

13 • Travel Demand Management

Overview/Summary

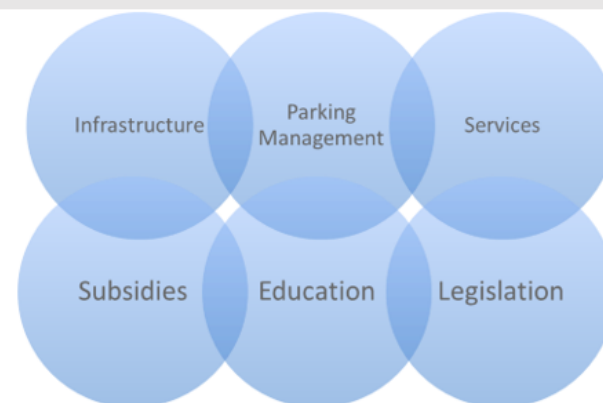
As urban areas grow, it's critical to manage the demand for vehicular travel as the cost of expanded road and parking capacity becomes increasingly challenging to accommodate. In Rochester, a particular concern is the ability to provide adequate access to the central core of the city as the Destination Medical Center (DMC) economic development initiative promises to drive significant job growth and visitor activity. Projected downtown job growth of 50% is anticipated over the next 20-25 years, and visitor traffic to the Mayo Medical Center and the Mayo Civic Center, Rochester's Convention and Event Center, is also anticipated to increase the daytime population of downtown.

Work done as part of the planning for DMC suggests that without strategies to manage commuter traffic associated with the downtown workforce, a number of the major roadway portals into downtown Rochester will see significant growth in peak period congestion. This will impact not only economic activity, but also the street-level environment for

pedestrians and others. This study also suggested that an additional 16,500 parking spaces will be needed to accommodate workers, visitors, residents, and customers if no change was made in terms of travel mode choice.

What is Travel Demand Management

"A collection of strategies designed to reduce automobile trips and associated parking demand and roadway congestion by redistributing travel to alternative modes, times, and routes"



In response to these findings, planning for the expected changes in travel demand suggests that the City of Rochester and its major downtown partners, including the Mayo Medical Center, the University of Minnesota, Olmsted County, and other business interests, need to work together to develop a robust travel demand management effort to limit peak period vehicular travel growth. A key piece to any comprehensive travel demand management program is organizing and building support for a Transportation Management Association (TMA).

The concept of a TMA for downtown Rochester was being studied in 2012 but was paused when the Mayo Clinic brought forward the DMC concept. Recommendations brought forward with both the 2014 DMC Development Plan and the 2018 follow-up DMC Integrated Transit studies, included strong encouragement for establishing a downtown Rochester TMA.

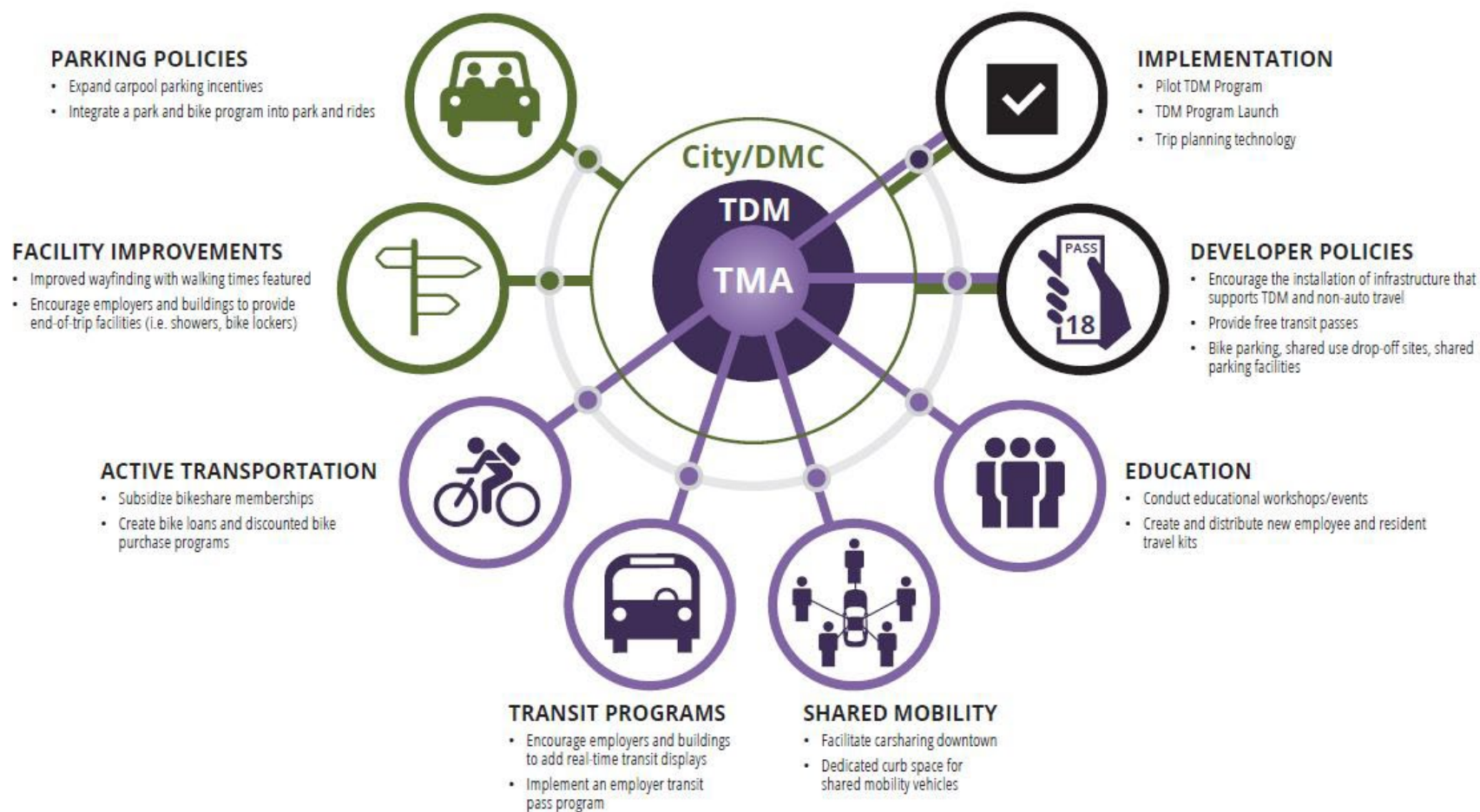
Figure 13-1 provides a high-level framework for the basic program elements and responsibilities envisioned for managing travel demand through a TMA. The City of Rochester and DMC Economic Development Authority (EDA) would be responsible for parking policies and infrastructure development; the TMA would establish and manage TDM programs, while the TMA would work with the City and EDA on items such as TDM policies for new development and pilot projects.

