

# CHAPTER 5: DEMAND MANAGEMENT

Limited funding for expanded roadways, unstable fuel prices, increased congestion, and concern for our air quality emphasize the need for reducing driving. For many years now, travel demand management (TDM) strategies have shown effectiveness in reducing traffic congestion and environmental pollution caused by motor vehicles.

This chapter focuses on managing travel demand by advancing alternatives to using one's personal vehicle to make a trip, especially the trip alone. The TDM strategies and projects focus on the opportunities to rideshare, use transit, bike, or walk to meet some of the travel needs of the region. Alternatives that reduce travel demand also include telecommuting and alternate work schedules that compress the work week or allow for commuting at non-peak hours.

## 1.a DEMAND MANAGEMENT

Travel Demand Management (TDM) refers to a myriad of programs and strategies that encourage more efficient use of existing transportation infrastructure by reducing the amount of vehicle miles traveled (VMT) on the system. As the name implies, TDM aims to reduce the demand side of congestion (i.e., reducing the number of people traveling, primarily alone, in private vehicles) rather than expanding the supply side (i.e., costly infrastructure). By reducing the number of people traveling in private vehicles, several travel and health benefits can be achieved.

### 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, 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.

Currently, 82% of commuters drive alone, while only 6% take transit, bike, or walk. This MTP 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 below are intended to help the region reach those targets.

### BENEFITS ACHIEVED THROUGH TDM

- Reduced roadway congestion
- Reduced commuting and travel costs
- Reduced energy use and greenhouse gas emissions
- Improved air quality
- Improved public health

## 1.b TDM STRATEGIES & PROJECTS

The MTP includes several strategies as described below focused on reducing vehicular demand on the roadway system.

### **1. Collect, develop, and maintain data on roadway, transit, bike and pedestrian conditions and other modes and share the data and 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 key partners. Ensuring the public is aware of their transportation options and real time information is available to help inform their choices .

MORPC staff currently have 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 we 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. Additionally, MORPC could use mode shift, safety, and route planning data together with regional partners to have a stronger influence on behavior change to encourage and empower mode shift. The other TDM strategies in this document can act as the guide for goals that can be accomplished through innovative collection and use of transportation data.

### **2. Collect, develop, maintain and analyze travel demand data to identify opportunities to provide appropriate mobility options.**

#### Policy Research & Planning Integration

Policy research pairs well with the need to integrate TDM into various plans throughout the region. One of the most effective ways to integrate TDM with local plans is simply through communication. MORPC is an effective communications hub between local governments. One of MORPC's services is educating its member governments about policy and legislation that impact the region. Finding ways to incorporate TDM into the policy discussion could be an effective approach in developing a relevant regional message. When appropriate, incorporating TDM strategies into local planning efforts can be used, such as influencing parking requirements, land use recommendations, and promoting MORPC's Complete Streets policy.

### **3. Collaborate to reduce the need for vehicle travel through development regulations.**

Strengthening the relationship between development patterns and the transportation system will increase travel options for consumers and commuters. As described in Chapter 2, the future population may have reduced mobility capacity due to aging, or cultural characteristics that may affect people's ability or desire to drive.

Local communities administer their own land use regulations. Land use and land development patterns are controlled through zoning, subdivision and parking ordinances by local units of governments. Updating 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.

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

MORPC will update the *Transportation Demand Management Strategic Plan* in 2020. This internal document guides the Transportation Demand Management (TDM) activities of MORPC. It is one of the many occurrences where MORPC has been engaged in providing a fully multi-modal transportation system in Central Ohio.

The intent of the TDM Strategic Plan is to deliver a strategy for accomplishing predetermined TDM-related goals identified in the MTP and analyze the effectiveness of MORPC’s current TDM actions. The strategies and actions developed in this plan are meant to help MORPC implement TDM throughout the region. MORPC’s program currently coordinates TDM activities in the region.

The primary focus is maintaining and administering ride-matching services for Central Ohio commuters. Commuters may call in or search online for other commuters who live and work in similar locations and commute at similar times. Through this matching service, accomplishes the TDM mission by forming carpools or vanpools of two or more riders, thus reducing the number of vehicles on Central Ohio roads. Table 5.1 summarizes the impact of the vanpool program, while Figure 5.1 shows the origin and destinations of existing vanpools in place. The service has mostly been advertised at local events such as transportation fairs or with individual employers, and has also been promoted through a PSA partnership with the Air Quality team.

