



CENTRAL OHIO TDM STRATEGIC PLAN 2020-2021



MID-OHIO REGIONAL
MORPC
PLANNING COMMISSION



TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

THE CASE FOR TDM3

COLLABORATIVE CHAMPIONS9

TDM STRATEGIES..... 12

TDM & THE MTP 21

APPENDIX 29



EXECUTIVE SUMMARY

WHAT IS TDM?

Transportation Demand Management (TDM) can be defined as the principle that guides transportation planning and investments so that system users can easily choose alternative options to driving alone in order to get where they want and need to go. TDM strategies involve using education, outreach, incentives, and programming to encourage and empower the public to use sustainable modes of transportation. Sustainable modes encouraged through initiatives documented in this document include biking, walking, taking transit, carpooling, and vanpooling.

WHY IMPLEMENT TDM STRATEGIES?

TDM initiatives help people use transportation modes more efficiently through education, outreach, and encouragement programs. TDM activities benefit individuals who live in the Central Ohio region and who use the transportation system by: saving them time and money; reducing traffic congestion and harmful vehicle emissions; and supporting physical activity and safety. TDM initiatives also improve the outcome for new transportation investments as well as the lifespan and impact of previous transportation investments.

CORE VALUES OF THIS PLAN

The regional TDM partners, referenced later in this document, prioritize the core values of this plan with every strategic campaign, event, and program:

People. TDM strategies in this plan will only be successful if needs and preferences of commuters are considered in program design.

Equity. It is a priority for TDM programs to benefit age, income, and race diversity. To this end, implementers of strategies seek to design programs that enhance equitable access to convenient and affordable travel options or tools for how to utilize those options.

Innovation. TDM implementers embrace new and creative approaches for connecting people with transportation options and maximizing the transportation system's capacity.

STRATEGIC CATEGORIES

The Central Ohio TDM Plan recognizes seven strategic categories designed to implement the MORPC TDM Mission. Each category has specific action steps: Innovation and improvement, accessibility of information, strengthening of the transportation system, education and outreach, research and collaboration, and policy integration.

WHAT IS TDM?

Transportation Demand Management (TDM) encourages people to use sustainable modes of transportation through education and incentives, thereby reducing the demand of so many vehicles on the roadway.

WHY IMPLEMENT TDM?

- Reduced roadway congestion
- Reduced travel cost
- Improved air quality
- Improved public health

TDM STRATEGIES

1

COLLECT, DEVELOP, AND MAINTAIN DATA ON ROADWAY, TRANSIT, BIKE, AND PEDESTRIAN CONDITIONS AND OTHER MODES, AND SHARE INFORMATION THROUGH TECHNOLOGY.

2

COLLECT, DEVELOP, MAINTAIN AND ANALYZE TRAVEL DEMAND DATA TO IDENTIFY OPPORTUNITIES TO PROVIDE APPROPRIATE MOBILITY OPTIONS.

3

COLLABORATE TO REDUCE THE NEED FOR VEHICLE TRAVEL THROUGH DEVELOPMENT REGULATIONS.

4

EDUCATE AND MARKET TRAVEL DEMAND MANAGEMENT (TDM) PROGRAMS TO INCREASE USE OF TRANSIT, RIDE SHARE, BICYCLING, AND WALKING.

5

CREATE TRAVEL DEMAND MANAGEMENT (TDM) PARTNERSHIPS AMONG THE FACILITATORS AND PROVIDERS OF ALL MODES OF TRANSPORTATION, COMMUNITY LEADERS, AND INSTITUTIONS THAT CONSTITUTE HIGH-DENSITY, TRIP GENERATING DISTRICTS.

6

MAKE NEIGHBORHOODS SAFELY WALKABLE, BIKEABLE, AND ACCESSIBLE BY TRANSIT THROUGH NON-INFRASTRUCTURE PROJECTS AND PROGRAMS.

7

FACILITATE MULTI-JURISDICTIONAL DIALOGUE TO IMPROVE OPPORTUNITIES FOR COLLABORATION.



CHAPTER 1

THE CASE FOR TDM

THE CASE FOR TDM

CURRENT CONDITIONS

Currently, 82% of commuters in Central Ohio drive alone, while only 6% take transit, bike, or walk. MORPC's 2020-2050 Metropolitan Transportation Plan sets a target of 75% of commuters driving alone and 10% of commuters taking transit, biking, or walking to work by 2050. The strategies summarized in this document are intended to help the region reach those targets.

For the purposes of this TDM Plan, MORPC focuses on roads classified as “collectors” or higher. As of 2020, this includes 5,650 lane miles of roadways in MORPC's metropolitan planning organization (MPO) area. This “lane mile” figure includes the length of each roadway (in miles), multiplied by the number of lanes in each roadway. That is, a mile of road with four lanes contributes four lane miles in the calculation. Figure 1 shows the Federal Functional classifications of roadways within the MPO planning area.

Where lane miles illustrates the extent of the roadway system, “vehicle miles traveled” (VMT) depicts the use of the roadway system. Mathematically, VMT is a combination of the distance traveled by all vehicles in a given area over a specific period, which is usually a day. VMT within the MPO planning area has shown an average annual growth of 1.2 percent since 2005. Figure 2 shows daily VMT by roadway classification type from 2005 to 2018. Although VMT declined in 2007 and 2008 due to high gas prices and the economic recession, VMT generally continued to rise after 2008.

While VMT depicts overall use of the roadway system, it alone cannot demonstrate where roadway capacity adversely affects traffic congestion. Growth and development of the region over the past several decades has led to congestion on the roadway system in Central Ohio. Figure 3 shows average traffic conditions during peak periods on major roadways in the MPO planning area in 2018, and Figure 4 makes these projections for 2050. Roadway segments in green (no congestion), yellow (moderate congestion), and red (severe congestion) portray how traffic puts stress on Central Ohio's roadway system. MORPC's Travel Demand Model helps estimate the levels of congestion shown and makes the case for TDM strategies identified in this document.

