

# 2020 – 2050 COLUMBUS AREA METROPOLITAN TRANSPORTATION PLAN

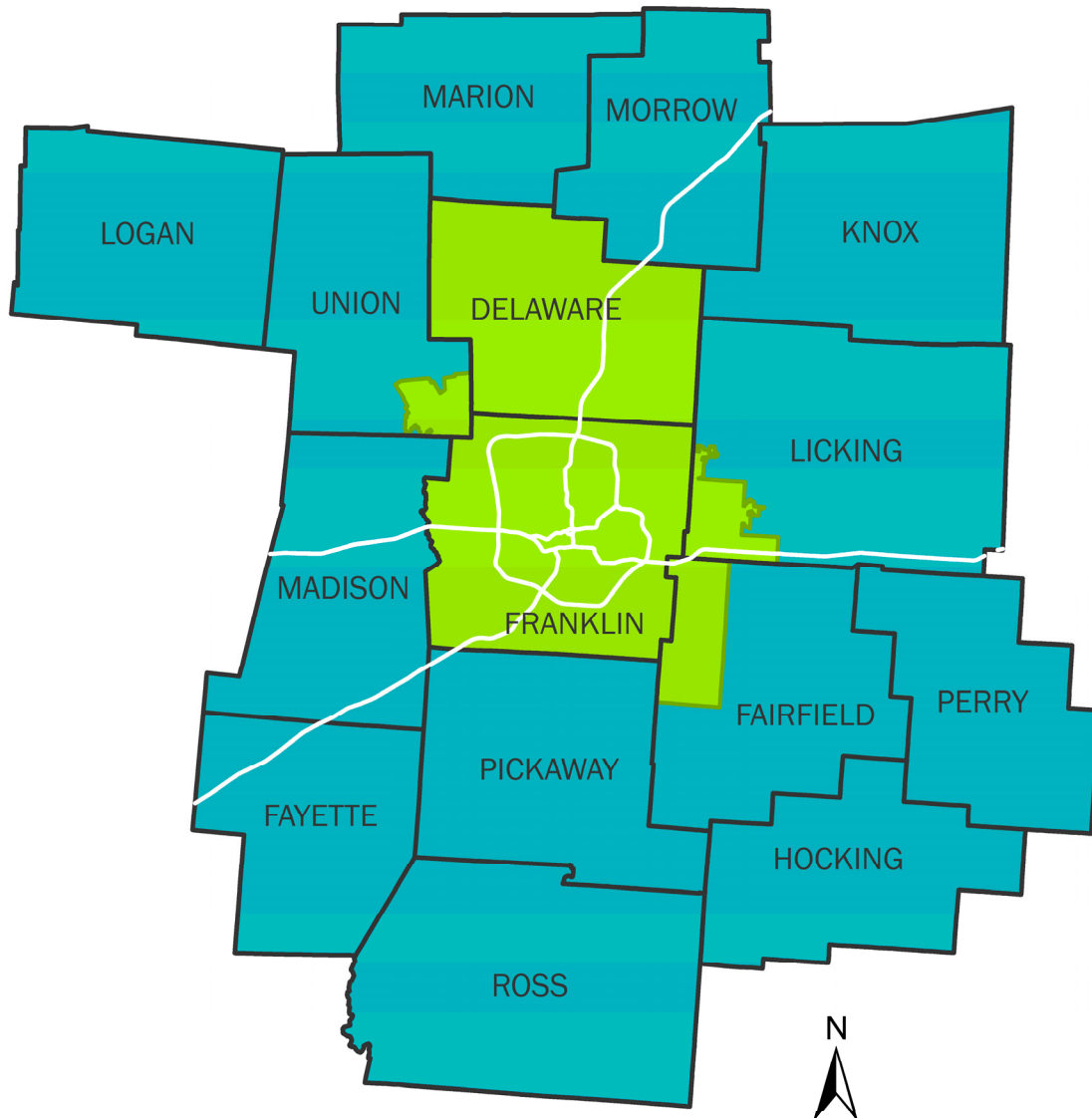
## EXECUTIVE SUMMARY

A safe, reliable, efficient, and accessible transportation system is essential to the economy and quality of life for those who visit, live, and work in the Central Ohio region. The 2020-2050 Metropolitan Transportation Plan (MTP) establishes a set of regional transportation goals and objectives, and recommends strategies—including projects—that will maintain, manage, and develop Central Ohio's transportation system through 2050. The MTP represents a consensus among regional partners on transportation needs and priorities, and should be implemented collaboratively throughout the region. Progress in meeting the plan's objectives will be monitored and reported on annually.