What is a Transportation Management Association?

“A TMA is an organization that provides transportation services in a particular area, such as a commercial district, corridor or downtown area. They are generally public-private partnerships that consist primarily of area employers and receive local government support”

Work began on organizing a TMA in 2018 with kickoff for the program in the second half of 2019. Titled **Arrive Rochester**, the program has taken over some of the transit marketing responsibilities from Rochester Public Transit, including managing transit pass programs as well as other programs such as Guaranteed Ride Home. The organization is managed temporarily under a consultant contract with the goal of getting a governance and organization structure in place in 2020.

While the TMA is getting up and running, the Mayo Medical Center continues to operate its long-standing employee transportation program. Mayo has been recognized as one of the Best Workplaces for Commuters in America. Mayo provides generous support for public and private transit, on-site amenities for people who bike to work, and preferential parking for carpoolers.

Figure 13-1: Rochester Downtown TMA Framework

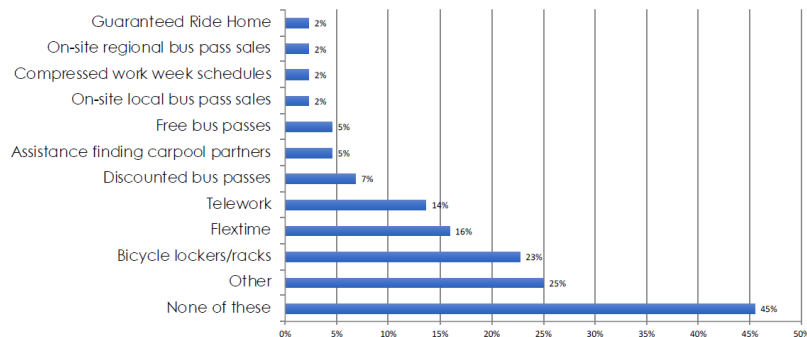
Source: Destination Medical Center Integrated Transit Studies, Parking and TMS Final Report, 2018

TDM Interest

As part of the work associated with organizing for a TDM program, a series of outreach events and survey efforts targeting downtown employers and workers were conducted. The results of this work identified existing services employers currently offer and the level of interest in having an area wide organization in place to relieve the burden on individual employers to establish these services. The survey work also identified what TDM services were of most interest to workers.

Figure 13-2 summarizes survey findings related to what services are currently offered by employers in the downtown Rochester are. Almost 50% of all employers offer no TMD type programs or services; about 25% offer on-site bike racks, with only 5-7% offering some type of free or discounted bus pass program.

Figure 13-2: Current Commuter Services offered by Employers

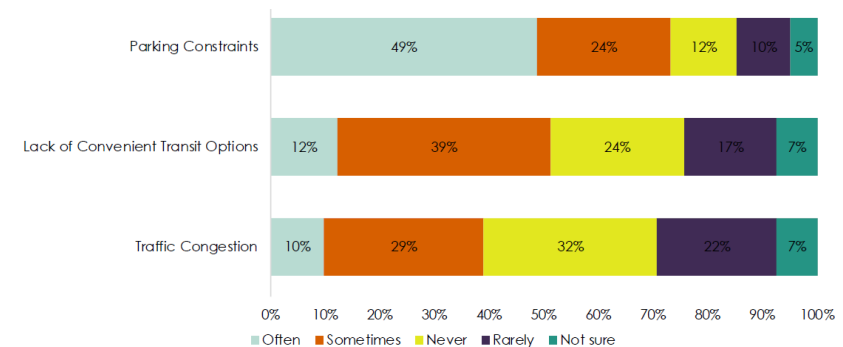


Source: Rochester TMA Start-up Program

Employers were asked about the frequency with which they were faced with recruitment or retention challenges related to employees getting to work. Parking constraints was the most often mentioned problem, as shown in Figure 13-3, followed by lack of transit options and congestion concerns.