FIGURE 1: FUNCTIONAL CLASSIFICATION, 2020

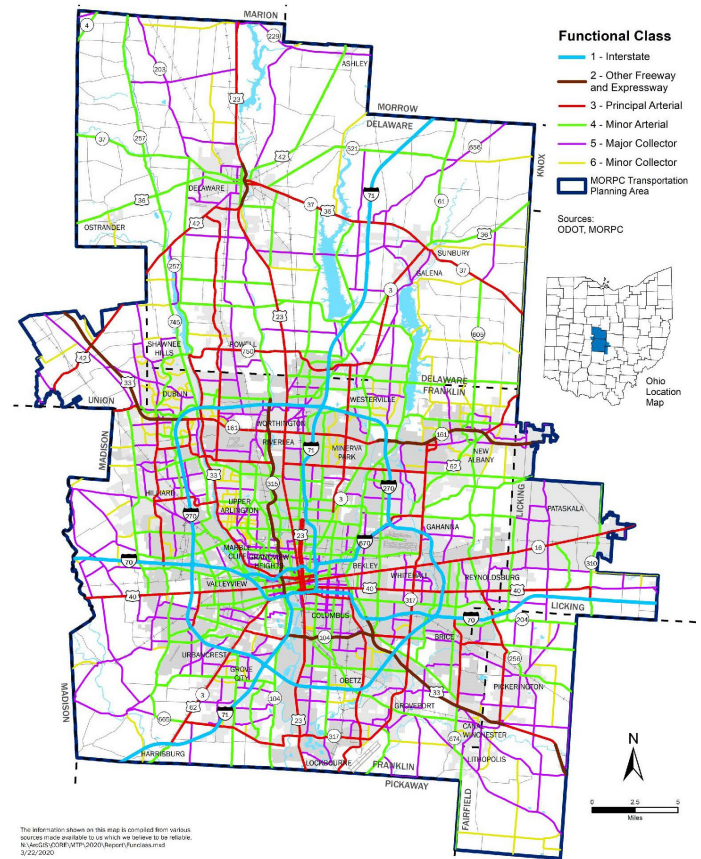


FIGURE 2: DAILY VMT BY ROADWAY CLASSIFICATION IN THE MPO, 2009-2018

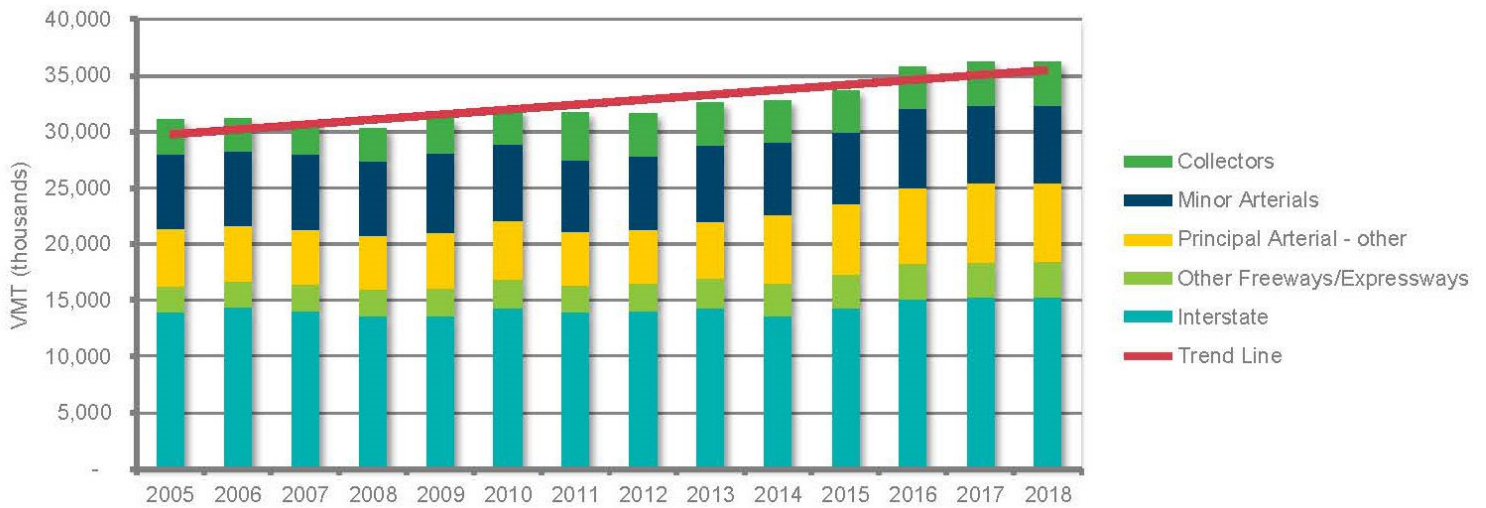


FIGURE 3: ROAD CONGESTION, 2018

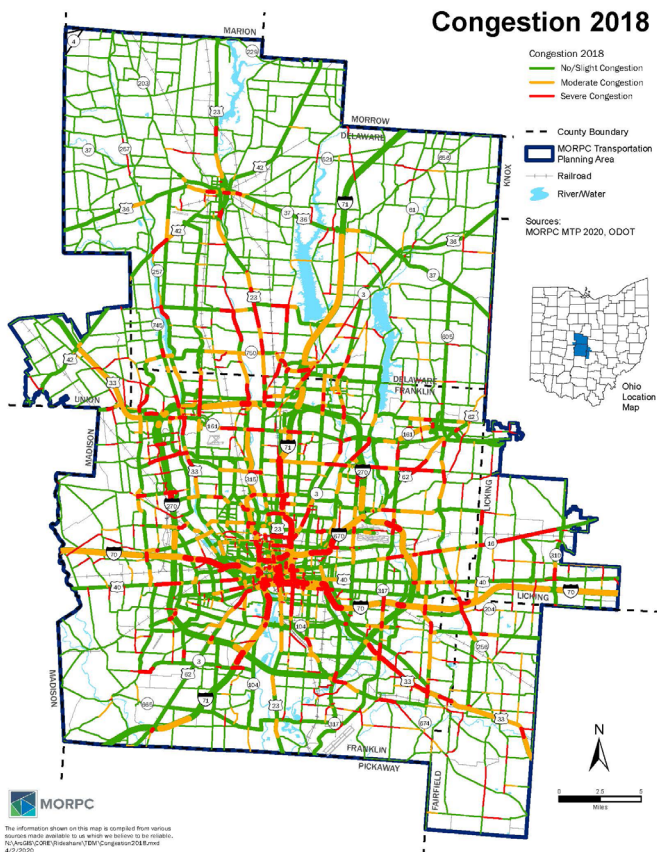


FIGURE 4: PROJECTED ROAD CONGESTION, 2050

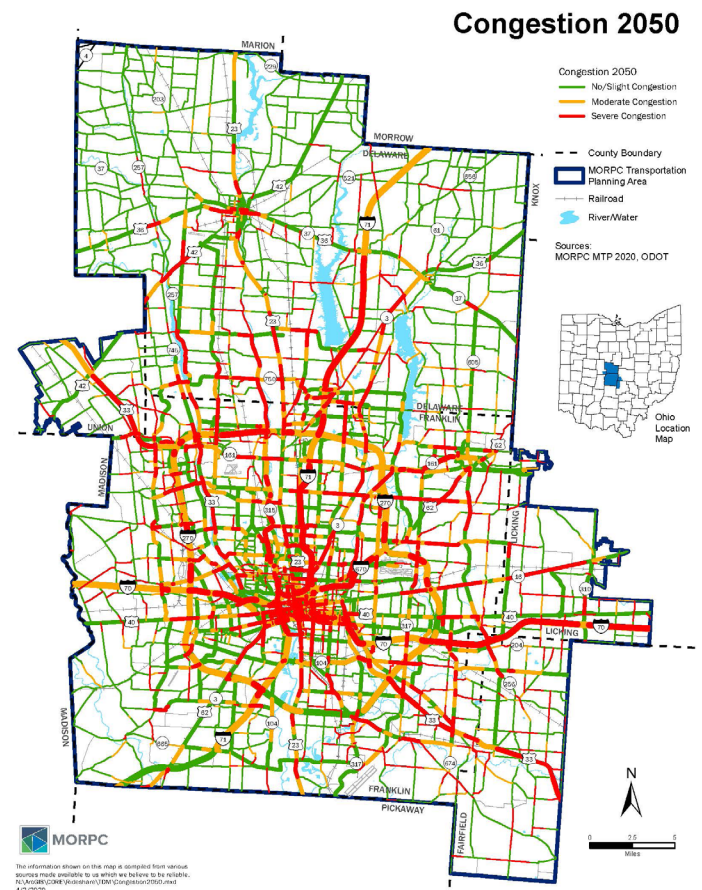


FIGURE 2: DAILY VMT BY ROADWAY CLASSIFICATION IN THE MPO, 2009-2018

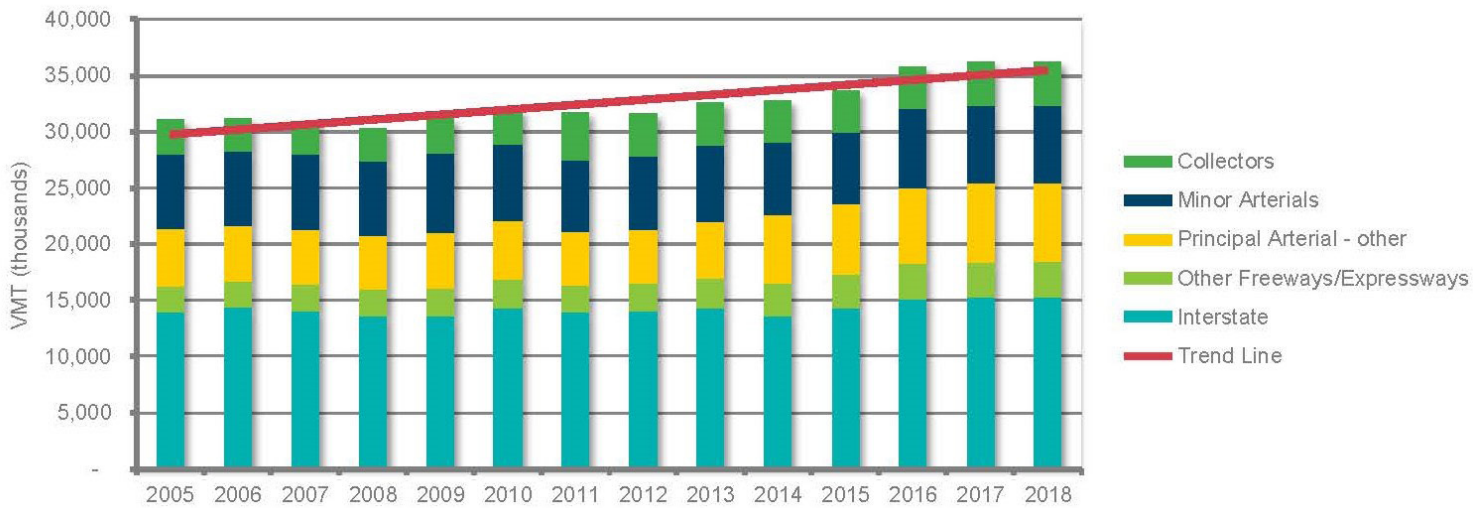


FIGURE 3: ROAD CONGESTION, 2018

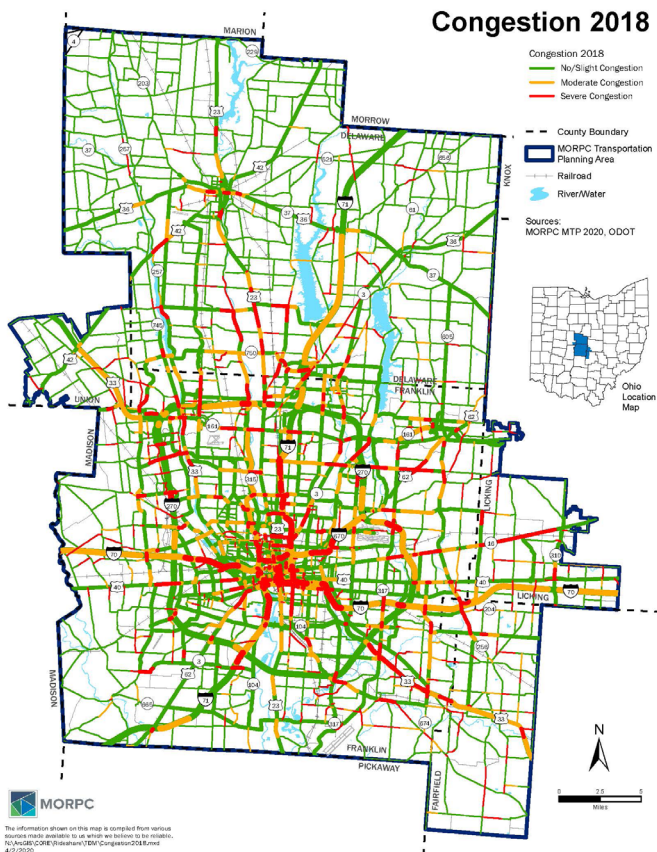
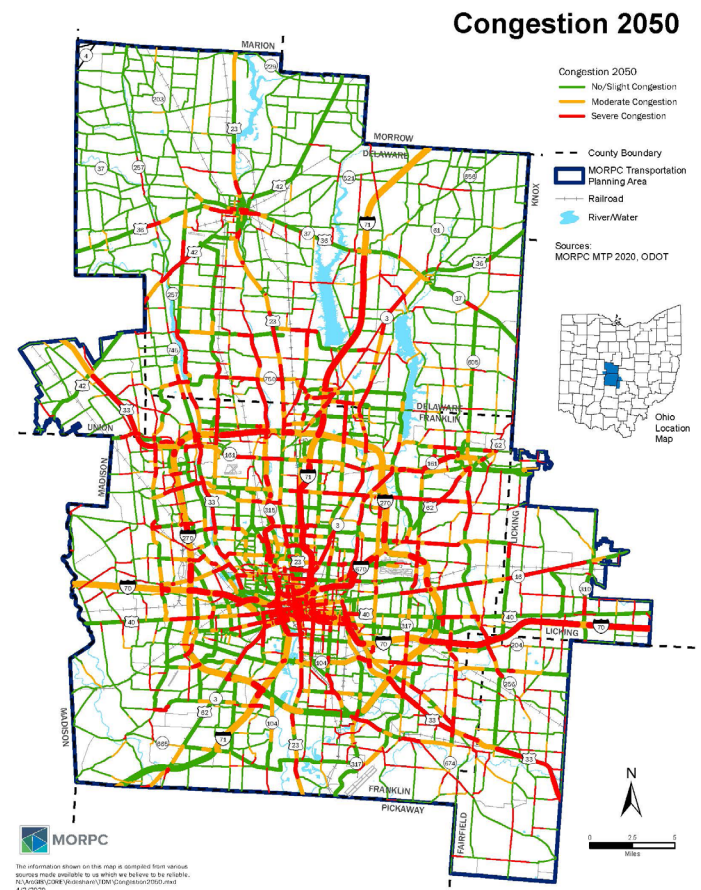


FIGURE 4: PROJECTED ROAD CONGESTION, 2050



THE CASE FOR TDM

The Central Ohio region finds itself in a predicament as it pertains to commuting trends and congestion rates. Land use policies that encouraged low-density development have caused decades of sprawling suburban and exurban growth. This growth has fueled the need for substantial roadway investments that provide the Columbus area with a large network of freeways, arterials and other streets to help shorten commute times throughout the region. However, heavy dependence upon the automobile, coupled with significant growth projections as described in Chapter 2 of the 2020-2050 Columbus Area Metropolitan Transportation Plan, will likely lead to an abundance of major congestion issues if TDM measures along with changes in development patterns are not implemented simultaneously with this expected growth.

The Gohio Commute platform equips commuters and companies with resources to help them explore commuting options available in Central Ohio, such as ridematching, emergency ride home service, and incentive campaigns.

Participation in the Gohio Commute Vanpool Program and maintaining the Gohio Commute Platform will continue to decrease the amount of single occupancy vehicles on the road and reduce the need for costly infrastructure improvements needed to overcome congestion.