Planning for the MTP is continuous, comprehensive, and cooperative. As the fastest growing region in the state of Ohio, changing demographics and market trends require ongoing identification and analyses of new demands on the transportation system. The MTP is comprehensive in that it addresses all surface travel options including the automobile, transit, bicycles, pedestrians, and freight movements. It also recognizes that the quality of the transportation system impacts, and is impacted by development patterns, economic conditions, and environmental policies. Finally, the MTP is cooperative with respect to the local communities, agencies, and stakeholders that have worked together to develop the plan and who must work together moving forward to successfully reach the outcomes proposed by the plan.

### PLANNING AREA

Many different agencies and local governments conduct studies on and complete improvements to the transportation system. However, MORPC is the principal public agency conducting regional transportation studies for the Central Ohio area because it serves as the designated Metropolitan Planning Organization (MPO) for the Columbus Urbanized Area. It covers Franklin County, Delaware County, and portions of Fairfield, Licking, and Union counties. The MTP covers the MPO area, as shown below.



<p>POSITION CENTRAL OHIO TO ATTRACT AND RETAIN <b>ECONOMIC OPPORTUNITY</b> TO PROSPER AS A REGION AND COMPETE GLOBALLY</p> 	<p>USE PUBLIC INVESTMENTS TO BENEFIT THE <b>HEALTH, SAFETY, AND WELFARE</b> OF PEOPLE</p> 
<p>CREATE <b>SUSTAINABLE NEIGHBORHOODS</b> TO IMPROVE RESIDENTS' QUALITY OF LIFE</p> 	<p>INCREASE <b>REGIONAL COLLABORATION</b> AND EMPLOY INNOVATIVE TRANSPORTATION SOLUTIONS TO MAXIMIZE THE RETURN ON PUBLIC EXPENDITURES</p> 
<p>REDUCE PER CAPITA <b>ENERGY</b> CONSUMPTION AND PROMOTE ALTERNATIVE FUEL RESOURCES TO INCREASE AFFORDABILITY AND RESILIENCE OF REGIONAL ENERGY SUPPLIES</p> 	<p>PROTECT <b>NATURAL RESOURCES</b> AND MITIGATE INFRASTRUCTURE VULNERABILITIES TO MAINTAIN A HEALTHY ECOSYSTEM AND COMMUNITY</p> 

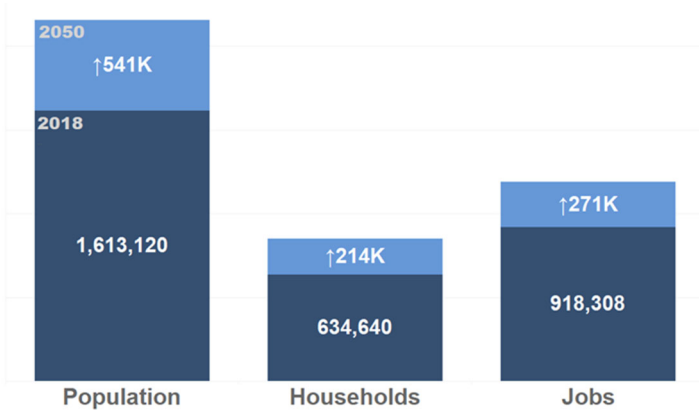
## PLAN GOALS & OBJECTIVES

The 2020-2050 Metropolitan Transportation Plan has been developed around a set of goals that give direction to making regionally based investments in the transportation system. Progress in achievement of these goals will be measured by objectives and targets as outlined in Chapter 1.

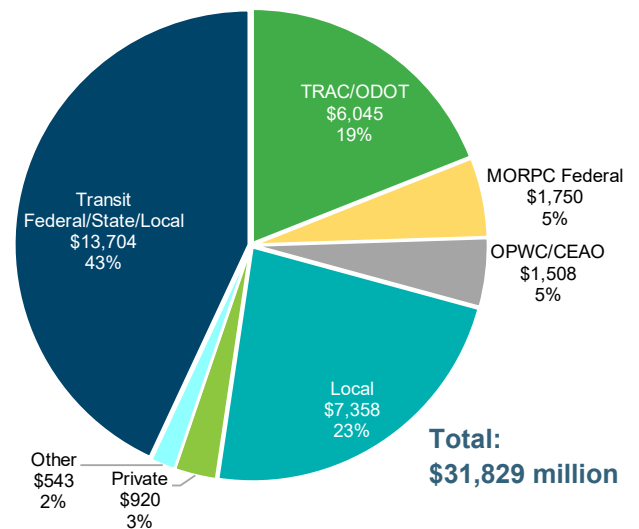
### THE REGION IN 2050

The process of developing the MTP requires assumptions and analyses of how many people will live and work in the MPO in 2050, and where and how they will travel, so that the demands of the transportation system can be anticipated.

