://www.nlc.org/Documents/Find%20City%20Solutions/Research%20Innovation/Infrastructure/understanding-urban-transportation-systems-gid-mar11.pdf]

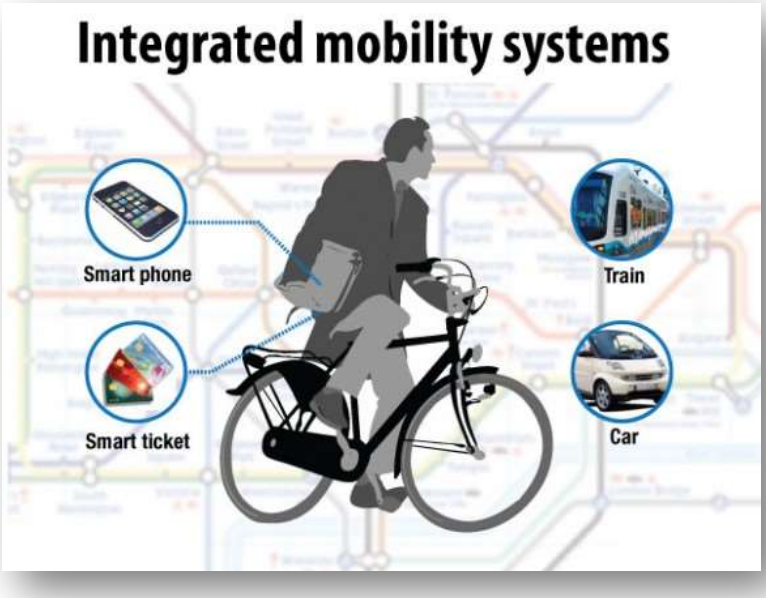
Our Changing Transportation System Needs

The preface to the 1971 *Richland County Long Range Transportation Plan* highlights the near constant change nearly every community faces, whether sparsely populated rural farmland, small village, town or suburb, or dense large metropolis. And nowhere is change occurring faster than in our local, national and global transportation systems, thanks largely to the ongoing revolution in computing and telecommunications, interfacing with transportation in the form of telematics.

> ***Telematics*** *refers to the use of wireless devices and "black box" technologies to transmit data in real time back to an organization. Typically, it's used in the context of automobiles, whereby boxes collect and transmit data on vehicle use, maintenance requirements or automotive servicing.-Wikipedia*

To take advantage of telematics, transportation must be considered in a regional context. While the geographic planning horizon for this plan is Richland County, the plan must consider the extended region beyond these borders.

RCRPC is responsible for planning transportation investments in this region and to do so must coordinate with ODOT, local transportation agencies, development agencies, local governments, environmental resource agencies, airports, and railways within the county.



The LRTP includes demographics, trends and issues that impact the transportation system as it exists today and projections of the demands that will be placed on the system over the next three decades. Understanding these trends is essential to planning and programming the transportation infrastructure and facilities that will be needed to maintain mobility and economic competitiveness in the county.

Some of the options for plan implementation:

Technology

Vision for 2045

- Web-based systems help people to better connect all modes and trips (carpooling, parking consolidation, transit connections, etc.)
- Advanced signal coordination and prioritization
- The transportation system uses the most efficient and modern technology available and it is upgraded as necessary
- Energy usage is sustainable

What trends will help achieve the 2045 vision?

- People will choose technology that improves their lives
- Younger generations will drive new applications of technology
- Necessity will accelerate expanded technological solutions for transportation
- There is growing public interest in more efficient vehicles and alternative fuels

What are potential obstacles to the 2045 vision?

- Many lower income people and older people have not had access to technology and technological knowledge, creating a "knowledge divide"
- New technology has had the associated cost of retraining employees, users, and those who fix the technology

Travel Demand Management

Travel Demand Management (TDM) are strategies designed to influence how, why, when and where people travel, resulting in more efficient use of transportation resources.

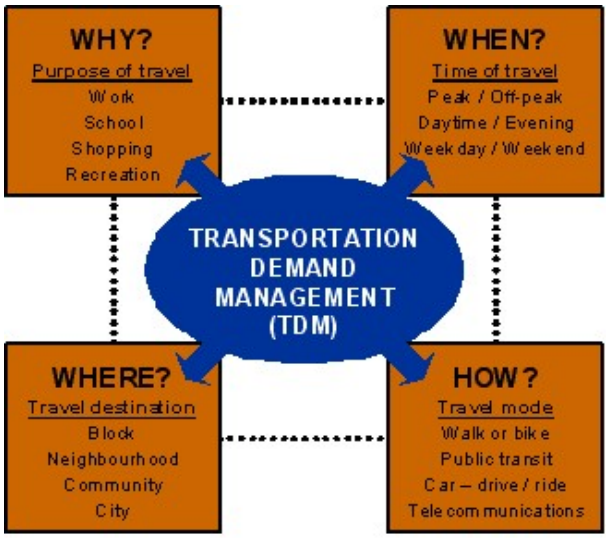
The main types of TDM measures are:
-Education, promotion and outreach

-Travel incentives and disincentives

These are complemented by:
-Sustainable travel options

-Supportive land use practices

These diagrams provide a conceptual framework for understanding role and use of TDM, as well as illustrating major strategies.