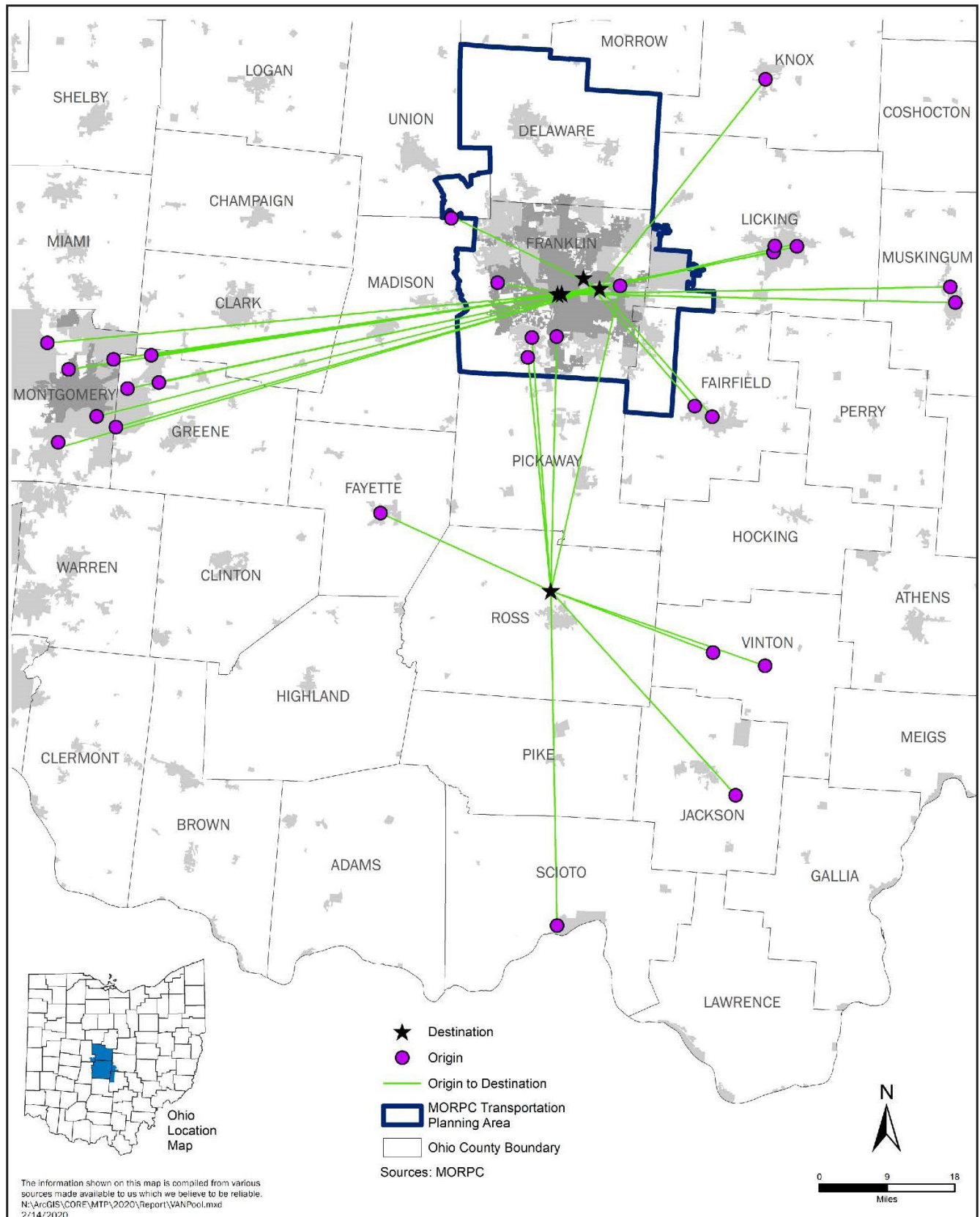
TABLE 1: VANPOOL RIDERSHIP

	2016	2017	2018
Vanpool Miles	68,400	671,850	637,000
Passenger Miles	3,719,000	3,786,300	3,164,100
VRM Savings	3,030,600	3,114,500	2,827,100

TABLE 2: GOHIO COMMUTE PROGRAM PARTICIPATION

	2017	2018	2019
Alternative Commute Trips	28,400	22,600	28,800
Alternative Commute Miles	286,200	266,200	282,900
CO2 Savings (grams)	66,260,800	64,169,500	66,312,800
Dollar Savings	\$80,700	\$85,300	\$55,600

FIGURE 5: VANPOOL ORIGINS & DESTINATIONS, 2020





CHAPTER 2

COLLABORATIVE CHAMPIONS

COLLABORATIVE CHAMPIONS

PARTNERS AND THEIR ROLE IN TDM

MORPC will enhance our position as a regional forum for collaboration by championing TDM advancements through stakeholder partnerships. MORPC recognizes the importance of stakeholder engagement when it comes to implementing regional TDM programs and policies. We strive to create buy-in from our diverse set of stakeholders who are working together to create a better region.

Unifying the ideas and efforts from multiple stakeholders stands to strengthen and solidify the message of TDM across the many facets of implementation. TDM activities and policies will be better developed and suited for our stakeholders when developed in the spirit of collaboration.

The Central Ohio Mode Shift Coalition was brought into existence in February 2019 by leveraging MORPC's status as a regional planning forum where TDM activities and policies can be created, studied, and elevated by regional stakeholders. This coalition serves as a hub of discussion and research among local transportation stakeholders, MORPC member governments, industry businesses, and local advocates. The continuation and strengthening of this coalition is a result of attempting to be proactive in our approach to partnering with local transportation partners to collaborate on joint regional campaigns that promote sustainable methods of mobility.

TDM strategies are also advanced by collaboration with established committees, working groups, and/or organizations whose end-goals might be well served through TDM advancements. Work with fellow MPO partners who comprise the Ohio Association of Regional Councils' Rideshare/Air Quality subcommittee will continue to explore the benefits of state-led efforts that can better equip and support TDM endeavors throughout MPO service areas in Ohio.



MID-OHIO REGIONAL PLANNING COMMISSION (MORPC)

The Mid-Ohio Regional Planning Commission (MORPC) is the designated metropolitan planning organization (MPO) for Central Ohio and is responsible for guiding infrastructure improvements in the region. MORPC has distributed Congestion Mitigation and Air Quality Improvement (CMAQ) funding for flexible programs to meet requirements of the Clean Air Act. MORPC uses this funding to coordinate TDM initiatives that are planned and carried out with partner organizations for the region.

OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

The Ohio Department of Transportation (ODOT) supports TDM initiatives through the encouragement of infrastructure that supports sustainable modes of transportation. ODOT can continue to support TDM by establishing relationships with partner and community organizations to coordinate transportation services to maximize the transportation system.

REGIONAL AND LOCAL TRANSIT PROVIDERS

The Central Ohio Transit Authority (COTA), Delaware County Transit (DCT), and Licking County Transit (LCT) are the major public transit providers in the MORPC MPO area. COTA provides public transportation for Franklin County and contiguous charter municipalities and para-transit services for individuals with a disability that prevents them from riding typical COTA services. LCT and DCT offer public transportation services for the counties that own and operate them with supplemental demand response services.

Public transit services support reduction in single occupancy vehicle use by providing a sustainable and economic option for transporting people to and from their destinations. Transit agencies should continue to support TDM by working with MORPC staff to create partnerships with employers and identify unique ways to communicate with travelers in the Central Ohio region.

LOCAL JURISDICTIONS

MORPC collaborates with local jurisdictions to support transportation improvements that improve quality of life and economic development throughout the region. MORPC planners work to improve multimodal connections that transcend local boundaries to support future growth. The increase of support of TDM campaigns and programs at the local level will encourage mode shift in multiple ways. Local municipalities develop parking and land use policies that have an impact on travel demand. They also have an opportunity to connect with residents on a more personal level when encouraging sustainable driving practices. Strengthening these efforts will support the TDM strategies developed in this plan.

ADVOCACY GROUPS

MORPC TDM implementors often partner with Central Ohio advocacy groups that support sustainable transportation in the region. Yay Bikes! is a Central Ohio advocacy group that supports safe bicycling for those who choose to travel alternatively and those who have no other transportation options. They provide bicycle oriented services and trainings to encourage and empower bicycling as a form of transportation. Transit Columbus advocates for a connected, safe, and sustainable transportation system that supports quality of life for all Central Ohio residents. These organizations support TDM strategies by encouraging the use of sustainable modes and supporting the of the transportation system.

PRIVATE TRANSPORTATION PROVIDERS

Micro and shared mobility options continue to grow in Central Ohio. Each new mode that comes to the market adds to the transportation system and makes it easier for people to drive alone less frequently. Private providers work with MORPC staff on how to strengthen campaigns and outreach initiatives to encourage use of their modes and decrease single occupancy vehicle use in the region. This collaboration can also lead to provider experiences being shared and the improvement of services offered.



CHAPTER 3

TDM STRATEGIES

TDM STRATEGIES

TDM STRATEGIES

The Central Ohio TDM Plan recognizes six strategic categories designed to implement the MORPC TDM mission. Each category identifies key programs to implement this objective: Innovation and improvement, accessibility of information, enhancement of the transportation system, education and outreach, research and collaboration, and policy integration.

Each strategy includes specific actions to accomplish during the lifespan of this document. These strategies work together to meet the goals and objectives outlined in the previous section. The following section describes the intentions of each of these strategies, next steps, and champion organizations that will assist in implementation.

TABLE 3: TDM ACTIVITY TIMELINE BY STRATEGY

TDM ACTIONS	2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Central Ohio Mode Shift Coalition to accept TDM Plan Update								
Develop Regional TDM and Air Quality Marketing Plan								
Review Current TDM Data Collection								
Develop TDM Data Collection and Review Process								
Coordinate Mobility Data with Relevant Policy Opportunities								
Maintain Foundational Activities								
Maintain Awareness of Multimodal Improvements and Emerging Modes								
Provide Monthly Mobility Updates on Online Platforms								
Support the Integration of New Modes of Sustainable Transportation								
Link TDM with Policy Development								
Coordinate with MORPC's Regional Policy Roundtable								
Offer TDM Consultation to Companies								
Collaborate with Economic Development Stakeholders								
Enhance the Gohio Mobility Hub Website								
Re-brand TDM Campaigns								
Develop Central Ohio Mode Shift Coalition Action Plan								
Measure TDM Program Success by Reviewing Benchmarks								
Update MORPC TDM MOU for Local Government Partners								
Develop Public Engagement Plan for Online and Event Opportunities								
Coordinate a Public Input Review Process with MORPC Committees								
Invite stakeholders to join the Central Ohio Mode Shift Coalition								

1 COLLECT, DEVELOP, AND MAINTAIN DATA ON ROADWAY, TRANSIT, BIKE, AND PEDESTRIAN CONDITIONS AND OTHER MODES, AND SHARE INFORMATION THROUGH TECHNOLOGY.