Because the plan must be fiscally balanced, forecasts of available funding for maintaining and expanding the transportation system were also developed. The strategies and projects identified in this plan stay within the forecasted revenues. This plan was developed with the assumption that similar funding will be available to the area as what has been made available in the past, but with moderate growth, particularly for transit revenues.



PROJECTED GROWTH  
Metropolitan Planning Organization



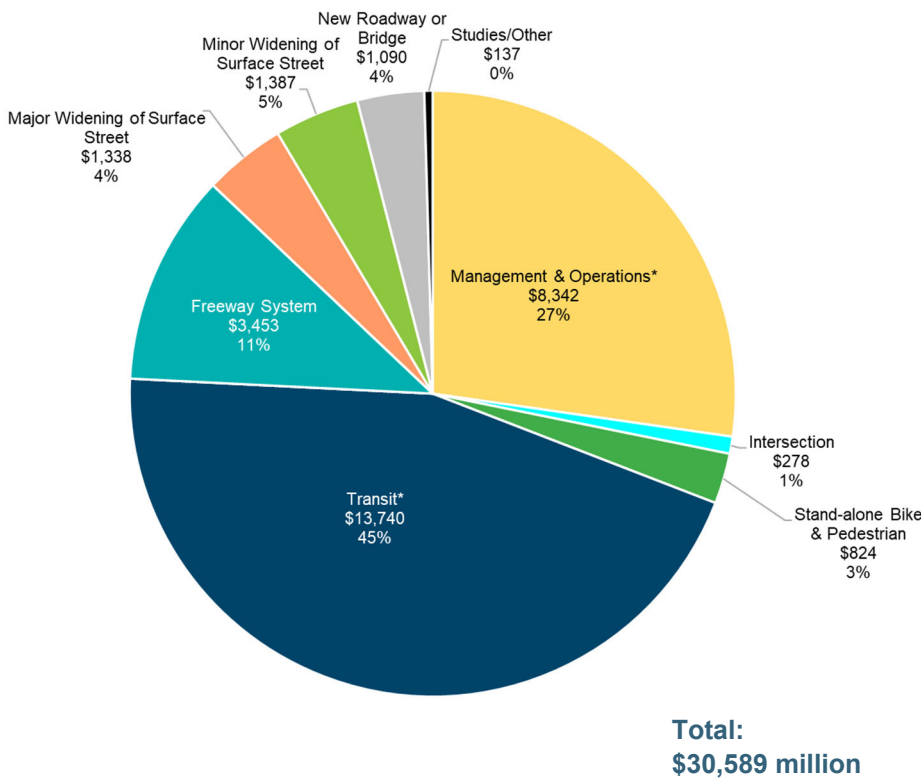
REVENUES EXPECTED BY 2050 (IN MILLIONS)

## STRATEGIES & PROJECTS

The MTP identifies 66 strategies that are intended to be fulfilled by MORPC and other regional and local planning partners. The MTP chapters discuss each strategy, including the approach to improving the transportation system starting with 1) physical preservation; 2) operating it efficiently; 3) making it safe and secure; 4) reducing demand for travel; and 5) expanding the system through pedestrian infrastructure, bike infrastructure, transit infrastructure and service, intermodal connections and finally additional roadway infrastructure. The specific projects included in the MTP are mapped on a following pages.

## THE MTP INCLUDES PROJECTS THAT:

- Add **six** high-capacity transit projects covering 50 miles
- Maintain and expand COTA and DCT service
- Replace transit vehicles and accommodate other capital expenses for transit
- Add **415 miles** of stand-alone bike and/or pedestrian facilities
- Widen **32 miles** of freeways
- Convert **17 miles** of four-lane divided roadways to freeways
- Add **42 miles** of lane management along freeways
- Modify **25** freeway interchanges
- Add **6** new interchanges
- Add **99 miles** of new roadway connections
- Add **86 miles** of through lane additions
- Add **127 miles** with minor widening/safety improvements
- Modify **149** intersections



\*Transit category includes:

- 5 high capacity transit projects
- Expand COTA & DCT service
- Replacement vehicles and other capital expenses

\*Management & Operations category includes:

- 6 Access Management & One-way Conversion projects
- Maintenance & Preservation
- ITS and other operations

## EXPENDITURES EXPECTED BY 2050 (IN MILLIONS)

## SYSTEM MANAGEMENT STRATEGIES

### Physical Preservation

PRES 1: Repair or replace bridges in poor physical condition

PRES 2: Repave or reconstruct roads in poor physical condition

PRES 3: Repave or reconstruct sidewalks and bikeways in poor physical condition

PRES 4: Replace transit vehicles that are beyond their useful life

PRES 5: Repair or replace transit facilities in poor physical condition

PRES 6: Utilize advanced material and techniques to maximize life of transportation system components

PRES 7: Continue to evolve consistent data collection and analysis procedures to rate the physical condition of the transportation system components

### Operations

OP 1: Collect, develop, and maintain data on roadway, transit, bike and pedestrian conditions and other modes and share the data and information through technology.