Shared Mobility

Shared Mobility encompasses several transportation options, all with the common feature of vehicles or services being shared among a variety of users, most often making use of memberships and telematics to connect user and service.
Shared ride services, notably Uber, have expanded rapidly in Ohio, and currently serve the Columbus, Cleveland and Akron regions.
Rideshare/Car/Vanpool options include hosting and promoting rideshare in house, another local/regional entity, or linking to the statewide program and rideshare database.

Maintenance and System Operations

Transportation agencies have long been tasked with helping to support community goals of mobility, accessibility, and economic vitality. Recently, there has been a rising interest in having sustainability and livability goals help guide transportation system investments, with considerable focus on the interrelationship between transportation infrastructure, housing, and land use planning.
In addition to planning and designing transportation infrastructure, state, regional, and local governments play a key role in operating transportation systems; from maintaining local traffic signals and crosswalks to operating regional transit services and statewide traveler information programs. However, the role that transportation systems management and operations plays in supporting **livability** and **sustainability** has not been well defined. Transportation planners, operators, and stakeholders are becoming more aware of the role planning plays in achieving livability and sustainability goals, using M&O strategies in a cost-effective and timely manner.

Urban Goods Movement

There are numerous opportunities regarding current and future freight modes (rail, truck, airport) and urban goods movement (delivery vans and bicycles) in light of future demographics and Intelligent Transportation Systems. Increased online shopping will shift delivery trips to more efficient package delivery services.

Energy & Environment

Vision for 2045:

- Roadways are context-sensitive and upgraded with trees and landscaping;
- The transportation system is designed to improve the environment and to minimize environmental impacts where they are unavoidable;
- The transportation system conserves land, water, historic, and cultural resources, and encourages reduced energy consumption;
- Measures have been taken to increase the energy-efficiency of the transportation system through greater use of alternatives to driving, better transportation-land use connections and other measures.

What trends will help bring 2045 vision to fruition?

- There is a rising awareness and interest among the general public in conservation and other environmental concerns.

What are our potential obstacles?

- Biofuels, and their secondary negative effects, are not fully understood;
- Inadequate facilities for alternatives to driving limit the number of people willing to switch modes.

Transportation, Healthy Food Access and Community Health

Improving transportation options to and from food sources such as supermarkets and farmers' markets increases a community's access to healthy foods. Transportation improvements may include increasing bus routes to food retailers, supermarket-sponsored shuttle services, and improved pedestrian facilities to locations of farmers markets.

The size of our region provides RCRPC with several opportunities to consider and address transportation and health.

RCRPC also has some planning assistance responsibilities for land use, active recreation, housing, and other public health-related issues. The integration of transportation systems with other planning components can support the creation of communities with accessible, healthy destinations.

The American Planning Association (APA) is taking a lead in pressing for communities and their plans and planners to take an increasing lead in linking transportation, land use, food and health:

> *"Transportation and land use policies attuned to the nation's food security needs can build bridges between family farmers, food retailers, and consumers. Transportation policies and programs can make it easier for low-income families, the aged, and others with mobility challenges and particular nutrition needs to access supermarkets, farmers' markets, and other sources of affordable, healthy food. Innovative policies can also help small farmers transport their products to market and meet untapped demand for local, fresh food. These links can help revitalize rural and urban neighborhoods and improve the health and wellbeing of millions. Developing policies to change food access enables transportation advocacy groups to focus on critical community and household needs."*
>
> -APA Adopted Policies

RCRPC is well-situated to coordinate with our member cities and the county on these issues, and to partner with public health officials on integrated regional health plans. Additionally, RCRPC board members who are local elected officials can identify and communicate local needs for enhanced safety, access to healthy destinations, or physical activities within their communities, including as part of a regional network. The MPO can then identify broad regional needs and identify specific projects to address multiple local needs for healthy communities. For example, despite local responsibility for land use and leadership on many health issues, health related transportation frequently crosses local jurisdictions, such as with walking or bicycling, transit connections, access to medical offices, and sales of healthy food.

Stakeholder and Public Involvement

Overview of RCRPC Public Involvement Plan-May 2014

The goals of the RCRPC regarding public involvement in the planning process are:

-Provide general public with thorough information on transportation planning activities and project development, in a convenient and timely manner;

-Assure that plans and activities have the support of those affected and those who must implement them;

-Achieve a level and mix of public involvement appropriate to the scope and nature of planning activities or projects;

-Meet the letter and spirit of MAP-21 public participation requirements.

The public involvement process establishes goals, objectives, and policies to be carried out at the three distinct but interacting levels of activity. These can be described as *identify*, *inform*, and *involve*.

This Public Involvement Plan outlines way to:

Identify and contact the community affected by the plan or activity;
Inform them of the need for the plan or activity through brochures, draft plans and activity summaries;
Involve them in decision making process.

For additional information see appendix - RCRPC Public Involvement Plan May 28, 2014

LRTP Update Steering Committee

Coordinated**,** comprehensive and continuous efforts were made to **i**dentify, inform and involve the community affected by the plan. A steering committee comprised of a variety of representative stakeholders and interest groups was used for input to this update.

The steering committee was kept informed through a series of emails and surveys. The COVID-19 pandemic altered the way this process was conducted., although we do feel the process resulted in an update to this plan that will serve the region well.