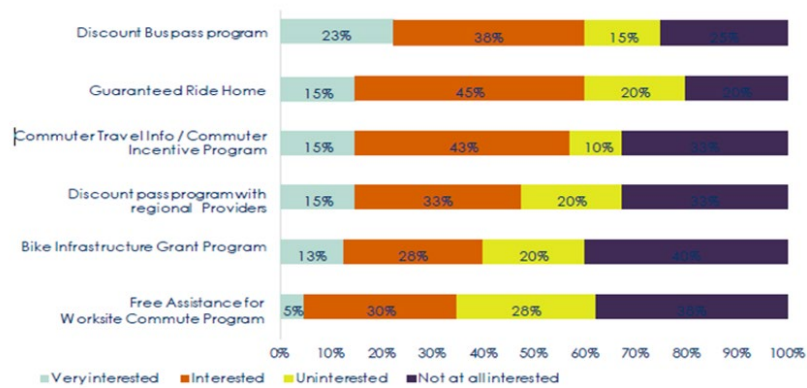
Employers were also asked what types of services or programs they would be interested in being available through a TMA one established. Assistance in setting up a transit discount pass program saw the most interest, followed by, at only a slightly lower level of interest, a free guaranteed ride home program and some type of trip planning/transit tracking program with incentives.

Figure 13-3: Employer Recruitment/Retention Issues



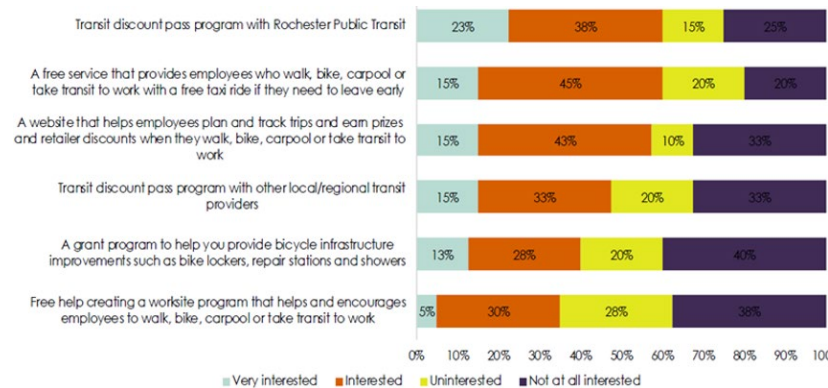
Source: Rochester TMA Start-Up Program

Figure 13-4 highlights the overall response from employers.

Figure 13-4: TDM Services of Interest to Employers

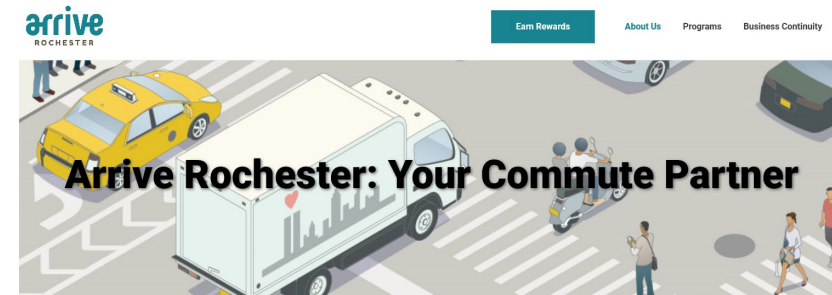
Source: Rochester TMA Start-Up Program

Employee responses to the same question about services of interest generally mirrored those of their employers. As shown in Figure 13-5, access to discounted transit passes, guaranteed ride home, and a trip planning app were of most interest.

Figure 13-5: TDM Services of Interest to Employees

Source: Rochester TMA Start-Up Program

The Arrival of Arrive Rochester



Arrive Rochester launched in October of 2018 with a series of events intended to draw interest to the organization. Success of the organization will depend on developing and nurturing a partnership between public and private sector employers that provide programs and services that commuters find attractive and will make the choice to utilize. Kickoff of the program was built upon more than a year's work by the Arrive Rochester Advisory Committee, a voluntary group of representatives from the City, DMC, local businesses, and other transportation stakeholders.

Arrive Rochester will provide commute options programs to downtown Rochester employers and property, with businesses having access to a range of programs and benefits including:

- Discounted transit passes for employees
- Guaranteed-ride-home program
- Online ride-matching tool for carpoolers

- Employee engagement campaigns and events
- Commuter surveys and commute target goal setting
- Commute impact reporting
- Incentives and raffles for employees choosing greener commute options

Employers are able to join Arrive Rochester at no cost for the first year of operation and access the programs and services noted above. In addition, Arrive Rochester will work with employers and the City to investigate and pilot new policies and programs to support greener commuting.

Activity in Rochester reflects a significant progress since Arrive Rochester's inception. The organization is currently administered by the City, with oversight and guidance from the Arrive Rochester Committee. The following pages highlight the offerings that have been provided in the first 18 months of operations, including:

- Figure 13-6: Base TMA Program Offerings
- Figure 13-7: Arrive Rochester Trip Planning App
- Figure 13-8: Promotions
- Figure 13-9: Incentive Program

All information in these figures is found on the Arrive Rochester website (<https://www.arriverochester.com/>)