A first step in working to influence mode shift in Central Ohio is collecting transportation data, understanding it and using it collaboratively with regional partners. Ensuring that the public is aware of their transportation options and real-time information will assist the public in making informed transportation choices. As new transportation services come to the Central Ohio market, TDM initiatives must adapt to support current and expanding audiences to maximize the capacity in the transportation system and to continue to serve all populations in the region.

ACTIONS

UNDERSTAND AND IMPROVE MOBILITY DATA COLLECTION

Collect, develop, and maintain data on roadway and transit conditions, and share the data and information through technology. Leverage new transportation data to improve system performance. Continue to seek an awareness of how people get around and how they make travel decisions to better reach and target markets.

NEXT STEPS:

- Collect mobility data that can be used to identify mode choices.
- Analyze and share data with the Mode Shift Coalition to better determine gasification strategies for regional programs.
- Track and influence policy that impacts the transportation system.

CHAMPIONS:

- MORPC Staff
- Central Ohio Mode Shift Coalition
- Local Government Partners
- ODOT

TRACK AND IMPROVE TDM PROGRAMMING PERFORMANCE

MORPC staff currently has the ability to track how many individuals sign up as a user of Gohio Commute, what modes they use, and how often they log trips, but MORPC would have a stronger understanding of mode shift by looking at company size and previous transportation behavior in addition to the other data points mentioned.

NEXT STEPS:

- Maintain foundational program responsibilities while continually working to improve outcomes.

CHAMPIONS:

- MORPC Staff
- Central Ohio Mode Shift Coalition
- Local Government Partners
- Central Ohio Employers

2

COLLECT, DEVELOP, MAINTAIN AND ANALYZE TRAVEL DEMAND DATA TO IDENTIFY OPPORTUNITIES TO PROVIDE APPROPRIATE MOBILITY OPTIONS.

A first step in working to influence mode shift in Central Ohio is collecting transportation data, understanding it and using it collaboratively with regional partners. Ensuring that the public is aware of their transportation options and real-time information will assist the public in making informed transportation choices. As new transportation services come to the Central Ohio market, TDM initiatives must adapt to support current and expanding audiences to maximize the capacity in the transportation system and to continue to serve all populations in the region.

ACTIONS**HIGHLIGHT MULTIMODAL CONNECTIONS**

Maintain awareness of the transportation system and how modes connect. Draw attention to multimodal benefits and connections for new mobility options and trip planning services. Make neighborhoods more safely walkable, bikeable, and accessible by transit through non-infrastructure projects and programs.

NEXT STEPS:

- Identify and highlight emerging mobility that increases multimodal connectivity in the region.
- Identify multimodal connections based on geographic location to best understand location-specific modes to recommend and identify the needs that should be addressed.

CHAMPIONS:

- MORPC Staff
- Transportation providers
- Transit agencies
- Local jurisdictions
- ODOT

MAXIMIZE TRANSPORTATION INVESTMENTS

Review travel demand and ridership data for available modes to determine current and future mobility needs in the region. Work with transportation providers and local decision makers to influence how emerging transportation options are deployed to maximize benefits for all people.

NEXT STEPS:

- Collaborate with Central Ohio decision makers on the integration of new modes into the existing transportation system.
- Provide regional context and support to emerging modes in Central Ohio jurisdictions.

CHAMPIONS:

- MORPC Staff
- Transportation providers
- Transit agencies
- Local jurisdictions
- ODOT

3

COLLABORATE TO REDUCE THE NEED FOR VEHICLE TRAVEL THROUGH DEVELOPMENT REGULATIONS.

TDM policies can help mitigate congestion and its negative impacts. MORPC has an opportunity to use its regional voice as an influencer and exemplar of sustainable TDM policies that will allow Central Ohio to grow in a sustainable manner without sacrificing its original character.

Encouraging local communities to update zoning codes to remove barriers to mixed-use development is one way to reduce short, non-vehicular trips. Devising subdivision regulations and site plan requirements to allow for increased densities, allowing for shared or reduced parking, and improving access to transit are other examples of how short auto trips can be reduced. In addition, by practicing access management principles and promoting complete streets policies, the safety of the transportation system for all users will be improved.

ACTIONS**LINK ECONOMIC DEVELOPMENT TO TDM POLICY**

Link economic development initiatives to TDM policy to connect future development with the existing transportation system.

NEXT STEPS:

- Redefine MORPC's TDM offerings to offer TDM consultation to communities in order to drive their future economic development success.
- Incorporate TDM policies into economic development business site-selection decisions.

CHAMPIONS:

- MORPC Staff
- Transportation providers
- Transit agencies
- Local jurisdictions
- Employers
- Business and Economic Development Professionals

TDM POLICY SUPPORT

Research TDM policies that could be integrated into state and/or local plans and policy documents.

NEXT STEPS:

- Gain an active voice through the MORPC's Regional Policy Roundtable for consideration of TDM priorities in in public policy at the federal, state, and local levels.
- Generate and publish sample TDM policies that can be easily integrated and follow best practices.

CHAMPIONS:

- Gain an active voice through the MORPC's Regional Policy Roundtable for consideration of TDM priorities in in public policy at the federal, state, and local levels.
- Generate and publish sample TDM policies that can be easily integrated and follow best practices.

4

EDUCATE AND MARKET TDM PROGRAMS TO INCREASE USE OF TRANSIT, RIDE SHARE, BICYCLING, AND WALKING.

TDM programs work together with existing transportation options to support a shift in transportation use. TDM activities can encourage individuals to identify sustainable modes of transportation and provide incentives to encourage use and continued travel behavior, which also benefits transportation providers.

Education and outreach initiatives should confront the barriers that keep individuals from using sustainable modes by providing instruction on basic skills needed and empowering an individual to try a new trip type. Outreach to those of all ages, abilities and incomes will help confront individuals' unique mobility barriers.

ACTIONS

PROVIDE ACCESSIBLE INFORMATION

Make information that supports alternative transportation use easily accessible so that people can explore what transportation options are available to them and are empowered to make informed mobility choices.

NEXT STEPS:

- Update Gohio Mobility Hub: trip planning, sustainable modes available, TDM campaigns, and sustainable transportation related events.
- Provide monthly regional transportation updates on Gohio Mobility Hub and social media outlets.

CHAMPIONS:

- MORPC Staff
- Transportation providers
- Transit agencies
- Local jurisdictions
- ODOT

COHESIVE TDM BRANDING

The creation of cohesive TDM campaign branding is intended to increase awareness and attention to each effort. TDM campaigns may vary in marketing mediums used, but a recognizable look will strengthen them by having a visibly identifiable connection.

NEXT STEPS:

- Create a branding toolkit that has adjustments for all TDM campaigns.
- Update TDM campaign look on Gohio Mobility Hub and social media outlets.
- Develop advertising tools with new TDM branding.

CHAMPIONS:

- MORPC Staff
- Transportation providers
- Transit agencies
- Central Ohio Mode Shift Coalition

5

CREATE TDM PARTNERSHIPS AMONG THE FACILITATORS AND PROVIDERS OF ALL MODES OF TRANSPORTATION, COMMUNITY LEADERS, AND INSTITUTIONS THAT CONSTITUTE HIGH-DENSITY, TRIP GENERATING DISTRICTS.

Effective local implementation will be enhanced by partnering with other agencies and transportation providers. Partnerships such as these and involvement of community stakeholders like local government representatives, public health agencies, and other local stakeholders support the advancement of the Central Ohio Mode Shift Coalition, a regional umbrella for organizations that wish to promote the advancement of TDM within the Central Ohio region. This coalition provides frequent coordination among participating agencies in order to create impactful TDM programming as well as continuous research for how to use emerging mobility data and policy influence to support performance of the continuously evolving transportation system. This consortium will develop into a hub of discussion and research that will help expand upon current TDM activities by exploring new policies and TDM implementation techniques.

ACTIONS

DEVELOP ACTION PLAN AND MEASURE IMPACT

Conduct impactful collaboration among transit agencies, private transportation providers, public health agencies, and other mobility stakeholders to implement meaningful TDM activities and coordinate regional mobility initiatives.

NEXT STEPS:

- Develop a Central Ohio Mode Shift Coalition Action Plan.
- Develop benchmarks to measure program success.

CHAMPIONS:

- MORPC Staff
- Central Ohio Mode shift Coalition

CONDUCT IMPACTFUL OUTREACH

Encourage partner local governments to implement memoranda of understanding with MORPC regarding the rideshare service area to formalize MORPC's TDM program as a top priority.