Social Media

Social media, including webpages, Facebook, Twitter and blogs, has emerged as a growing and critical component of Public Involvement. Our webpage, Facebook and Twitter accounts enable RCRPC to share photos from events, construction projects, and studies quickly and easily, improving two-way communication with stakeholders. These tools are fairly inexpensive, and readily grasped by most potential users. RCRPC maintains a webpage and a facebook page in which we attempt to keep the region informed on the activities of RCRPC.

Regional Strengths / Concerns

A series of workshops with the LRTPU Steering Committee and others identified regional transportation, mobility and access strengths and concerns, as well as linkages to land use, economic and environmental viability and livability of regional local communities.

Strengths:

- Location – proximity to three major metropolitan regions- Cleveland, Columbus and Akron, Ohio and major freeway access, I-71 North and South, US 30 East and West;
- The multimodal freight and motorized passenger vehicle infrastructure, capacity and condition are seen as generally in good to adequate condition;
- City and county streets adequately serve regional needs, and roads and bridges are regarded as being in good condition, due in part to city and county repaving programs funded by local taxation;
- Established transit system;
- Concentrated industrial development into regional industrial parks such as Lahm and Shelby, instead of building excess infrastructure seeking industry;
- The 18-mile long B & O Trail is the backbone of current and future regional Active Transportation, serving much of the southern half of the county, linking the communities of Butler, Bellville, Lexington and Mansfield;
- Mobility and housing is considered to be generally affordable.

Concerns:

- Cumbersome access to industrial park north of Mansfield;
- Lack of appropriate or adequate North-South truck routes through urbanized areas places an undue burden on downtown Mansfield and Shelby;
- Truck traffic on inappropriate streets through communities; signed truck routes are not being followed through downtowns and neighborhoods; lack of directional signage countywide – way finding;
- Poor design of Interstate 71 and US 30 interchange;
- Balance of having destinations to attract visitors and more efficient movement of cars and trucks wishing to pass through the community;
- Retention and attraction of a younger professional workforce;
- Uncertainty of adequate funding to maintain existing infrastructure;
- Lack of non-motorized connectivity between residential and retail/commercial areas;
- Lack of connectivity of The B & O Trail to surrounding residential and commercial areas;
- Lack of master plans and policies for bicycle and pedestrian facilities;
- Limited availability of the public transit system.

The workshop discussions highlighted the need for this update to provide a comprehensive framework for addressing the country's long-term transportation needs. Technological and demographic changes may soon fundamentally alter demands on our transportation infrastructure. These Steering Committee workshop conversations tackled the growing accessibility, mobility and infrastructure challenges of Richland County as part of a regional, statewide, national and global setting. We discussed potential solutions within the framework of plan's vision, goals, objectives and strategies to address these needs, and set an initial direction for implementation.

Regional Vision

Richland County will have a transportation system that meets the needs of the 21st Century. A truly multimodal system will operate to move people and goods safely and efficiently throughout Richland County.

The development of Richland County will be supported by a framework of transportation options, with the goal of protecting physical, social and economic environments.

Mobility and access will be optimized by a balanced system of roadway networks, transit, rail freight, pedestrian, and bicycle modes.

The vision is supported by a series of goals, objectives and strategies needed to achieve the goals. The vision, goals, and objectives of the transportation plan should take into account a full range of planning factors, addressing transportation system inputs and desired and projected community outcomes.

Richland County public and private policy decisions should reaffirm those things which have already created a well-regarded quality of life for all demographic sectors in the community. The policy decisions should also seek to improve the lives of the people - who are ultimately the most important component of Richland County's future.

Richland County's transportation network and its central location are a remarkable asset. Goals, objectives and strategies at local and regional levels should continue to build on the foundation of roads, railroads, airports and facilities supporting active transportation that already provide outstanding access to the region and support the county's livability and vitality.

Goal #1

Safety

Goal Statement

Transportation modes and facilities in the region will be safe for all users

Objectives

Reduce total number of crashes in the region

Reduce crash severity

Prevent bicycle and pedestrian crashes

Strategies

Continue to identify high crash locations in an effort to assist in improving these areas

Continue to implement county wide safety program.

Continue to support all local Safe Routes to School efforts

Assist ODOT and all local partners with their safety goals

Continue to monitor statewide crash database

Initiate Strategies from Active Transportation Plan

Emphasize safety improvements within the project selection process

Goal #2

Economic Vitality

Goal Statement

A regional transportation system that supports and furthers economic vitality

Objectives

Integrate transportation and land use planning to ensure future decisions support keeping Richland County a place where people want to reside and businesses want to be located

Improve multimodal freight system for movement of goods

Improve access to and from major employment areas

Strategies

The MPO will work with local governments to ensure transportation and mobility strategies and local land use plans are compatible and mutually supportive

RCRPC will support roadway design standards that balance the need to improve operations and traffic carrying capacity with the economic viability of adjacent land uses

Coordinate long range planning activities with land use, economic development and local community organizations

Encourage ODOT and local governments to employ context sensitive solutions in the planning and development of transportation projects

Maintain an efficient transportation system

Promote the region's logistical advantages

Continue to participate in statewide planning efforts

Goal #3

System Preservation and Reliability

Goal Statement

Preserve, operate, and manage an efficient transportation system

Objectives

Maintain reliable transportation infrastructure in a state of good repair.