Figure 13-6: Base Program Offerings

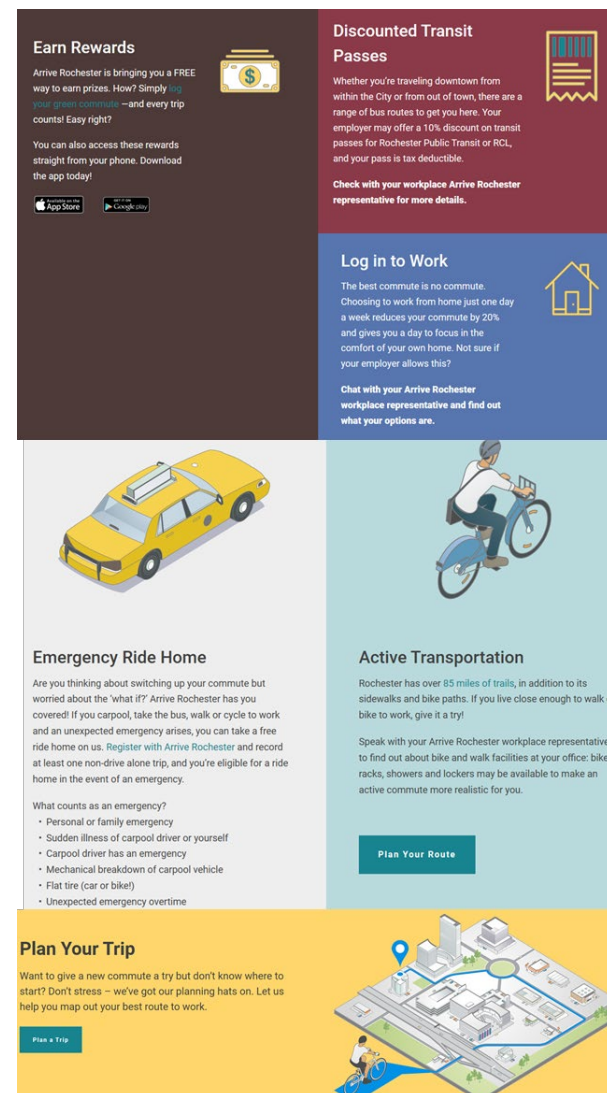
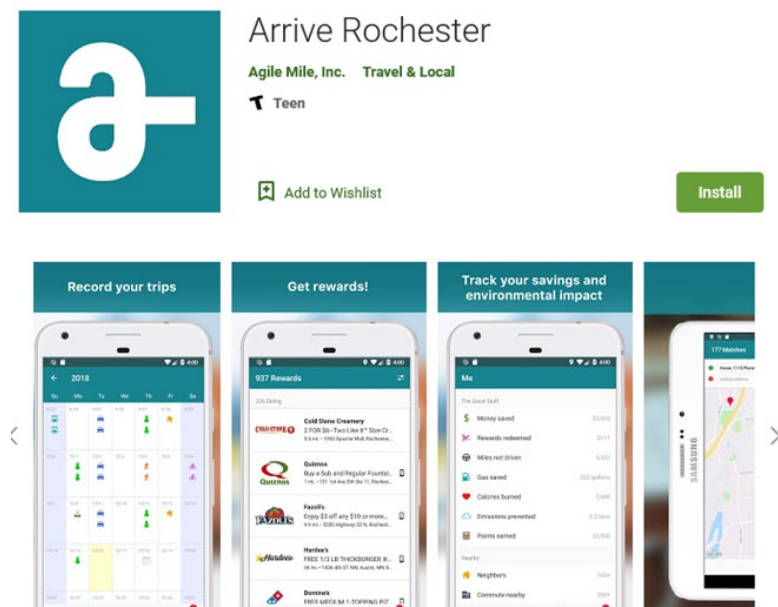


Figure 13-7: Arrive Rochester Trip Planning App

Use the Arrive Rochester app to find rideshare matches and earn rewards in the greater Rochester, MN area.

Simply record your carpool, vanpool, walk, bike, telecommute, or transit trips in your Arrive Rochester account and earn points that can be redeemed for rewards.

Figure 13-8: Promotions

Try Transit

Sept. 16 – 20 // Arrive By Bus. Earn Rewards.

Rochester's first-ever Try Transit week is Sept. 16 – 20. All Rochester commuters can join in and win prizes by riding the bus to work and recording the trip at ArriveRochester.com/Rewards. Use your workplace email address to create an account or sign in.

Rochester Carpool Week

April 8 – 12, 2019

Carpool Week is taking place April 8 – 12, 2019, encouraging the Rochester community to partner up for their rides into work throughout the week. Join in the fun and enjoy the benefits of carpooling by creating an [Arrive Rochester profile](#) and logging your carpool trips on the platform.

Every carpool trip you log during Carpool Week earns you an entry for a chance to win 1 of 3 prize packs:

- \$50 coffee gift card
- \$100 Cameo Castle gift card
- \$200 gas card

Join in Carpool Week! Get started by creating your [Arrive Rochester profile](#).

Bike to Work Day // May 17, 2019

Arrive At Work On Two-Wheels

#RochesterBikeMonth

powered by **arrive** ROCHESTER

Bike to Work Day & Month

May 17: Arrive At Work On Two-Wheels

On May 17, break out your two-wheeler and take part in Bike to Work Day. In celebration of the day, join the City of Rochester and Arrive Rochester for an event at Peace Plaza on your way into work, and refuel with breakfast, take part in bike activities and enter our Bike to Work Day raffle for a chance to win prizes.

RSVP for the event and find out more details about the exciting activities, local vendors, and group rides led by We Bike Rochester that are taking place at the event by visiting the [Bike to Work Day Facebook event page](#).


Figure 13-9: Incentive Program


Get Rewards for Greener Trips

Record your walk, bike, telework, carpool, vanpool, or transit trips with Arrive Rochester and earn rewards. Looking for a carpool or vanpool? We can help with that too!

Join [Arrive Rochester today](#) — it's free and easy to do!

Join
Save \$






Enjoy \$5.00 OFF any PURCHASE..