NEXT STEPS:

- Update the memoranda of understanding with the support of the Central Ohio Mode Shift Coalition.
- Work with local government partners to highlight the importance of TDM and rideshare.

CHAMPIONS:

- MORPC Staff
- Central Ohio Mode Shift Coalition
- Local government partners

6

MAKE NEIGHBORHOODS SAFELY WALKABLE, BIKEABLE, AND ACCESSIBLE BY TRANSIT THROUGH NON-INFRASTRUCTURE PROJECTS AND PROGRAMS.

The main pillars of Gohio Commute's current outreach are to support the use of and development of sustainable transportation programming. Expanding into transit, active transportation and land use components of TDM will potentially require more broad funding opportunities. In particular, land use regulations oftentimes inadvertently prohibit the use of alternative transit. Wide roads may deter commuters from walking and biking, while low-density developments make transit an infeasible option.

ACTIONS

IDENTIFY BARRIERS TO SUSTAINABLE TRANSPORTATION

Expand TDM public engagement by asking what infrastructure barriers keep Central Ohio residents from using sustainable modes of transportation.

NEXT STEPS:

Develop a TDM public engagement guide for public events and for collaboration with community groups.

CHAMPIONS:

- MORPC Staff
- Central Ohio Mode Shift Coalition
- Community Groups

IMPACTFUL RESPONSE TO COMMUNITY INPUT

Coordinate responses to public feedback gathered through TDM outreach with other relevant MORPC groups.

NEXT STEPS:

- Collaborate with relevant MORPC groups on how public input can be gathered and used in an impactful way.

CHAMPIONS:

- MORPC Staff
- MORPC Committees such as the Central Ohio Greenways Board and the Active Transportation Committee.

7

FACILITATE MULTI-JURISDICTIONAL DIALOGUE TO IMPROVE OPPORTUNITIES FOR COLLABORATION.

From a statewide perspective, MORPC is working toward a united, multi-regional TDM effort that will be implemented at the local level. This includes working with other MPOs in Ohio to create a statewide partnership when delivering TDM services. Coordinating ridesharing efforts among MPOs will be a more efficient method of spending funds.

The Central Ohio Mode Shift Coalition will continue to work with mobility providers, advocacy groups, and evolving mobility programs leaders to educate employees and employers about using transit, rideshare and the other sustainable options available for getting around Central Ohio. This group has conducted education sessions and attended information events.

ACTION

IDENTIFY BARRIERS TO SUSTAINABLE TRANSPORTATION USE

The Central Ohio Mode Shift Coalition will extend the invitation to new mobility partners and other external stakeholders to support MORPC TDM program reach and the success of the program.

NEXT STEPS:

- Expand Central Ohio Mode Shift Coalition to additional stakeholders to advance TDM initiatives.

CHAMPIONS:

- MORPC Staff
- Central Ohio Mode shift Coalition
- Community Groups
- Other External Stakeholders



CHAPTER 4

TDM & THE MTP

TDM GOALS & MTP BENCHMARKS

TDM is a small component in the complex system of transportation in Central Ohio. When it comes to planning out transportation improvements and maintenance, MORPC's Metropolitan Transportation Plan (MTP) serves as the region's long-range planning document that identifies transportation deficiencies, policies, strategies, and projects over the next two decades. MORPC coordinates the development of the MTP with communities throughout Central Ohio and with other local, state, and federal agencies.

The development of the TDM Plan took place in conjunction with the 2020-2050 MTP and is essentially an extension of this document. The TDM Plan suggests action to reduce vehicular demand on the roadway, while the MTP increases and/or maintains the supply of the road network. Due to this connection, the MTP and TDM Plan have coordinating goals, as identified in Table 2 below:

TABLE 2: COORDINATION OF TDM PLANNING AND MTP GOALS

	REDUCE PER CAPITA ENERGY	PROTECT NATURAL RESOURCES	ATTRACT AND RETAIN ECONOMIC OPPORTUNITY	CREATE SUSTAINABLE NEIGHBORHOODS	MAXIMIZE ON PUBLIC EXPENDITURES
TDM OUTCOMES					
REDUCED CONGESTION	✓	✓	✓	✓	✓
REDUCED ENERGY USE & GHG	✓	✓		✓	
REDUCED COMMUTING COSTS	✓		✓	✓	✓
IMPROVED AIR QUALITY	✓	✓		✓	
IMPROVED PUBLIC HEALTH	✓	✓		✓	

PERFORMANCE-BASED PROGRAMMING

Competition for public dollars continues to strengthen. In order to justify allocations in the budget to TDM activities, MORPC must demonstrate that the program is of substantial benefit to the Central Ohio region and is a smart use of taxpayer dollars. Using data-driven decision making to establish performance metrics allows MORPC to present the positive impacts of TDM throughout our region. Performance metrics will also help the team understand what strategies are working, and what needs to change. A core function of the MTP is to provide benchmarks for the identified objectives. These benchmarks measure whether certain aspects of each goal are met.

It is the responsibility of this TDM Plan to provide further guidance for MORPC to achieve these benchmarks. As previously stated, TDM is only a small piece of the "transportation puzzle," but is a critical piece that needs to be administered properly in order to achieve the benchmarks identified in the MTP. Tables 3 through 8 describe how MTP performance measures are impacted.

ENERGY REDUCTION

Energy reduction is a core component of the TDM plan, as well as the MTP. The act of reducing vehicle miles traveled (VMT) per capita and reducing the percentage of commuters driving alone has a direct impact on congestion reduction. Reducing the number of cars on the road allows for faster commute times, thereby reducing commuting costs. A reduction in commuters driving alone will lead to less CO₂ being admitted in the air, thereby improving air quality and reducing green house gases (GHG) emitted. Both goals lead to the improvement of public health through attaining cleaner air.

TABLE 3: COORDINATION OF ENERGY REDUCTION IN THE MTP AND TDM PLAN

GOAL: REDUCE PER CAPITA ENERGY CONSUMPTION AND PROMOTE ALTERNATIVE FUEL RESOURCES TO INCREASE AFFORDABILITY AND RESILIENCE OF REGIONAL ENERGY SUPPLIES	
OBJECTIVE: Reduce the percentage of commuters driving alone and increase the percentage of commuters riding transit, bicycles, or walking	
RATIONALE	<ul style="list-style-type: none"> Reducing single occupancy auto commutes and increasing commuters using alternative transportation modes will reduce per capita fuel and energy consumption
2020 MTP BENCHMARK	<ul style="list-style-type: none"> 82% of commuters drive alone 6% of commuters ride transit, bicycle, or walk
2025 TARGET	<ul style="list-style-type: none"> 80% of commuters drive alone 7% of commuters ride transit, bicycle, or walk
2050 TARGET	<ul style="list-style-type: none"> 75% of commuters drive alone 10% of commuters ride transit, bicycle, or walk
OBJECTIVE: Reduce vehicle miles traveled (VMT) per capita	
RATIONALE	<ul style="list-style-type: none"> Reducing vehicle miles traveled per person for any trip purpose will reduce per capita fuel and energy consumption
2020 MTP BENCHMARK	<ul style="list-style-type: none"> 9,300 VMTper capita 2017 ODOT VMT, 2018 MORPC Population Estimates
2025 TARGET	<ul style="list-style-type: none"> 8,800 VMT per capita (5% reduction)
2050 TARGET	<ul style="list-style-type: none"> 6,500 VMT per capita (30% reduction)

NATURAL RESOURCES

Protecting natural resources as they relate to TDM predominantly applies to pollutants emitted by vehicles. Reducing congestion improves air quality and health by reducing the amount of greenhouse gases (GHG) emitted. The performance of this goal is benchmarked by the MTP utilizing the amount of fine particulate matter emitted in the region as measured by the EPA.