Improve and optimize the existing system through innovative transportation system management and operations

Strategies

We will encourage local and state agencies to maintain adequate funding programs for the operation and maintenance of the transportation system

Promote system preservation throughout the project selection process

Assist in promoting development plans along the existing transportation network where capacity is sufficient to minimize the construction and maintenance of new roadways

Introduce innovative transportation solutions such as access management or signal coordination to reduce the need for new roadways and added capacity

Goal #4

Public Involvement

Goal Statement

Public participation in the Long Range Transportation Plan and other MPO planning activities that reflect the needs of the region, particularly those that are traditionally underserved

Objectives

Provide opportunities to engage citizens, and other public and private sector entities

Consider and respond as appropriate to all comments and concerns

Strategies

RCRPC will continue to implement, evaluate and update its Public Involvement Plan

We will continue to be a readily accessible forum for cooperative decision making by local government officials with regards to land use and transportation related issues and the development and implementation of transportation related plans and programs

Expand web based and social media activities in a effort increase input

Participate in organizations and events targeted to underserved populations and areas

Goal #5

Quality of Life

Goal Statement

Enhance quality of life and promote sustainability

Objectives

Protect the environment from any adverse impacts of the transportation system and mitigate as appropriate

Provide users in the region access to a network of transportation modes and infrastructure that maximizes connectivity and promotes the use of motorized and non-motorized modes of travel

Support active living, universal design, and place making

Ensure the benefits and impacts of transportation investments are equitably distributed

Strategies

The MPO will continue to support construction of infrastructure which makes walking, biking, and riding transit safer, accessible and more efficient

Develop County-wide Complete Streets Policy that can act as catalyst for local government to adopt their own policy

Continue to support local bike lane striping and signing

Develop Countywide Bicycle and Pedestrian Plan

Support US and State Bike Route designation activities

Encourage transportation design standards that consider community and environmental impacts through incorporation of context sensitive solutions into projects

Performance Management

Performance Targets

The Moving Ahead for Progress in the 21st Century Act (MAP-21) require State Department of Transportation and Metropolitan Planning Organizations to establish targets for safety, pavement and bridge conditions, travel time reliability, freight travel time reliability, and in some areas emission reductions. Fixing America's Surface Transportation Act (FAST Act) reaffirms this requirement. MPOs may adopt their own regional targets or agree to support ODOT in achieving the statewide goals

Federal-Aid Highway Program Performance Target Categories

Safety
To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

Infrastructure condition
To maintain the highway infrastructure asset system in a state of good repair.

System reliability
To improve the efficiency of the surface transportation system.
Freight movement and economic vitality—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

Congestion reduction
To achieve a significant reduction in congestion on the NHS.

Environmental sustainability
To enhance the performance of the transportation system while protecting and enhancing the natural environment.

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.

Safety Performance Targets

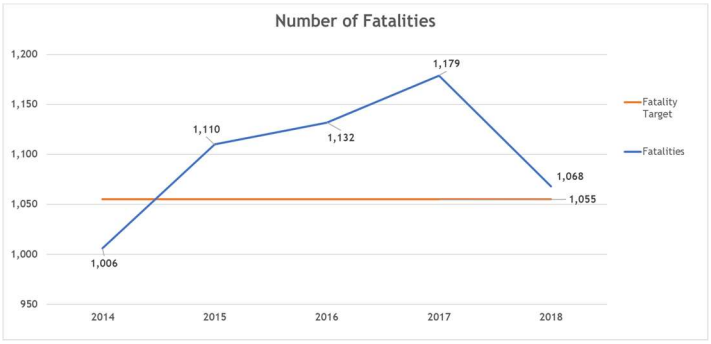
Number of Fatalities
The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year

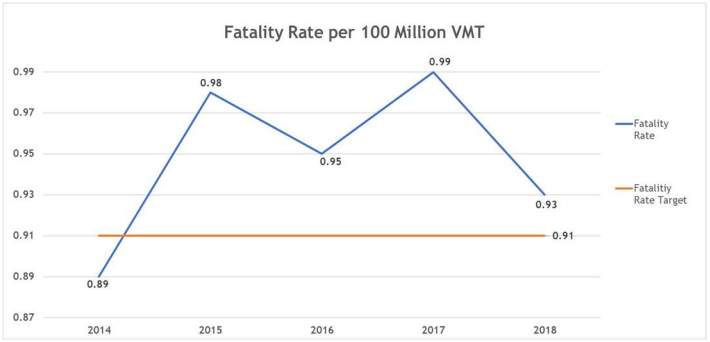
Rate of Fatalaties
The ratio of the total number of fatalities to the number of VMT (expressed in 100 million VMT)

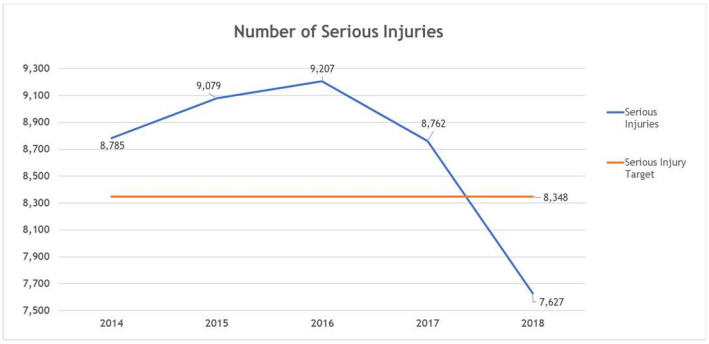
Number of Serious Injuries
The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year