Whole Earth Grocery
126 S Main St, River Falls, WI 54022

<
19 of 683 Rewards
>


How It Works

Take Greener Trips




Telecommute from home, bike to a friend's house, take transit, or carpool with other Arrive Rochester members. Just don't drive by yourself.

Record Your Trips



Record your greener trips in your Arrive Rochester account and track the money you save, the emissions you prevent, and your Arrive Rochester points.

Get Rewards



Redeem your points for restaurant coupons, retailer discounts, and tickets to shows & attractions. It's free and easy to do, so [join today](#).

Key Recommendations for TDM

As part of the work conducted under the auspices of the 2018 DMC Integrated Transit Studies, an implementation plan was prepared that included recommendations for how to advance TDM activities and the success of the Arrive Rochester TMA. Table 13-1 indicates the recommendations included in that plan. It is anticipated

that once a permanent governance structure is put in place, and a full time TMA Director and support staff are hired to execute the business plan, these recommendations will be revisited and modified or expanded as deemed appropriate, probably somewhere in the 2021-2022 time frame. ROCOG would expect by the time of its next plan update that this list will have been revised and updated.

Table 13-1: Travel Demand Management Implementation Plan/ITS Integrated Transit Studies 2018

1.0 BEGIN TO IMPLEMENT THE TRAVEL DEMAND MANAGEMENT PLAN	
2018 - 2019 Priorities	Implementation Status*
1.1 Launch Arrive Rochester ride-matching/trip planning/ trip tracking app and website and develop campaigns and promotions to promote the tool	Launched Ongoing promotion
1.2 Establish a District-wide guaranteed ride home program	In Progress
1.3 Establish and market a Corporate Transit Discount Pass Program with Rochester City Lines for regional commuters and market a Corporate Transit Pass Program with Rochester Public Transit for local commuters	Ongoing
1.4 Increase awareness of TMA through marketing and outreach plan	Ongoing
1.5 Explore feasibility of carpool/vanpool options/incentives with providers and District Employers that could be offered through the TMA	Not Started
1.6 Research infrastructure needs and opportunities for emerging mobility and shared travel options	Initiated / City of Rochester in lead
1.7 Increase awareness of Travel Options through development of travel options marketing materials, workshops, events and employer/employee webinars	Initiated & Ongoing

1.8 Incorporate TDM communications into overall city communications	Ongoing
1.9 Study the need for a "retail outlet" for TDM services	Not Started
1.10 Develop TDM Evaluation Plan	Not Started
1.11 Develop and implement a recruitment/sales strategy to attract TMA employer members and provide in-depth programming and support for TMA members	Ongoing
2020 - 2024	
Nurture advocates / champions for the TMA that can help build support for key service or organizational goals the TMA needs to be successful in its mission, recognizing its critical importance in supporting mode shift	
Integrate TMA Program Measurement and Evaluation efforts with larger DMC District data collection and monitoring program; communicate and leverage data to inform efforts to ensure successful movement toward mode shift targets	
Grow participation in TMA among downtown employers and businesses	
Wayfinding Improvements <ul style="list-style-type: none"> • Prepare a comprehensive wayfinding plan for the district that encompasses bicycles, pedestrians, parking, vehicular and transit needs • Integrate walking and bicycling times and dynamic parking/transit information with wayfinding 	
Education and Encouragement <ul style="list-style-type: none"> • Use virtual reality to educate about biking and taking transit to work • Create and distribute new employee travel kits • Continue to conduct educational workshops/events regarding travel options and programs 	
Developers and Building Managers <ul style="list-style-type: none"> • Encourage developers to install infrastructure that supports TDM and non-auto travel • Encourage employers and building owners to provide end-of-trip facilities for alternative modes such as bike parking, shower and locker facilities, etc. • Encourage employers and building owners to add real-time transit displays 	

- Encourage developers/building managers to provide free transit passes

Bicycling

- Create bike loans and discounted bike purchase programs for low income households
- Conduct bike education classes

Mobility Pass Program – Investigate development of a Mobility Pass Program that offers payment for various modes of travel (transit, ride-hailing, carshare, bikeshare, scooters, parking, etc.) through a single smartphone platform/app

2025 - 2034

Create and distribute new resident travel kits

2.0 ADVANCE ARRIVE ROCHESTER GOVERNANCE

2018 - 2019 Priorities	Implement ation Lead*	Implement ation Status*
2.1 Secure contract for service to operate agency through 2019 (UrbanTrans)		Complete
2.2 Engage the Advisory Committee regularly		Ongoing
2.3 Solidify TMA host agency, formalize, and prepare for late 2019 transition from consultant management to permanent TMA Program Manager		In Progress
2.4 Establish a transportation coordinator network with District employers to work with TMA		Ongoing
2.5 Recruit, hire and train TMA Director and staff		In Progress
2.6 Finalize short and long-term funding strategy		In Progress

2.7	Develop a business plan for 2020—2021 2021-2022	Annual
NOTE: An annual business plan will detail additional tasks to be executed in any given year		
2020 - 2024		
Refine governance structure and funding model if necessary		
2025 – 2034		
A well-established, successful Transportation Management Association (TMA) is operating in Rochester and the DMC District and coordinates with others on data collection, reporting, and continued service.		