TABLE 4: COORDINATION OF PROTECTION OF NATURAL RESOURCES IN THE MTP AND TDM PLAN

GOAL: Protect natural resources and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community	
OBJECTIVE: Reduce emissions from mobile sources to continuously meet EPA air quality standards for each criteria pollutant	
RATIONALE	<ul style="list-style-type: none"> Clean air an essential natural resource and is a key indicator of a healthy community
2020 MTP BENCHMARK	<ul style="list-style-type: none"> Ozone Non-Attainment PM2.5 Attainment
2025 TARGET	<ul style="list-style-type: none"> Ozone Attainment PM2.5 Attainment
2050 TARGET	<ul style="list-style-type: none"> Ozone Attainment PM2.5 Attainment

ECONOMIC OPPORTUNITY

The transportation network is a critical factor when determining individuals' access to economic opportunity throughout the region. While factors such as land use and zoning are likely the largest contributors to economic opportunity, reducing congestion can help improve traffic flows. Improved transportation flow helps connect jobs with people more quickly and reliably. Congested commutes are also a burden on the budgets of both individual commuters and freight carriers, therefore reducing congestion will in return reduce commuting costs for those who must drive during peak travel periods.

TABLE 5: COORDINATION OF ECONOMIC OPPORTUNITY IN THE MTP AND TDM PLAN

GOAL: POSITION CENTRAL OHIO TO ATTRACT AND RETAIN ECONOMIC OPPORTUNITY TO PROSPER AS A REGION AND COMPETE GLOBALLY	
OBJECTIVE: Minimize the percentage of total vehicle miles traveled under congested conditions	
RATIONALE	<ul style="list-style-type: none"> Efficient mobility of people and freight is an important element of a vibrant economy
2020 MTP BENCHMARK	Total vehicle miles traveled under congested conditions: <ul style="list-style-type: none"> Daily: 5% Peak Periods 10.3% 8.6 Annual Hours of Peak Hour Excessive Delay Per Capita 2018 Travel Demand Model on functionally classified Collectors and above, 2017 RITIS

2025 TARGET	Total vehicle miles traveled under congested conditions: <ul style="list-style-type: none"> • Daily: <5% • Peak Periods <10% • <12 Annual Hours of Peak Hour Excessive Delay Per Capita
2050 TARGET	Total vehicle miles traveled under congested conditions: <ul style="list-style-type: none"> • Daily: <5% • Peak Periods <10% • <12 Annual Hours of Peak Hour Excessive Delay Per Capita
OBJECTIVE: Minimize the amount of extra, or buffer, travel time necessary when planning expected trip travel	
RATIONALE	<ul style="list-style-type: none"> • Freight carriers, commuters and businesses need reliable and consistent travel times to ensure the on-time delivery of goods and most efficiently use their time
2020 MTP BENCHMARK	<ul style="list-style-type: none"> • AM Peak Region-wide Uncertainty Index: 1.43 • PM Peak Region-wide Uncertainty Index: 1.55 • Calculated from Jan-Dec 2017 INRIX data, arterials and above • 77% of Interstate System has Level of Travel Time Reliability Ratio less than federal threshold • 71% of non-Interstate NHS has Level of Travel Time Reliability Ratio less than federal threshold • Truck Travel Time Reliability Index: 1.85 (2018 ODOT)
2025 TARGET	<ul style="list-style-type: none"> • Region-wide Uncertainty Index: 1.3 • 85% of Interstate System has Level of Travel Time Reliability Ratio less than federal threshold • 80% of non-Interstate NHS has Level of Travel Time Reliability Ratio less than federal threshold • Truck Travel Time Reliability Index: <1.5
2050 TARGET	<ul style="list-style-type: none"> • Region-wide Uncertainty Index: 1.25 • 85% of Interstate System has Level of Travel Time Reliability Ratio less than federal threshold • 80% of non-Interstate NHS has Level of Travel Time Reliability Ratio less than federal threshold • Truck Travel Time Reliability Index: <1.5

SUSTAINABLE NEIGHBORHOODS

Investing in infrastructure that promotes TDM activities, such as implementation of complete streets, will encourage modal shift by offering safe and healthy alternatives to driving alone. This will help facilitate the creation of sustainable neighborhoods around Central Ohio. These neighborhoods will likely see a reduction in congestion due to the natural ability to use sustainable modes. By choosing not to drive alone, residents will improve air quality and save money on transportation costs.

TABLE 6: COORDINATION OF SUPPORTING SUSTAINABLE NEIGHBORHOODS IN THE MTP AND TDM PLAN

GOAL: CREATE SUSTAINABLE NEIGHBORHOODS TO IMPROVE RESIDENTS' QUALITY OF LIFE	
OBJECTIVE: Encourage and support MORPC member communities to adopt complete streets policies or policies that contain those elements	
RATIONALE	<ul style="list-style-type: none"> Complete streets allow for transportation choices, which enhance quality of life
2020 MTP BENCHMARK	<ul style="list-style-type: none"> 14% of MORPC member communities have adopted complete streets policies or policies that contain those elements
2025 TARGET	<ul style="list-style-type: none"> 20% of MORPC member communities have adopted complete streets policies or policies that contain those elements
2050 TARGET	<ul style="list-style-type: none"> 100% of MORPC member communities have adopted complete streets policies or policies that contain those elements
OBJECTIVE: Increase the amount of bicycle and pedestrian infrastructure	
RATIONALE	<ul style="list-style-type: none"> Sustainable neighborhoods provide adequate bicycle and pedestrian infrastructure to provide viable transportation options
2020 MTP BENCHMARK	<ul style="list-style-type: none"> 700 miles of bikeways 40% of arterials and collectors have sidewalks* 2018 MORPC Bikeway, Sidewalk Inventories
2025 TARGET	<ul style="list-style-type: none"> 820 miles of bikeways (17% increase) 45% of arterials and collectors have sidewalks
2050 TARGET	<ul style="list-style-type: none"> 1,050 miles of bikeways (50% increase) 85% of arterials and collectors have sidewalks

GOAL: CREATE SUSTAINABLE NEIGHBORHOODS TO IMPROVE RESIDENTS' QUALITY OF LIFE

OBJECTIVE: Target infrastructure development to serve a higher number of people and jobs

RATIONALE

- Sustainable neighborhoods provide adequate bicycle and pedestrian infrastructure to provide multimodal connections

OBJECTIVE: Increase the number of bike/pedestrian miles traveled on COG trails annually

RATIONALE

- Central Ohio Greenways (COG) are an integral component connecting sustainable neighborhoods around the region. viable transportation options

2020 BENCHMARK

- 11.5 million COG bike/pedestrian miles traveled annually (7-county area)

2025 TARGET

- 14 million COG bike/pedestrian miles traveled annually (7-county area)

2050 TARGET

- 25 million COG bike/pedestrian miles traveled annually (7-county area)

MAXIMIZE PUBLIC EXPENDITURES

Coordination among the Central Ohio Mode Shift Coalition, other outside stakeholders, and MORPC committees will support the integration of new transportation projects and programs. This work will encourage a cohesive transportation system that works efficiently for Central Ohio transportation users and will ideally lead to an increased use of sustainable modes.

TABLE 7: COORDINATION OF MAXIMIZING PUBLIC EXPENDITURES IN THE MTP AND TDM PLAN

GOAL: INCREASE REGIONAL COLLABORATION AND EMPLOY INNOVATIVE TRANSPORTATION SOLUTIONS TO MAXIMIZE THE RETURN ON PUBLIC EXPENDITURES	
OBJECTIVE: Increase the percentage of functionally classified Minor Arterials and above facilities employing coordinated Intelligent Transportation System (ITS) technologies, and increase the percentage of all facilities that incorporate digital infrastructure.	
RATIONALE	<ul style="list-style-type: none"> ITS provides for maximization of capacity on existing facilities and real-time response to incidents and security issues.
2020 MTP BENCHMARK	<ul style="list-style-type: none"> 20% of mileage utilizes coordinated ITS technologies
2025 TARGET	<ul style="list-style-type: none"> 30% of mileage utilizes coordinated ITS technologies.
2050 TARGET	<ul style="list-style-type: none"> 90% of mileage utilizes coordinated ITS technologies.

HEALTH, SAFETY, AND WELFARE

TDM initiatives will be implemented with the needs of vulnerable populations in mind through thoughtful engagement with the general public and community groups. The activities described in this plan are intended to improve the quality of life for those that choose sustainable modes and those that have no other transportation options.