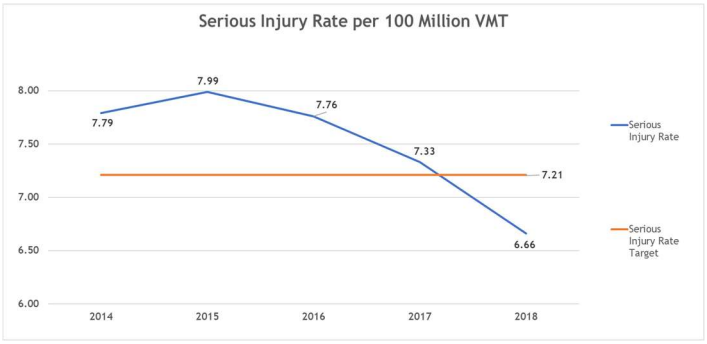
Rate of Serious Injuries
The ratio of the total number of serious injuries to the number of VMT (expressed in 100 million VMT)

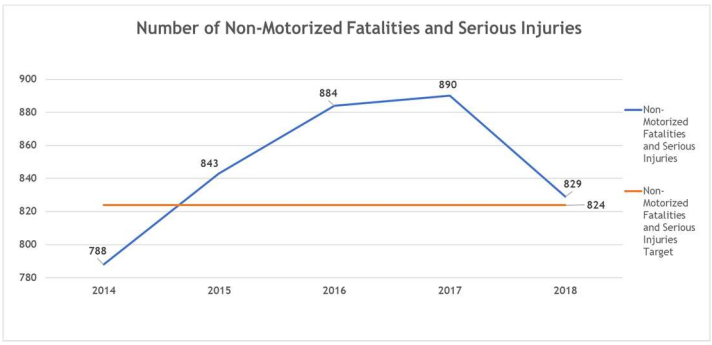
Number of non-motorized fatalities and serious injuries
The total number of fatalities and serious injuries to a Pedestrian, Bicyclist, Other Cyclist or Person on Personal Conveyance.











Infrastructure Condition - Pavement

Interstate Pavement rated in good condition

This target the the % of Interstate lane miles (centerline miles x number of lanes) that are rated in good condition. Good is considered a pavement rating between 75-85 (scale 0-100)
Statewide Interstate System = 8,357 lane miles

Interstate Pavement rated in poor condition

This target the the % of Interstate lane miles (centerline miles x number of lanes) that are rated in poor condition. Poor is considered a pavement rating 65 or less. (scale 0-100)
Statewide Interstate System = 8,357 lane miles

Non-Interstate, National Highway System (NHS) Pavement rated in good condition

This target the the % of Non-Interstate, NHS lane miles (centerline miles x number of lanes) that are rated in good condition. Good is considered a pavement condition rating between 75-85 (scale 0-100)
Statewide Non_Interstate, NHS System = 12,583 lane miles

Non-Interstate, National Highway System (NHS) Pavement rated in poor condition

This target the the % of Non-Interstate, NHS lane miles (centerline miles x number of lanes) that are rated in poor condition. Poor is considered a pavement condtion rating of 65 or less. (scale 0-100)
Statewide Non_Interstate, NHS System = 12,583 lane miles

A brief description of the Pavement Condtion Rating is as follows

Rating	Description
100-85	**Excellent Condition**
85-75	**Good Condition**
75-60	**Fair Condition**
60-0	**Poor Condition**

Infrastructure Condition - Bridge

NHS Bridges in good condition

This target is the % of NHS bridge deck area rated in good or above condition.
Statewide NHS Bridge Inventory = 7,280 structures / 87,682,012 bridge deck area (includes Interstate)

NHS Bridges in poor condition

This target is the % of NHS bridge deck area rated in poor condition.
Statewide NHS Bridge Inventory = 7,280 structures / 87,682,012 bridge deck area (includes Interstate)

Poor condition reflects a National Bridge Inventory (NBI) rating of the Deck, Superstructure, or Substructure code of 0-4.

A brief description of the NBI scale is listed below

Code	Description
9	**Excellent Condition**
8	**Very Good Condition** - no problems noted
7	**Good Condition** - some minor problems
6	**Satisfactory Condition** - structural elements show some minor deterioration
5	**Fair Condition** - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour
4	**Poor Condition** - advanced section loss, deterioration, spalling or scour
3	**Serious Condition** - loss of section, deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present
2	**Critical Condition** - advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
1	"**Imminant" Failure Condition** - major deterioration or section loss present in critical sructural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put it back in light service.
0	**Failed Condition** - out of service; beyond corrective action.

RCRPC Infrastructure Condition Measures and Targets

Performance Measure	2019 Statistics	4-Year Target	Target Met?	Trend	Ohio 2019 Statistics
Highway Measures					
Interstate Pavement Condition					
% Good	83.0%	≥ 50%	Yes	~	69.4%
% Poor	0.0%	≤ 1%	Yes	⇔	0.2%
Non-Interstate NHS Pavement Condition					
% Good	56.0%	≥ 35%	Yes	~	46.9%
% Poor	0.2%	≤ 3%	Yes	⇔	1.4%
NHS Bridge Conditions					
% Good	70.8%	≥ 50%	Yes	⇔	59.2%
% Poor	2.7%	≤ 5%	Yes	⇔	1.6%

Key:	
↑ Annual data trending upward	⇔ Even trend line; little to no annual change
↓ Annual data trending downward	~ Data is fluctuating from year to year

Reliability – Travel Time Reliability

Travel time reliability means the consistency or dependability of travel times from day to day or across different times of the day

% of person-miles traveled on Interstate System that are reliable.