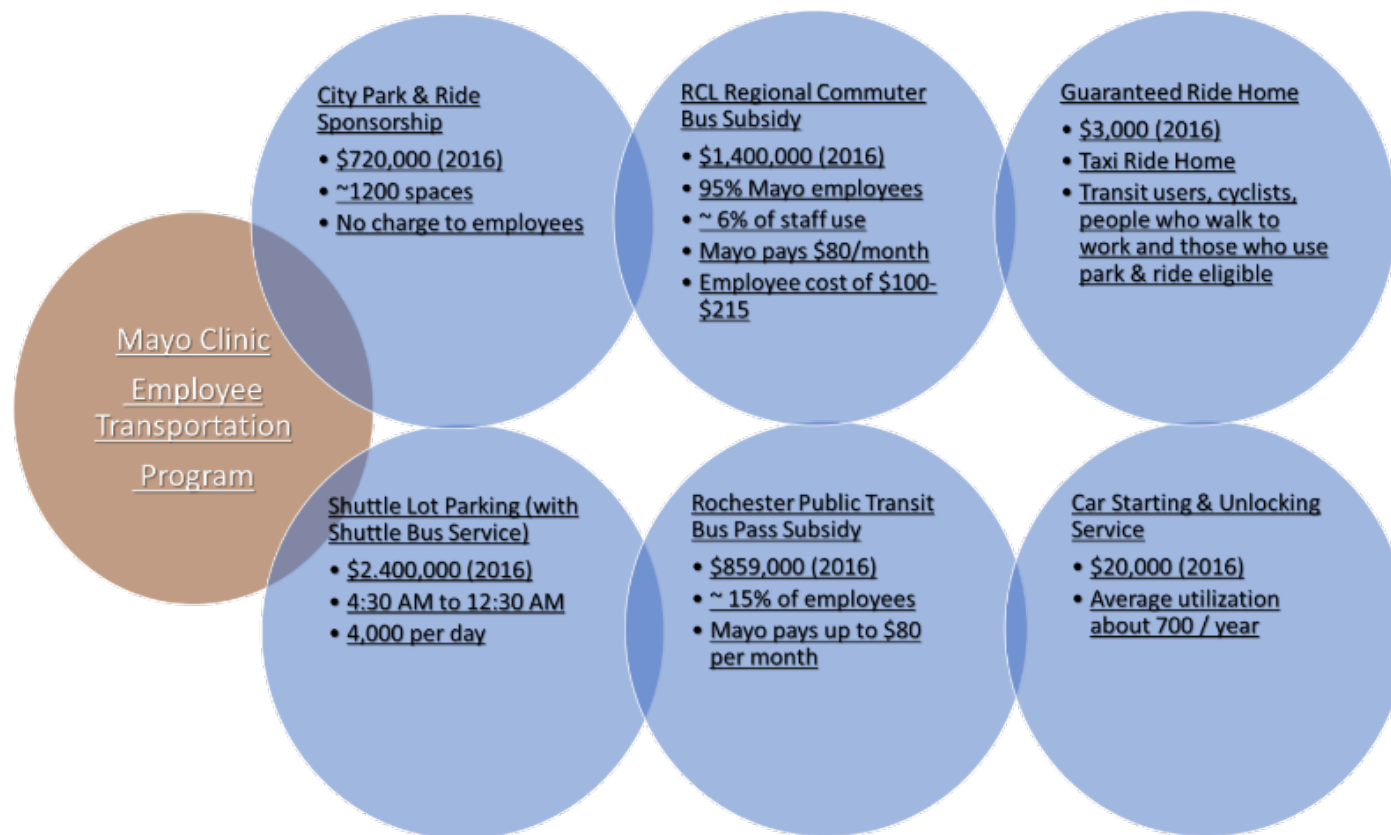
Mayo Medical Center Transportation Program

The Mayo Medical Center provides a range of alternative commute mode options for employees as an alternative to single occupant vehicle commuting. Figure 13-10 illustrates the prime elements of the program available to Mayo Employees. In addition to these transit and parking related service, Mayo also provides 80 on-site bicycle racks with a capacity for parking 780 bikes; riding season utilization is 85%. Mayo also provides prime parking for carpool users; as of 2106 there were 280 active carpools and 840 registered employees.

As the Arrive Rochester TMA gets established, some of these services that Mayo provides internally are expected to be taken over by the TMA, with some level of financial support provided by Mayo.

Parking Management and TDM

In addition to direct programs and services offered through TDM styled programs, the management of parking offers another avenue to influence vehicular travel demand, make the most efficient use of parking resources, and minimize the need to develop additional off-street parking facilities. Differential parking pricing, targeted parking for certain users or pricing favoring short-term parkers such as customers over long term parkers such as workers at the most desirable downtown locations are examples of strategies that could be considered. Parking management is critical in the central area of Rochester, where the travel demands of high daytime population levels must be balanced with other community goals targeted at maintaining a vibrant core area.

Figure 13-10: Mayo Employee Alternative Commute Services

Source: Mayo Clinic Transportation Services Department

The Rochester Downtown Master Plan and DMC Development Plan recommended various strategies for managing downtown parking demand, including changes in parking pricing and availability. To better manage the development of new supply, Rochester adopted a Destination Medical Center District Parking Overlay Zone to better address the policies and principles for off-street parking set out in the DMC Development Plan. Key features of these Overlay Zone amendments included:

- Establishment of DMC District requirements for joint use and mixed occupancy parking by through creation of shared use parking requirements
- Development of incentives for unbundled parking in the district
- Reductions in off-street parking requirements for many use types
- Introduction of parking design principles to improve compatibility of off-street parking development with the pedestrian-oriented nature of street corridors that is being encouraged in the DMC District
- Encouragement of the adaptive reuse of historic structures and location of small retail business in the district by exempting such uses from providing off-street parking