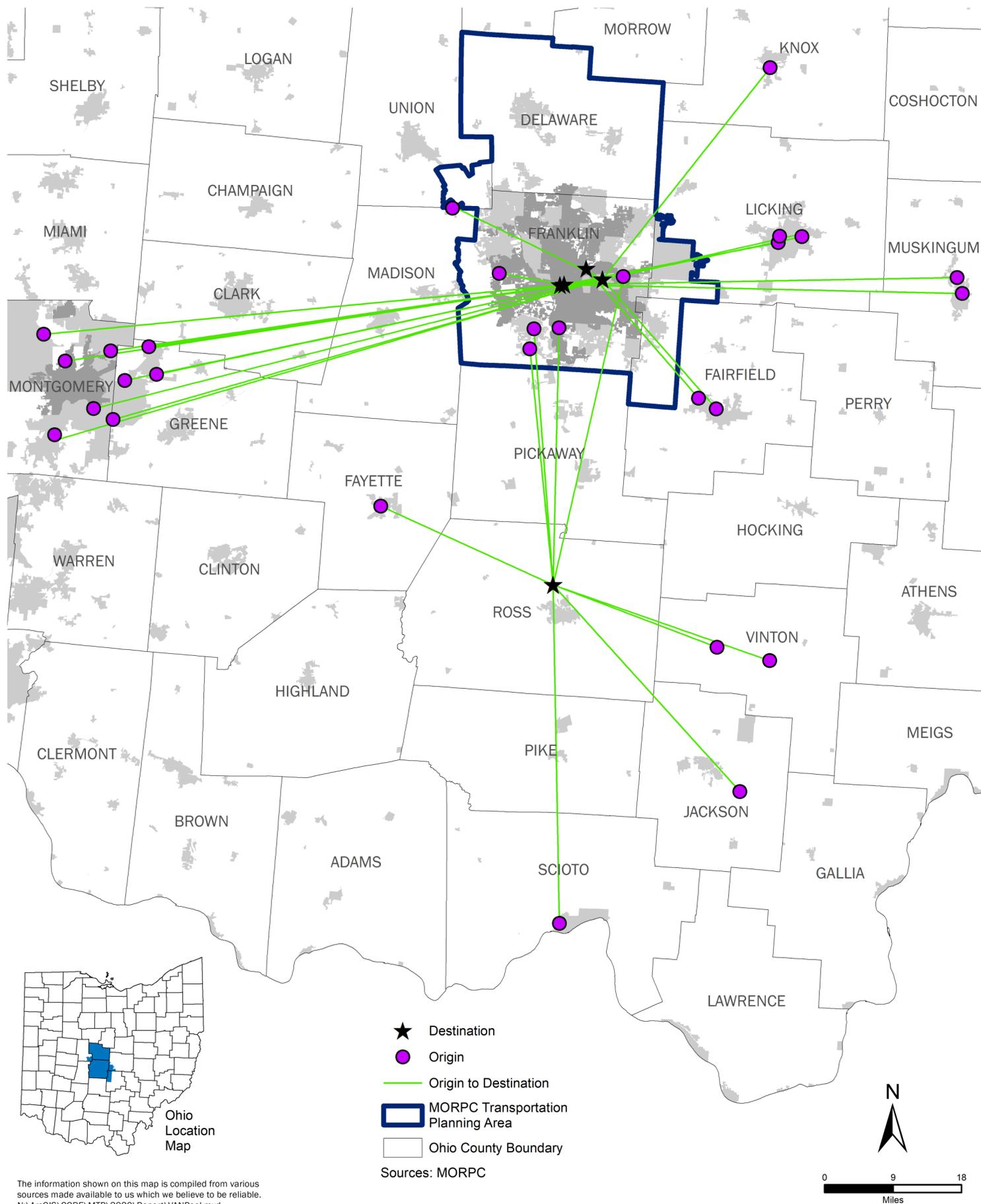
While ridesharing is the predominant function of the program, other modes of transportation are also supported such as transit, biking, walking, or telecommuting. Interested commuters may seek guidance from in finding a safe biking route, determining which bus to take, or by matching with a bike/walk buddy of similar commute interests.