Level of Travel Time Reliability is a comparison, expressed as a ratio, of the 80th percentile travel time of a reporting segment to the normal (50th percentile) travel time of a reporting segment occurring throughout a full calendar year

% of person-miles traveled on Non-Interstate, NHS System that are reliable.

Level of Travel Time Reliability is a comparison, expressed as a ratio, of the 80th percentile travel time of a reporting segment to the normal (50th percentile) travel time of a reporting segment occurring throughout a full calendar year

Interstate Truck Travel Time Reliability

Freight movement will be assessed by the TTTR Index. Reporting is divided into five periods:
morning peak (6-10 a.m.),
midday (10 a.m.-4 p.m.)
afternoon peak (4-8 p.m.)
Mondays through Fridays;
weekends (6 a.m.-8 p.m.);
overnights for all days (8 p.m.-6 a.m.).

The TTTR ratio will be generated by dividing the 95th percentile time by the normal time (50th percentile) for each segment. The TTTR Index will be generated by multiplying each segment's largest ratio of the five periods by its length, then dividing the sum of all length-weighted segments by the total length of Interstate.

Richland County Regional Planning Commission continues to adopt Resolutions supporting these targets and have agreed to plan and program projects that will contribute toward the achievement of these performance targets.

RCRPC System Reliability Measures and Targets

Performance Measure	2019 Statistics	4-Year Target	Target Met?	Trend	Ohio 2019 Statistics
Highway Measures					
Travel Time Reliability (TTR) - Interstates	100.0%	> 85.0%	Yes	⇔	89.8%
Travel Time Reliability (TTR) - Non-Interstates	98.6%	> 80.0%	Yes	↑	92.5%
Truck Travel Time Reliability (TTTR) Index (Expressed as "Level of Travel Time Reliability" or "LOTTR")	1.10	< 1.50	Yes	⇔	1.36

Key:			
↑	Annual data trending upward	⇔	Even trend line; little to no annual change
↓	Annual data trending downward	∿	Data is fluctuating from year to year

Although Congestion Reduction, Environmental Sustainability and Reduced Project Delivery Delays are important in the planning process and project delivery, currently targets for these categories are not required to be set or adopted by RCRPC.

Transit Performance Targets

Richland County Transit Board (RCTB) has established the following Transit Performance Targets.

RCRPC as the MPO has official recognized these targets and will continue to assist RCTB in any way possible in achieving these goals.

Transit Asset Management Targets

Asset Category	Asset Class	Target
Rolling Stock All revenue vehicles (Buses)	Heavy Duty – 30'bus (ULB = 14 years old)	100 %
	Cut Away – 30' Bus (ULB = 10 years old)	100%
Equipment Non-revenue vehicles (Maintenance Vehicles)	Vehicles (ULB = 10 years old)	100%
Facilities Buildings/Structures (Transit Center & Garage)	Buildings (at least 3.0 TERM Scale)	100%

ULB – Useful Life Benchmark
TERM – Transit Economic Requirements Model

Transit Safety Targets

Measure	Dial a Ride Target	Fixed Route Target
Total # of Safety Events	0	2
Rate per vehicle revenue miles	0	0
Total # of Fatalities	0	0
Rate per vehicle revenue miles	0	0
Total # of Injuries	0	1
Rate per vehicle revenue miles	0	0
System Reliability *miles between failures*	49,219	31,766

Travel Demand Model Process

Transportation planning is primarily focused on developing long range (15-30 years) urban transportation plans that can be used to set priorities for project implementation in the future. Such plans should ideally balance the need to build new or widen roads and increase transit service and facilities with future travel demand patterns, with a minimum of environmental effect and within the funding capabilities of the RCRPC and local governments.

Problems addressed can range from broad issues of policy (e.g. region-wide Complete Streets) to specific programs and projects at a local level (e.g. new transit route to Lexington). Besides problems of congestion and travel growth, these could include:

- Travel demand alternatives for congestion reduction
- Land use/transportation coordination
- Fuel reduction measures
- Safety measures
- Economic development/redevelopment activity
- Freight movement issues
- Recreational/tourism access
- Environmental compliance issues
- Public participation process

Forecasting Models

Transportation planning uses the term 'models' extensively. Models are used in a sequence of steps to answer a series of questions about future travel patterns. Basic questions asked in each modeling step are:

1. What will our community look like in the future?
    A. How many people will there be? (population forecasts)
    B. What will they be doing? (economic forecasts)
    C. Where will activities take place? (land use)
2. What are the travel patterns in the future?
    A. How many trips will be made? (trip generation)
    B. Where will the trips be? (trip distribution)
    C. What modes will be used? (mode split)
    D. What routes will be used? (traffic assignment)
    E. What will be the effects of this travel? (impact analysis)

Population, Economic and Land Use Forecasts

Before forecasts are made of travel, it is necessary to determine how the community will look in the future. Transportation is directly linked to land use. Trips are assumed to follow future land use patterns. If land use is changed, there should be a change in travel. The model, if well designed and calibrated with accurate input data, can answer the questions:

- How many people will there be? (population forecasts)
- What activities will people engage in? (economic forecasts)

Future Applications
After the adoption of ths update, RCRPC staff will make use of the regional model as we implement policies, programs and projects, and continue to measure progress in the performance of the transportation and land use system in meeting the plan's goals and objectives.