OP 2: Broaden the existing transportation system managed in a coordinated manner through Intelligent Transportation System technologies

OP 3: Implement managed lanes along additional freeway corridors

OP 4: Apply access management along arterial and collector corridors

OP 5: Improve connections and coordination among transit system operators

OP 6: Expand transit signal priority along additional roadway corridors

OP 7: Improve demand response transit service

OP 8: Manage, improve and coordinate human service, private and public transportation, to better meet the needs and fill the gaps

OP 9: Implement vehicle to infrastructure and vehicle to vehicle communications

OP 10: Modify lane configurations of roadways, where appropriate, to safely match vehicle, transit, bike and pedestrian demand

OP 11: Implement curbside management to facilitate package delivery and mobility as a service pick-up and drop-off while minimizing impact on transportation system operations

OP 12: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

### Safety

SAF 1: Collect, develop, maintain, and analyze crash data and identify regional safety emphasis areas and priority safety locations

SAF 2: Collect, develop, maintain, and analyze data on transit safety

SAF 3: Implement countermeasures that address priority safety locations

SAF 4: Implement countermeasures that address transit safety issues

SAF 5: Advance educational initiatives that address regional safety emphasis areas

SAF 6: Advance legislative initiatives that address regional safety emphasis areas

### Security

SEC 1: Promote and strengthen security, including cyber security

SEC 2: Promote and strengthen emergency preparedness efforts

SEC 3: Collect, develop and maintain data and information to improve decision making

SEC 4: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

#### Demand Management

DM 1: Collect, develop, and maintain data on roadway, transit, bike and pedestrian conditions and other modes and share the data and information through technology

DM 2: Collect, develop, maintain and analyze travel demand data to identify opportunities to provide appropriate mobility options

DM 3: Collaborate to reduce the need for vehicle travel through development regulations

DM 4: Educate and market travel demand management (TDM) programs to increase use of transit, ride-share, bicycling, and walking

DM 5: Create travel demand management (TDM) partnerships among the facilitators and providers of all modes of transportation, community leaders, and institutions that make up high-density trip generating districts

DM 6: Make neighborhoods safely walkable, bikeable, and accessible by transit through non-infrastructure projects and programs

DM 7: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

### **SYSTEM DEVELOPMENT STRATEGIES**

#### Bike and Pedestrian Infrastructure

BP 1: Collaborate to build high comfort bicycle and pedestrian infrastructure through development regulations

BP 2: Increase the quantity and quality of data on bicycle, pedestrian, and similar modes travel behavior

BP 3: Expand high comfort bicycle and pedestrian networks through the implementation of complete streets

BP 4: Implement the Central Ohio Greenways trail vision

BP 5: Update the Active Transportation Plan and implement it to create high comfort regional pedestrian and bicycle transportation networks

BP 6: Make neighborhoods walkable and bikeable through infrastructure projects that fill gaps in the high comfort pedestrian and bicycle networks

BP 7: Ensure neighborhoods and employment locations have high comfort connections for pedestrians and bicyclists to the regional pedestrian, bicycle and transit networks

BP 8: Facilitate multi-jurisdictional dialogue to improve opportunities through collaboration

#### Transit Infrastructure

TRAN 1: Collaborate to build transit infrastructure through development regulations

TRAN 2: Increase frequency on appropriate fixed route transit routes

TRAN 3: Implement high capacity transit service along additional corridors

TRAN 4: Expand geographic coverage of fixed route transit service

TRAN 5: Implement appropriate additional/innovative service to address first/last mile needs

TRAN 6: Make neighborhoods transit supportive through infrastructure projects

TRAN 7: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

#### Freight Rail Infrastructure

FRE 1: Improve at-grade rail crossings and close or grade-separate crossings where feasible

FRE 2: Address congestion points “bottlenecks” on the rail system

FRE 3: Collect information on and analyze freight activity to identify developing trends and work to disseminate that information among partners and peers

FRE 4: Maximize the efficiency and provide needed capacity of rail terminals

FRE 5: Implement hyperloop technology for freight movement

FRE 6: Make transportation decisions that positively impact freight movements and maximize the effectiveness of the region's integrated freight transportation system

FRE 7: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

#### Multimodal Infrastructure Connections

MULTI 1: Forge public/private partnerships to provide resources to maintain and expand key linkages between air, rail and roadway transportation modes

MULTI 2: Maximize efficiency of existing transit terminals and construct new transit terminals, mobility centers and park and rides with safe bike, pedestrian, and vehicle access where there is a convergence of transit routes or intercity rapid speed transportation modes

MULTI 3: Incorporate vehicle sharing needs at transit terminals, stations and major stops

MULTI 4: Improve transit, bike and pedestrian connections to airports

MULTI 5: Alleviate existing or anticipated congestion at roadway and rail terminal access areas

MULTI 6: Alleviate existing or anticipated congestion at roadway and air terminal access areas

MULTI 7: Incorporate ground needs for flying intraregional transport such as drones for package delivery and personal transport

MULTI 8: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

#### Roadway Infrastructure

RDWY 1: Add capacity, where appropriate, to alleviate existing or anticipated congestion along existing freeways and at interchanges

RDWY 2: Continue conversion of key divided expressways into limited access freeways

RDWY 3: Construct new interchanges, where appropriate, to alleviate congestion or support regional development goals

RDWY 4: Add capacity, where appropriate, to alleviate existing or anticipated congestion along existing arterial and collector corridors

RDWY 5: Add capacity, where appropriate, at locations such as intersections to alleviate existing or anticipated congestion

RDWY 6: Construct new roadways, where appropriate, to alleviate congestion or support regional or local development goals

RDWY 7: Provide efficient connectivity of local roads to the arterial and collector roadway system

RDWY 8: Facilitate multi-jurisdictional dialogue to improve opportunities for collaboration

#### **TRANSPORTATION AND SYSTEM RELATED STRATEGIES**

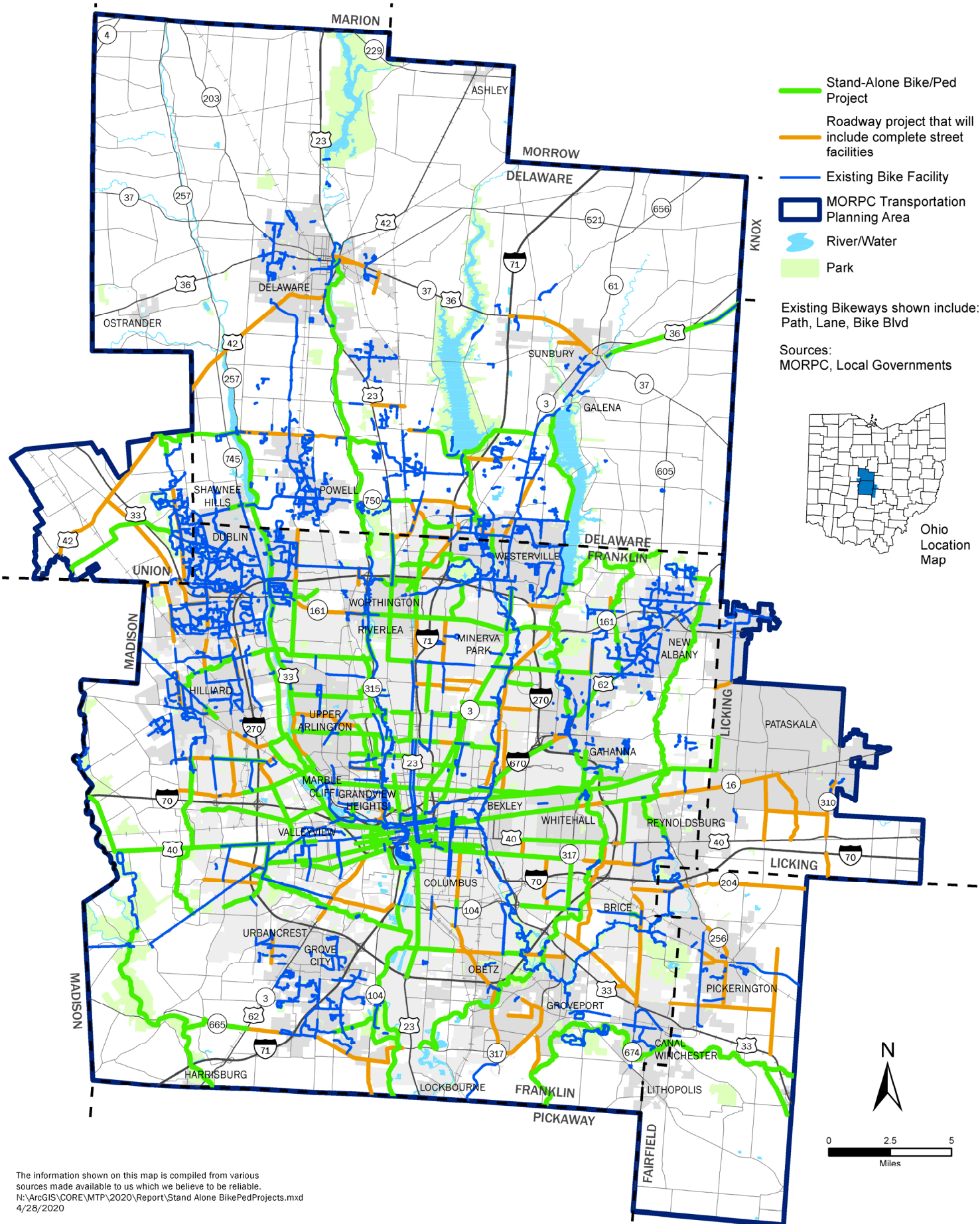
SYS 1: Collaborate to ensure localized and regional transportation systems needs are addressed in development decisions