TABLE 8: COORDINATION OF USING PUBLIC INVESTMENTS TO BENEFIT ALL PEOPLE IN THE MTP AND TDM PLAN

GOAL: USE PUBLIC INVESTMENTS TO BENEFIT THE HEALTH, SAFETY, AND WELFARE OF PEOPLE	
OBJECTIVE: Minimize the difference in trip travel time for disadvantaged populations relative to the regional trip travel time.	
RATIONALE	<ul style="list-style-type: none"> The transportation system should equally serve all of the region's population
2020 MTP BENCHMARK	<ul style="list-style-type: none"> Average trip travel time for disadvantaged populations is 5% less than the regional average trip travel time. 2018 Travel Demand Model
2025 TARGET	<ul style="list-style-type: none"> Average trip travel time for disadvantaged populations within 5% of regional average trip travel time
2050 TARGET	<ul style="list-style-type: none"> Average trip travel time for disadvantaged populations within 5% of regional average trip travel time

APPENDIX

FIGURE 1: FUNCTIONAL CLASSIFICATION, 2020

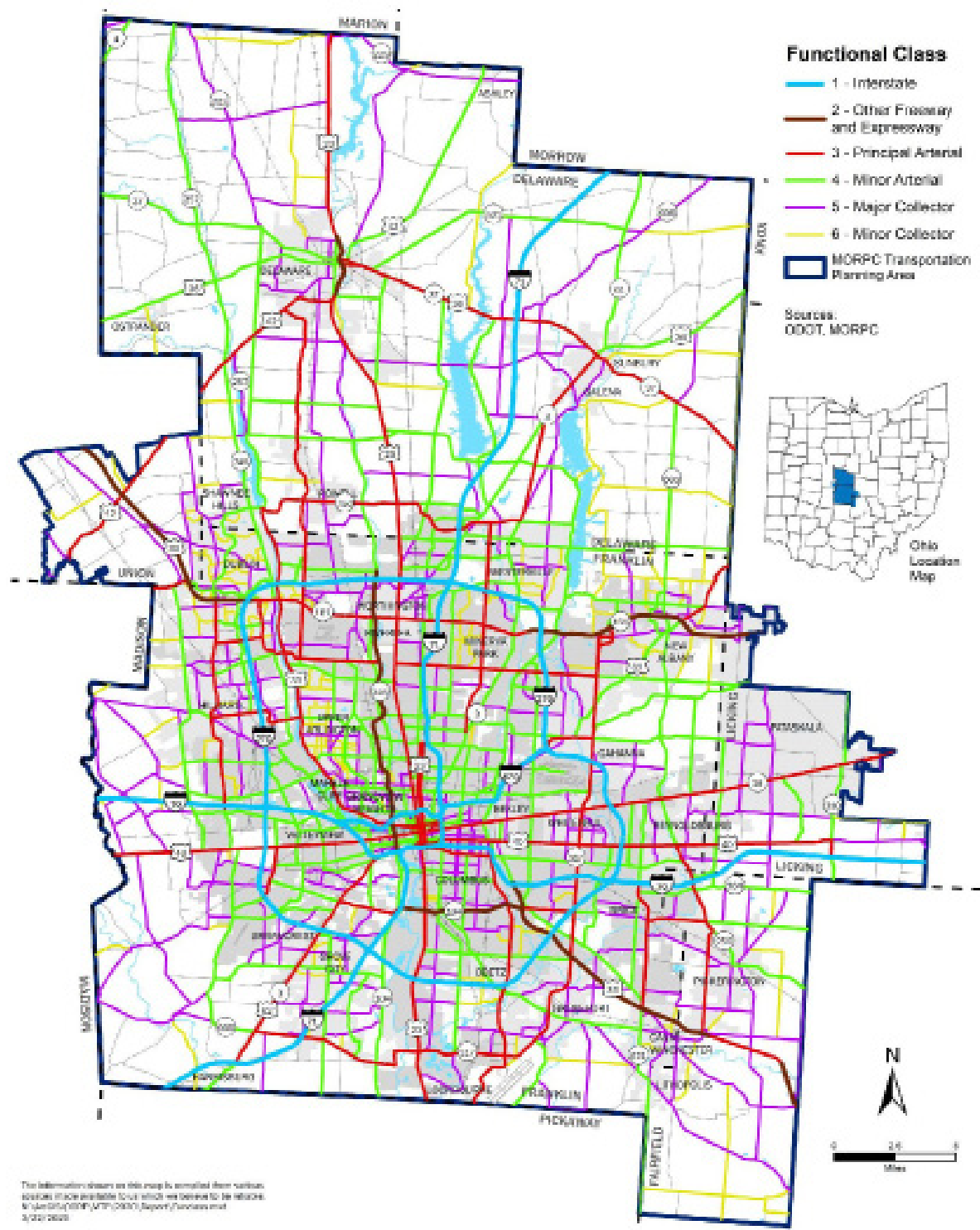


FIGURE 3: ROADWAY CONGESTION, 2018

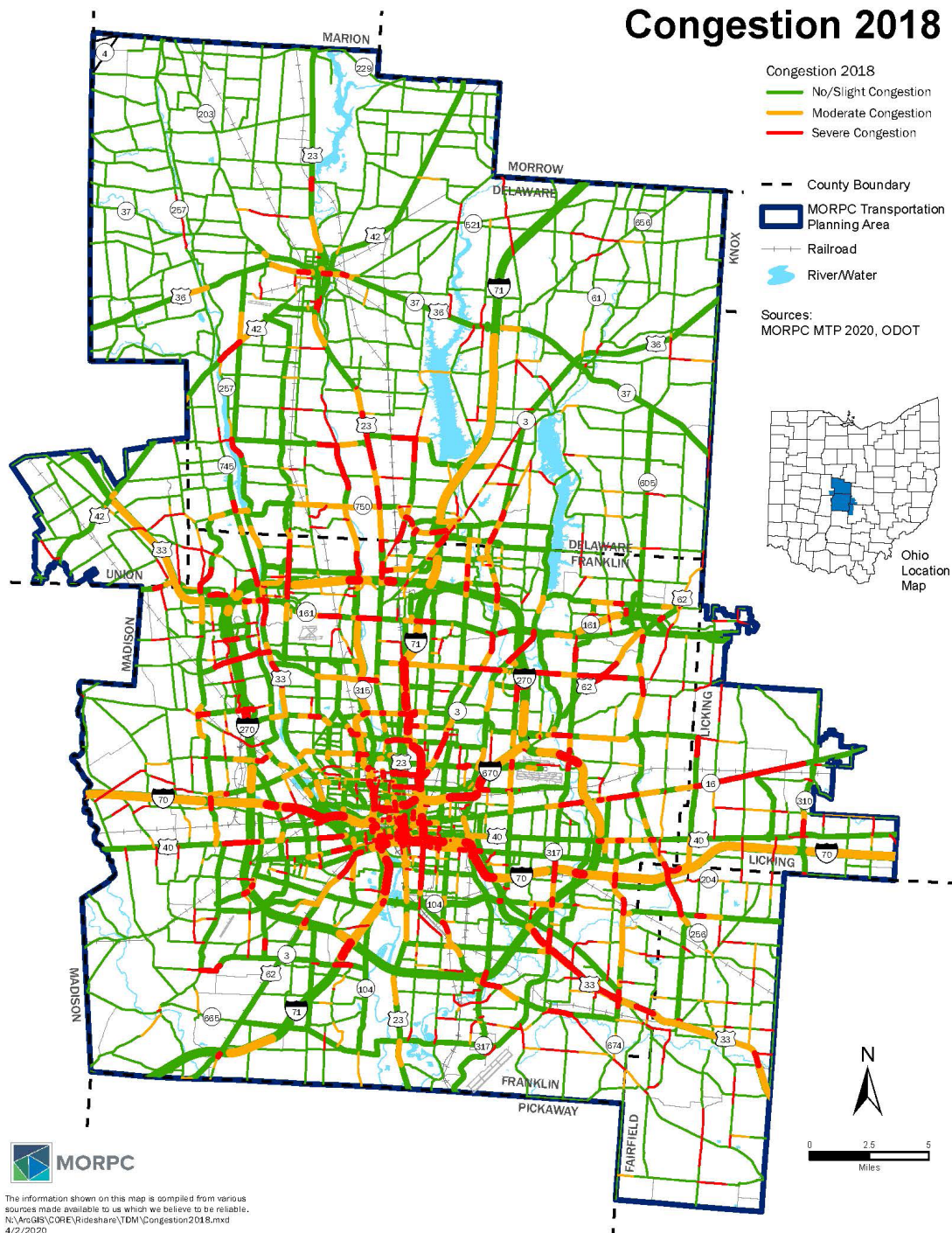


FIGURE 4: ROADWAY CONGESTION, 2050