We will employ scenario planning, a form of modeling that is new for this region. It allows for greater communication of input variables and possible transportation and urban form outputs, or scenarios, through simulations, mapping and visualization. These alternative scenarios present the impacts of different growth and policies on issues like quality of life, the economy, the environment, transportation, and much more.

The scenarios may include a broad range of alternatives, based on community and planner discussion and input. There can be alternative modes of transportation, alternative locations of different systems, alternative levels of capacity or alternative policies, such as growth management. These might include:

- Travel demand management policies
- A no build alternative
- Land use alternatives
- Modal alternatives
- Capacity changes
- Alternative locations

Often, these are combined into three to four scenarios based along two or more dimensions, and generally reflect several directions, with varying levels of desirability and sustainability.

Each scenario and model run uses a set of rules and assumptions, based on Richland County data, to show possible consequences of particular choices in such areas as housing, transportation, and land use. The scenario modeling will use historical trends in projecting patterns of movement and development in the region, and current conditions determine the constraints and possible choices. Finally, the scenarios are explicitly spatial: they describe the physical outcomes of choices made, which in turn impact our economy, quality of life, transportation, and the environment.

Eventually, this form of modeling and planning will be placed online, to become more interactive and accessible to the public and community businesses and leaders.

Environmental Justice in the Transportation Planning Process

As a public agency receiving federal funds and making recommendations on federal expenditures, RCRPC is affected by Environmental Justice requirements for ensuring that federal funds are used fairly and without discrimination.

Transportation program Environmental Justice (EJ) regulations are embodied in the US DOT Order 5610.2 (a), Executive Order 12898, FHWA Order 6640.23A, and FTA Circular 4703.1.
The primary purpose of EJ principals are to:

- avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and low-income populations.

- ensure the full and fair participation by all potentially affected communities in the transportation decision making process

- prevent the denial or, or reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations.

Environmental Justice (EJ) as defined is 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 no group should bear a disproportionate share of the negative environmental consequences resulting from the plan, program, or policy.

Meaningful Involvement means that people have an opportunity to participate and have influence, based on their concerns, in decisions about activities that may affect their environment and/or health. The decision makers shall seek out and facilitate involvement of those potentially affected.

RCRPC continues to consider environmental justice principals in all programs, policies, and activities. This strategy is integrated into planning, programming, and policy making in order to prevent disproportionately high and adverse effects to minority or low income populations.

Adverse Effects: The totality of significant individual or cumulative human health or environmental effects, including but not limited to:
- *Bodily impairment, infirmity, illness or death*
- *Air, noise and water pollution and soil contamination*
- *Destruction or disruption of man-made or natural resources*
- *Destruction or the diminishing of aesthetic values*
- *Destruction or disruption of community cohesion*
- *Destruction or disruption of a community's economic vitality*
- *Destruction or disruption of the availability of public and private facilities and services*
- *Vibration*
- *Adverse employment effects*
- *Displacements of persons, businesses, farms or nonprofit organizations*

- Increased traffic congestion
- Isolation
- Exclusion or separation of minority or low income individuals within a given community from the broader community
- Denial of, reduction in, significant delay in the receipt of, benefits of DOT programs, policies, or activities

Minority Population: Any readily identifiable group of minority persons who live in geographic proximity, and if circumstances warrant geographically dispersed/transient persons (such as migrant workers) who will be similarly affected.

Minority A person who is:
Black: a person having origins in any black racial group of Africa

Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South America, or other Spanish culture or origin regardless of race;

Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent;

American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification though tribal affiliation or community recognition;

Native Hawaiian and Other Pacific Islanders: a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other pacific islands.

Low Income Population: Any readily identifiable group of low income persons who live in geographic proximity, and if circumstances warrant geographically dispersed/transient persons (such as migrant workers) who will be similarly affected.

Low Income
A person whose median household income is at or below the Department of Health and Human Services

2020 Federal Poverty Guidelines

Persons in Family/ Household	Poverty Guideline Income
1	$12,760
2	$17,240
3	$21,720
4	$26,200
5	$30,680
6	$35,160
7	$39,640
8	$44,120
Additional	Add $4,480 per

Identification of Environmental Justice Areas:

To identify the Environmental Justice areas RCRPC analyzed the 2018 American Community Survey 5 year estimate data to determine areas that include a 2 times higher than average low income and/or minority population.

The MPO staff and various committees are committed to evaluation of all proposed projects. Real estate activity, noise impacts, system condition and overall economic effect on the area are considered for projects within an identified environmental justice area. The majority of the projects in this TIP are system preservation projects (resurfacing, bridge rehabilitation and replacements , and general maintenance) that have little to no adverse effects on the immediate area.

RCRPC continues to identify advocates from these EJ areas to improve input within the public involvement process.