SYS 2: Develop transportation system to serve all demographic population groups

SYS 3: Create plans and partnerships to attract investment in alternative fuel vehicles and infrastructure

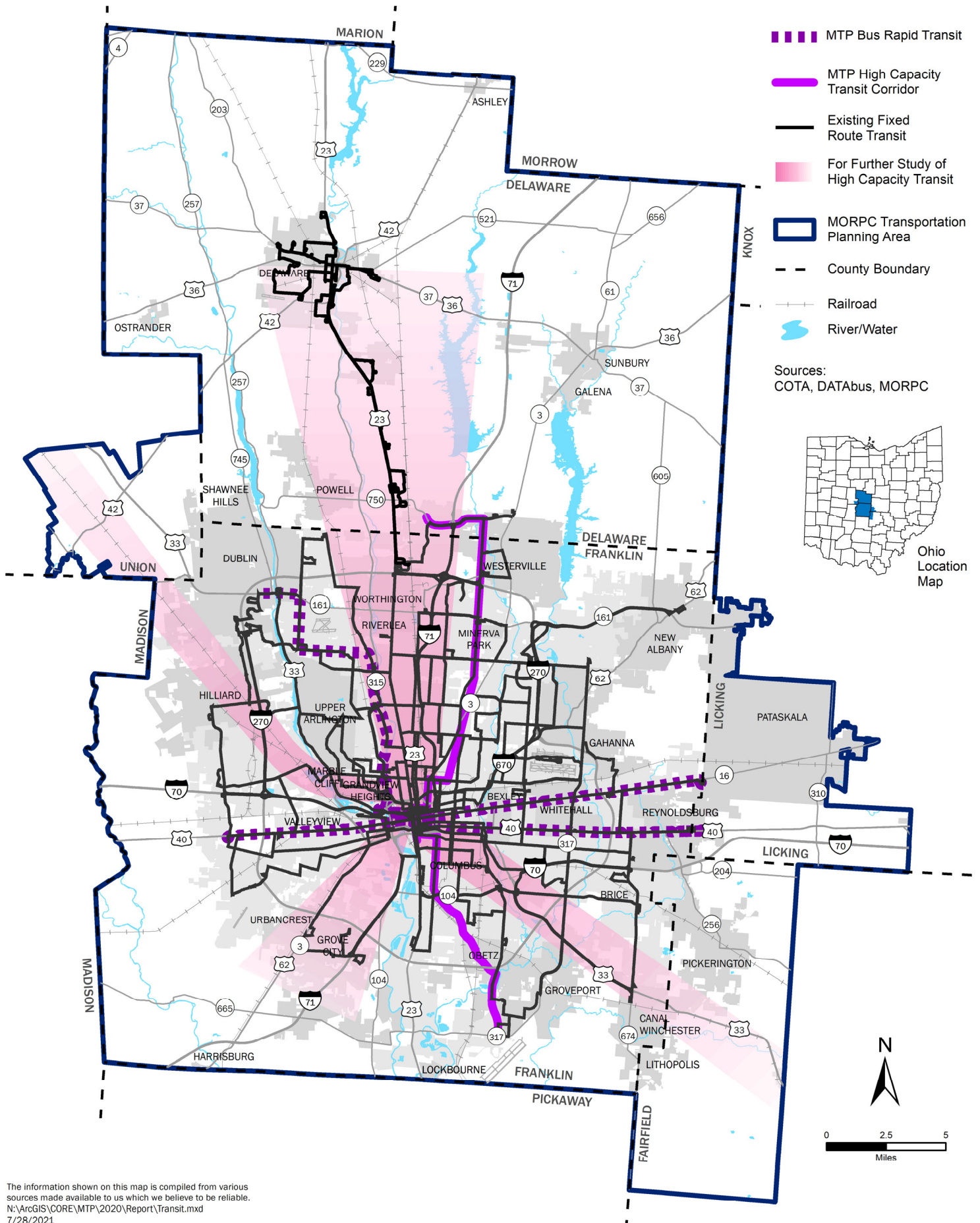
SYS 4: Implement best management practices for storm water runoff and implementation of green infrastructure





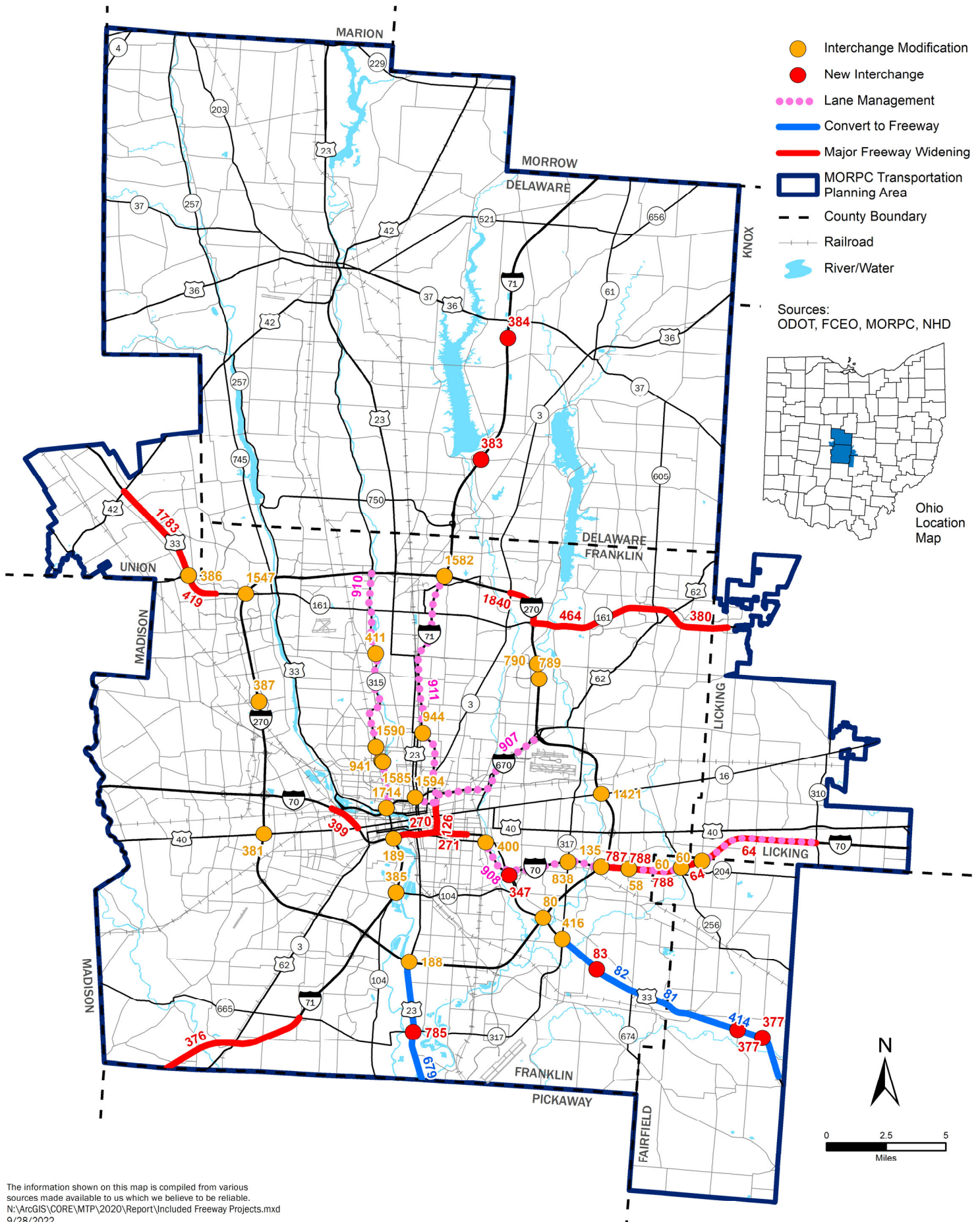
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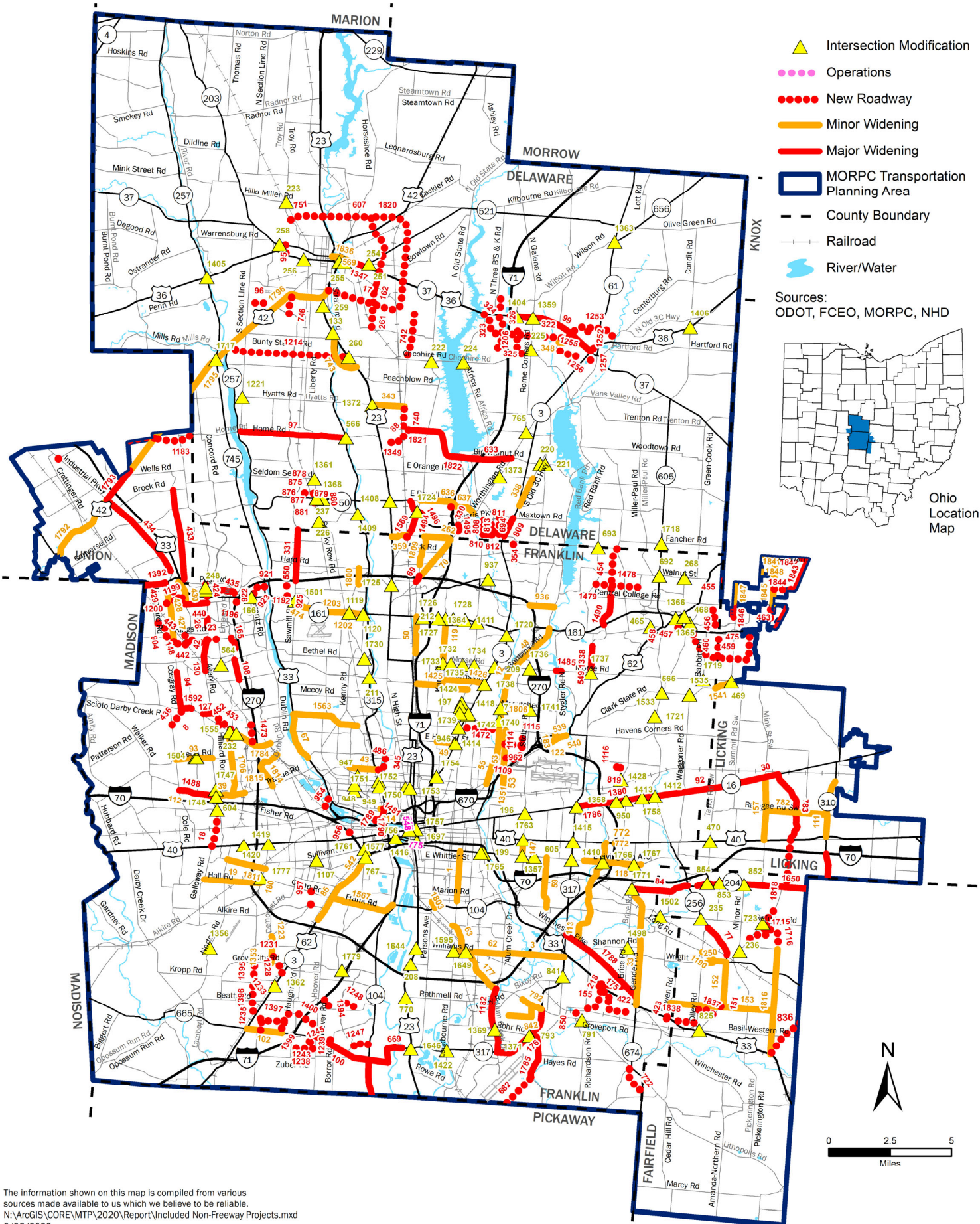
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Amended September 2021



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The information shown on this map is compiled from various sources made available to us which we believe to be reliable.  
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## PLAN IMPLEMENTATION & MONITORING

Involvement from communities within the MPO was important in the development of this plan, and it is through their actions, and those of other regional planning partners, that implementation will occur. MORPC will work with state and local governments and regional planning partners to execute the strategies identified.

While it is estimated that the projects identified in this MTP will be within expected available resources by the year 2050, specific funding has not yet been allocated to most of the projects. When ODOT, COTA, DCT, or local governments decide to secure and commit funding for the design and construction of a project, the project is then added to the Transportation Improvement Program (TIP), and programmed for construction. Many local governments also maintain their own Capital Improvements Program (CIP), which identifies projects within the local jurisdiction with committed funding.

To measure success of the MTP, MORPC publishes an annual report card that identifies if the region is on track for reaching the established targets for each of the objectives as listed in Chapter 1. This is done by comparing current data to the benchmarks and targets, to assess if the region is moving in the right direction, and on track to meet the short- and long-term targets.

MTP



TIP/CIP



Implementation