**TABLE 5.1 Vanpool Ridership**

	2016	2017	2018	2019
<b>Vehicle Revenue Miles (VRM)</b>	688,400	671,850	637,000	645,300
<b>Passenger Miles</b>	3,719,000	3,786,300	3,164,100	3,521,500
<b>VRM Savings</b>	3,030,600	3,114,500	2,827,100	2,876,200

**TABLE 5.2 Gohio Commute Program Participation**

	2017	2018	2019
<b>Alternative Commute Trips</b>	28,400	22,600	28,800
<b>Alternative Commute Miles</b>	286,200	266,200	282,900
<b>CO2 Savings (grams)</b>	66,260,800	64,169,500	66,312,800
<b>Dollar Savings</b>	\$80,700	\$85,300	\$88,600



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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**Figure 5.1**  
***Vanpool Origins & Destinations, 2020***

Education and outreach initiatives should confront the barriers that keep individuals from using sustainable modes by providing instruction on basic skills needed and the encouragement needed to empower an individual to try a new trip type. Age, ability, and income inclusive outreach design will help to confront individuals' unique mobility barriers.

In addition to exploring the proper marketing balance, determining effective outreach techniques is another key issue that will be addressed in the Marketing Strategy. Gohio Commute will continue to investigate Best Practices and will continue to incorporate them into future Marketing Strategies.

In addition to the new Marketing Strategy, Gohio Commute is to undergo brand evaluation. The main impact of rebranding will allow the rideshare team to broaden the scope of TDM services that Gohio Commute advertises, and may end up being a branch of a statewide rideshare re-brand. Timing of the brand evaluation should coordinate with the launch of the new Gohio Mobility Hub website. The feasibility and plausibility of rebranding will hinge largely upon the interest of MORPC's rideshare-MPO partners.

Even with the right incentive, individuals are not empowered to try a new form of transportation until they don't know how to plan the trip and how to use a new mode. There is a need for easy to access, accurate, and current resources regarding all available transportation modes and services. Ensuring that information that supports alternative transportation use is maintained in a centralized well-known online location will encourage road users to explore what transportation options are available to them and are empowered to make informed mobility 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. MORPC TDM tools and programs, must evolve to serve emerging transportation needs in the region while continuing to support foundational activities such as trip planning, employer incentives, regional incentive programs, and vanpool management.

The success of TDM initiatives is dependent on connecting people with a variety of transportation options and trip tools to choose from. These initiatives serve audiences of different trip needs and abilities. The majority of TDM initiatives have focused on work commute trips. However, most trips taken every day are for other purposes. Encouraging sustainable trips for a wider variety of trip types widens the audience for TDM programming and could lead to more sustainable trips taken. Rethinking TDM campaigns to incorporate trip types outside of work to home trips could lead to an increase in transportation behavior change.

**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.**

The scope of TDM services varies widely and requires buy-in from a variety of local agencies if they wish to be an effective means of reducing congestion. Doing so will require a unified front that exists both at the state and regional levels. Effective local implementation will be enhanced by partnering with other agencies in Central Ohio that promote a TDM service, such as Yay Bikes, COTA, and Delaware County Transit. Partnerships such as these and catalytic 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 "TDM Consortium" 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 continue to into a hub of discussion and research that will help expand upon current TDM activities by exploring new policies and TDM implementation techniques. This coalition will Strengthen partnerships by fostering a culture of peer support and integrating TDM into cross-organization planning.

As it currently stands, several counties in Central Ohio do not have official Memoranda of Understanding with MORPC regarding the rideshare service area. Seeing as this area helps distinguish the different geographies as they relate to NTD reporting, taking action to formalize MORPC's rideshare service area should be a top priority. This area can then be reviewed on a yearly basis and updated on an as-needed basis.

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

Gohio Commute funding - funds only projects associated with ridesharing, such as carpooling and vanpooling, and supporting other sustainable transportation programming in the region. These are the two main pillars of Gohio Commute's current outreach. 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.

**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.

Mode Shift Coalition COTA, MORPC Gohio Commute, CoGo (bikeshare), ZipCar? and YayBikes!, a bike education and advocacy group, will continue to work together to educate employees and employers about using transit or rideshare and the other support options available for getting around downtown Columbus. This group has conducted education sessions and attended information events.