Financial Resources / Fiscal Analysis

One of the requirements of this plan is that it must be financially constrained; meaning that it is reasonable to believe that funding is available to implement the plan. RCRPCs decision to maintain this plan as a policy based plan makes this requirement challenging. The Richland County Regional Planning Commission continually tracks available financial resources and history of spending. There are many sources of funds, some of which are spent at the discretion of the local areas, and others that are spent at the discretion of state agencies. There are specific sources of funds, Surface Transportation Block Grant (STBG) Program and Transportation Alternative (TA) Program that are allocated and spent at the discretion of the MPO.

Funding for any future year is difficult if not impossible to predict. However, using historical spending data it is anticipated that the MPO in coordination with ODOT and our local partners will be able to meet the goals wet within this plan.

Major funding programs used in the RCRPC region:

Surface Transportation Block Grant (STBG)

Each MPO and large city receives a yearly suballocation of STBG funds. STBG funding is eligible for a wide variety of multimodal maintenance, operational, and new construction projects. Funding is suballocated to the MPO based on the MPO's urban population and is allocated discretionary. Population figures used are from the 2010 census. General population is the 2010 MPO urbanized population plus any other urbanized within the MPO boundar (Richland County)

Transportation Alternatives (TA)

Transportation Alternatives (TA) funds are eligible for non-motorized transportation projects. TMAs are required to develop a competitive selection process for these funds. With the passage of the FAST Act, TA funds are now a set-aside of STBG funds.

Local Funds

Local funds are generally allocated from gas tax revenue and the jurisdiction's general fund. In some instances, local pothole/resurfacing taxes have been approved. The City of Mansfield, City of Shelby and several Townships have these levies in place and are subject to voter approval on a consistent basis.

ODOT Pavement and Bridge Preservation Program

The pavement and bridge preservation program were created to provide funding for the preservation and rehabilitation of the Priority, Urban and General System pavements and the state-maintained bridge structures. The goal of the department's preservation program funding process is to maintain pavements and bridges at "steady state" conditions, or a relatively low and stable level of deficiencies where a predictable rate of preventive maintenance and regular repairs can efficiently sustain the system conditions Funding For pavements, funding is driven by conditions

goals and based on treatment strategies provided by the department's pavement management system.

Pavements
Priority and General System Pavements – Surface treatments and minor rehabilitation as defined by the Office of Pavement Engineering.

Bridges
For bridges, funding is provided to address deficiencies in one or more of the bridge condition categories (General Appraisal, Floor Condition, Wearing Surface or Paint Condition) for ODOT maintained bridges

ODOT Urban Paving Program
This program provides funds for eligible surface treatment and resurfacing projects on
An annual allocation is set statewide and distributed to each of ODOT's 12 districts based on a district's "City State and U.S. Route System" mileage, and the condition of those routes according to ODOT's Pavement Condition Rating System.

Funding is provided on an 80-20 basis with the local governments providing the 20% match for project construction costs, however, locals are encouraged to provide more than 20% to stretch the amount of available funds. The ODOT director, at his discretion, may waive or reduce the local match for cities in fiscal distress.

This ODOT funding is intended to provide non-structural overlays (resurfacing) when appropriate based on PCR.

Local governments are expected to provide the pothole patching, surface treatments and other maintenance necessary to preserve the pavement. Surface treatments include, but are not limited to crack sealing, chip sealing, microsurfacing, fine graded polymer asphalt concrete overlays (smooth seal); or diamond grinding for concrete surfaces.

ODOT will not participate in curbs, gutters, utility relocations and other non-surface items. If the local government wants to expand repairs beyond the surface treatment, it will have to provide funds from a source other than the Urban Paving program.

Highway Safety Improvement Program

The Ohio Department of Transportation dedicates about $102 million annually for engineering improvements at high-crash and severe-crash locations – one of the largest state investments in the nation. This funding is available to ODOT staff and local governments, and it can be used to make improvements on any public roadway.

ODOT funds a mix of spot safety projects, such as intersection and curve realignment, and systematic safety treatments, such as edge line rumble stripes and cable barrier, which can be installed across hundreds of miles. Funding requests typically range from $200,000 to $5 million, though the department will consider funding requests up to $10 million. Funding is available for all stages of development and typically requires a minimum 10% local match. Safety improvements, such as upgrading signs, signals, pavement markings and guardrail are eligible for 100% funding.

In addition to engineering, the department assists with driver education and enforcement efforts, which are primarily coordinated and funded through the Ohio Department of Public Safety, Ohio Traffic Safety Office.

Other Highway Safety Programs

The Ohio Department of Transportation works with local and state organizations to make investments that improve safety on all public roads. These collaborative efforts are critical because Ohio roads are maintained by ODOT and a vast network of villages, townships, cities and counties, with varying levels of expertise and available funds

Toll Credits (TC)
Tell development credit play a huge roll in funding regional projects. Toll Credits are credits that states earn from nonfederal capital expenditures that public or private agencies, such as the Ohio Turnpike, make "to build, improve, or maintain highways, bridges, or tunnels that serve the public purpose of interstate commerce."
Section 120(j) of Title 23 permits the use of Toll Credits to fulfill some or all of the federal matching fund requirements normally associated with the financing of eligible projects'
The application of TC increases the federal share of a project, thereby reducing required non-federal match requirements.

It is important to note that TCs are not "cash" or additional funding, but instead are credits that can be applied to surface transportation federal aid projects. Utilizing TCs increases the percentage and amount of federal funding that is used to finance an eligible project.

Additional Funding being utilized in the region can be found here:
http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf