Chapter 5: Demand Management

Limited funding for expanded roadways, unstable global fuel prices, increased congestion, concern for air quality, and improving quality of life indices 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, alternate work schedules that compress the work week or allow for commuting at non-peak hours. Mobility management techniques contribute educational resources to plan one's mobility options, therefore providing a sense of safety and confidence to utilize other modes of transportation besides the car for certain trips.

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 and safety issues if TDM measures along with changes in development patterns are not implemented simultaneously with this expected growth.

Currently, 77.5% of commuters drive alone, while only 3.4% 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 and 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.

The 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 can 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, rideshare, bicycling, and walking.

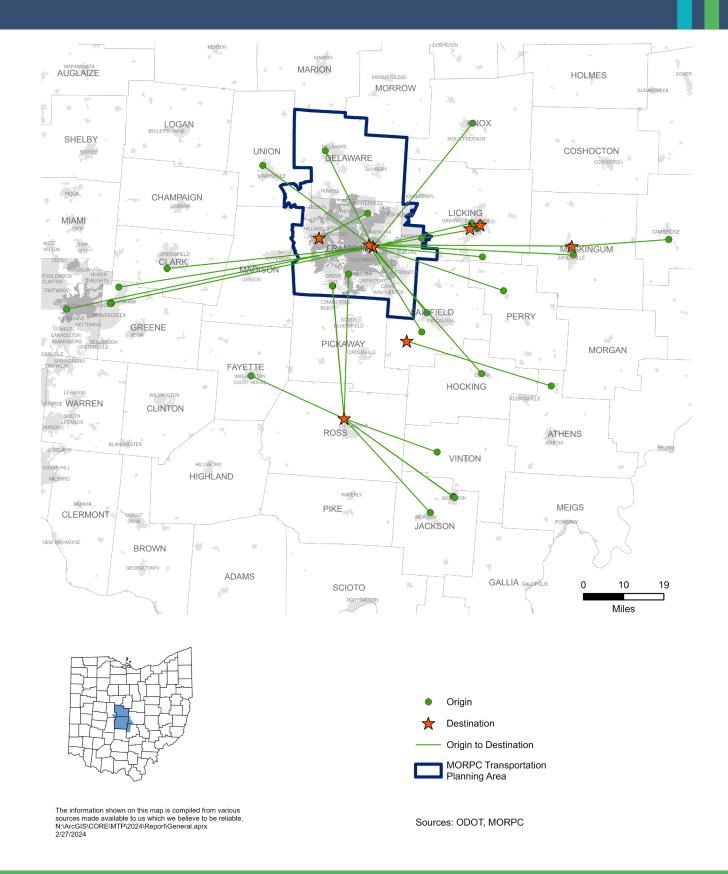
The Transportation Demand Strategic Plan action items are updated annually – most recently in 2024. This internal document guides the Transportation Demand Management (TDM) activities of MORPC. It is one of the many occurrences where MORPC has been engaged in providing a fully multi-modal transportation 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.

Vanpool Ridership	2020	2021	2022	2023
Vehicle Revenue Miles (VRM)	391,586	254,085	321,945	406,104
Passenger Miles Traveled (PMT)	1,628,401	1,005,779	1,560,966	1,976,647
Unlinked Passenger Trips (UPT)	35,841	24,485	33,496	43,104

Table 5.1

Gohio Commute Trips Logged	2020	2021	2022	2023
Alternative Commute Trips	8,642	3,482	8,518	9,376
Alternative Commute Miles	86,747	18,965	66,656	89,291
C02 Savings (grams)	25,706,468	6,415,442	21,812,765	24,487,715
Dollar Savings	\$38,533	\$9,660	\$37,013	\$41,696

Table 5.2





The primary focus is maintaining and administering ride-matching services for Central Ohio commuters through the website Gohio Commute. Commuters may call in or search online for other commuters who live and work in similar locations and commute at similar times. Through Gohio Commute's matching service, the TDM mission by forming carpools or vanpools to reduce 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 advertised at local events such as health fairs, transportation fairs, partnerships with individual employers and through social media campaigns. It has also been promoted through a PSA partnership with the Air Quality team. While ridesharing is the program's main function, other modes of transportation are also supported, such as transit, biking, walking, or telecommuting. Interested commuters may seek guidance in finding a safe biking route, determining which bus to take, or by matching with a bike/walk buddy of similar commute interests.

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.

Even with the right incentive, some individuals are not empowered to try a new form of transportation if they don't know how to plan the trip and how to use a new mode. There is a need for easy, accurate, and current resources regarding all available transportation modes and services. Ensuring that information that supports alternative transportation use is maintained in a centralized 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 of 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.

Commuters are not the only demographic needing alternative options for getting to vital destinations. Older adults and individuals with disabilities face many barriers when trying to access multimodal options. MORPC's mobility management program leverages 5310 funding and community collaboration to enhance mobility for these key groups.

Mobility Management is an innovative approach for managing and delivering coordinated transportation services to customers, including older adults, people with disabilities, and individuals with lower incomes according to the Federal Transit Administration. Techniques and tools utilized by Mobility Managers are to make sure users of the transportation network understand their options and are safe utilizing the mode(s) of their choice.

MOBILITY MANAGEMENT STRATEGIES AND PROJECTS

The Regional Mobility Plan includes several strategies as described below focused on providing mode shift education and tools.

- 1. Utilize, update, and educate the public on the Gohio Mobility platform.
- 2. Provide travel training opportunities and mobility planning education & outreach.
- 3. Coordinate transportation services for older adults, individuals with disabilities, and individual with low incomes through information and referral with the Franklin County mobility manager.
- 4. Creation and revision of the ODOT Region 6 Human Transportation Services Coordination Plan, more commonly referred to as the Regional Mobility Plan.
- 5. Complete annual public surveying of urbanized area residents to determine mobility and accessibility infrastructure and needs.
- 6. The maintenance of the Franklin County Mobility Advisory Committee as a group for stakeholders to work together on Franklin County's local goals and strategies and enhancing mobility options for older adults and individuals with disabilities.

In June 2023, Gohio Mobility was launched with the intention of promoting accessible transportation for seniors and individuals with disabilities. Gohio Mobility is a page on the Gohio Commute site that allows users to search for specialized transportation and filter options by location, accommodation needs, ways to pay, and more. Providers are regularly updated by mobility managers in each Ohio county. Efforts to promote and improve the site are coordinated across ODOT, NOACA, and MORPC. Promoting Gohio Mobility and encouraging its use is a main goal of the Regional Mobility plan and the local strategies for both Delaware and Franklin County. Gohio Mobility is a way to empower individuals with disabilities, older adults, caregivers, and service providers to connect with relevant and accessible transportation for many kinds of trip beyond the commute to work.

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 be 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.

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

MORPC works as part of a statewide effort to provide a multi-regional TDM effort implemented locally. MORPC works with other MPO's in the state to provide our statewide rideshare platform called Gohio Commute.

Mode Shift Coalition COTA, MORPC Gohio Commute, CoGo (bikeshare), 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.