- Requiring larger developments to develop and implement an on-site Travel Demand Management Plan

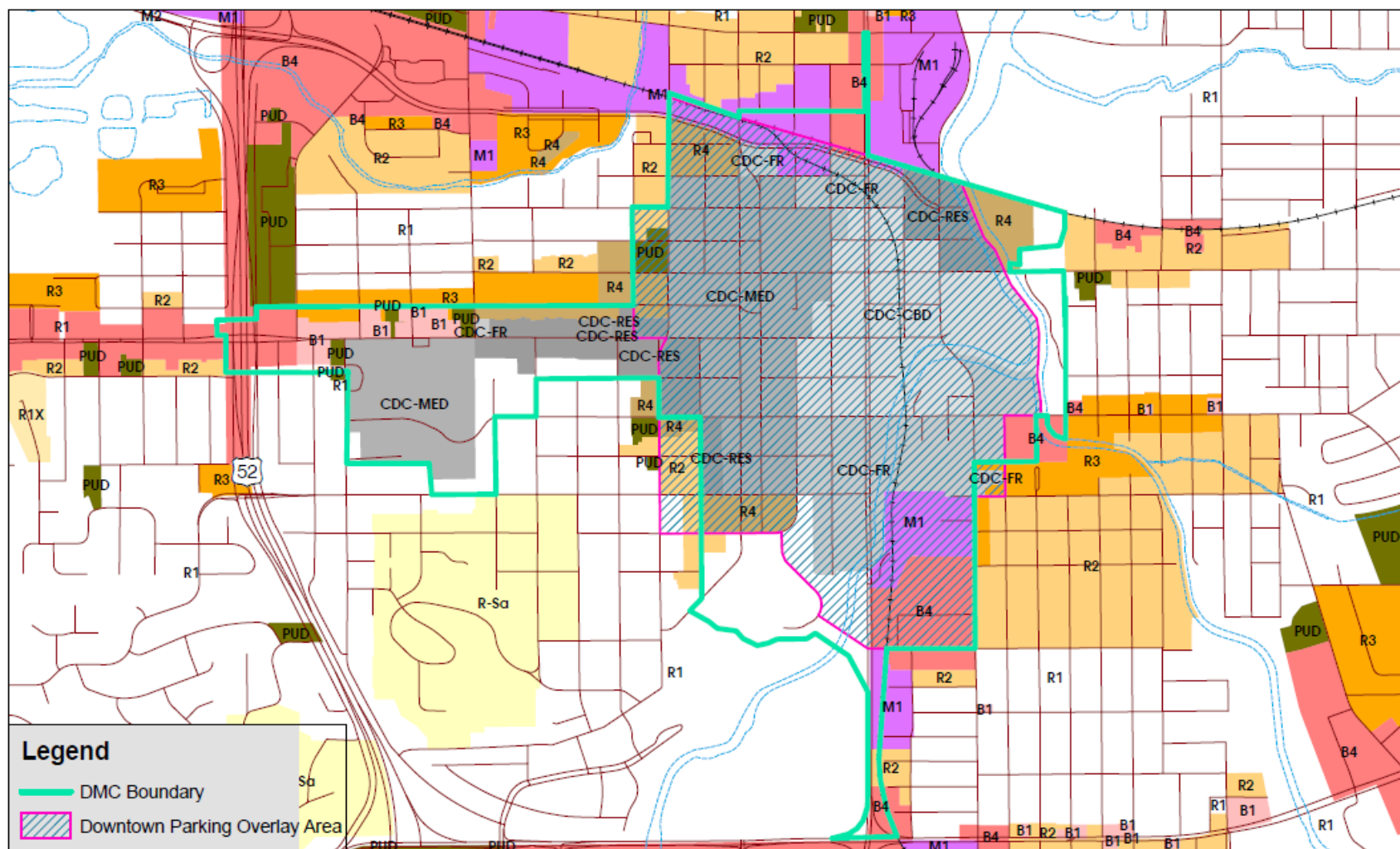
Over time other parking system management strategies are expected to be investigated. One area of interest that has been identified is demand-responsive pricing for on-street parking.

Figure 13-11 illustrates the area where the DMC Downtown Parking Overlay regulations are applied.

Other parking management strategies employed by the City of Rochester and Mayo Clinic in the downtown area are described in Table 13-2. The City and the Mayo utilize these strategies to achieve a balance between parking supply and demand.

Emerging Travel Options

Emerging Travel Options in the Rochester area includes a combination of micro-mobility options (a category including shared bikes and electric scooters), shared mobility options (a category including car sharing at this time) and automated vehicles. Typically, micro-mobility refers to transportation used for short distance trips less than two mile that offers riders an alternative to single occupancy vehicles in downtown or congested areas. Micro-mobility and shared mobility modes can serve as a last mile option for users of public transit.

Figure 13-11: DMC Parking Overlay District**Downtown Zoning & Development Boundary Comparison**

Source: Rochester-Olmsted Planning Department, 2016

Table 13-2: Parking Management and TDM Strategies

Parking	Inventory Conditions	Pricing or Supply Philosophy
On Street Parking	There are currently approximately 1260 on-street metered parking spaces in downtown Rochester. Rates range from \$0.50 for 30-minute meters, to \$0.25/hour for 10-hour meters. The 90-minute, 2-hour and 3-hour meters charge between \$0.70 and \$1.00 per hour. Utilization rates are high, averaging 82%.	City of Rochester uses a differential parking rate structure to encourage preservation of core area on – street and ramp parking for customers, clients and other short-term needs of businesses and attractions in the CBD. Lower daily and monthly rates are available in lots located on the fringe of the CBD that are marketed to employees when unused capacity is available.
Off Street Parking	<p>Off Street parking is provided in a combination of parking ramps and surface lots. There are approximately 12,800 off street parking spaces managed by the Mayo Clinic, representing approximately 82% of the downtown off street inventory. These spaces are roughly evenly divided between spaces in ramps and spaces in surface parking lots. Utilization rates average about 95% in Mayo facilities</p> <p>Approximately 17% of the inventory is managed by the City, including approximately 2600 spaces in 5 ramps with utilization rates ranging from 84% to 91%.</p>	<p>Mayo parking management principles include providing adequate parking to meet patient / visitor demand <u>in close proximity to</u> clinic and hospital facilities and also to provide convenient, close-in parking for staff doctors and residents. Approximately 1400 spaces are provided downtown for this purpose</p> <p>For the remainder of the employees, Mayo strives to meet a ratio of approximately having three spaces available for every five employees, and to encourage alternatives to driving to reduce parking demand.</p>

Micro-Mobility Projects and Pilots in Rochester

The City of Rochester has been conducting pilot projects for a number of micro-mobility modes over the last two years. These have included a bike share pilot completed with Nice Ride Bike of Minnesota, and an electric scooter pilot with Lime Scooters.

The Nice Ride pilot was discontinued going into the 2019 riding season and the bikes were donated to the City of Rochester. With the abrupt end of the bike share pilot,

the City established a temporary program in 2019 at Silver Lake Park, a major attraction in downtown Rochester.

For 2020, the City has established a bike share program for the riding season that provides community members and visitors the ability to check out bikes for free. Bikes are available at the Rochester Public Library, the Peace Plaza in the downtown business district, and at Rochester City Hall, with a total of 20 bikes available for use. The City also donated 100 of the bikes to community organizations.





Lime Scooter conducted a pilot project in 2019 in Rochester and has expressed interest in continuing to provide its service in the city. Based on the success of the pilot, Rochester determined it would pursue vendor deployment of scooter service through a Request for Proposals in time to launch in the Spring 2020. Lime Scooter was the sole respondent and was chosen to provide service again in 2020. However, due to the COVID-19 health pandemic, a decision was made to delay deployment. In late summer of 2020, a partial deployment of scooters was undertaken with the intent to return to a full deployment in future years.

Shared Mobility Projects

The City of Rochester entered 2020 anticipating the establishment of a limited downtown car share program to serve residents, workers, and visitors who do not own a vehicle but periodically desire access to a vehicle for specific trips. With a vendor selected, the program was just getting started when the COVID health pandemic impacted demand and use of the system, leading to the program being scaled back to three vehicles. The original project was to include five cars. Based on conditions outside of the vendor's and the City's control, the program was discontinued in early 2020. Further discussions may ensue once limitations imposed by health conditions allow a return to something close to normal.

At the time this ROCOG Plan was prepared and adopted, insufficient information existed to determine the future of shared mobility in the Rochester market. Inconclusive initial pilot studies will likely need to be followed up by additional pilot study work before a final determination can be made as to the scale of micro-mobility that is appropriate for Rochester.

Automated Vehicle Demonstrations

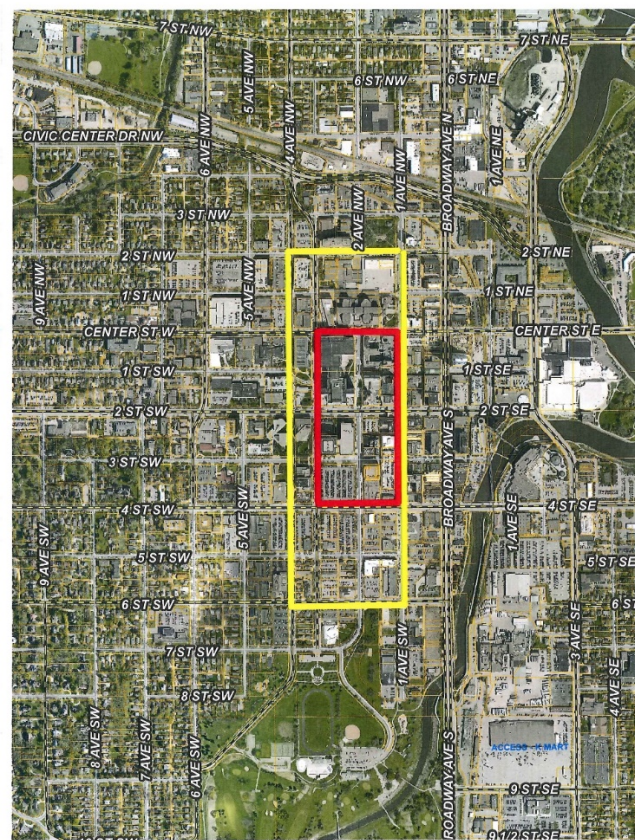
Rochester has been engaged in early planning with various partners, including the Minnesota Department of Transportation, in two automated vehicle demonstration projects.

The first demonstration is a project that was brought to the City by the team of First Transit and Easy Mile. First Transit would manage operation of the system and Easy Mile would provide the vehicles and control systems. This service would be an automated shuttle running on a limited length loop in downtown Rochester.



Again, due to the Covid-19 public health pandemic, implementation of the service was delayed, although logistics are in place for storage and charging of vehicles. A route was established utilizing Broadway Ave, 6th Street SW, 3rd Ave West, and West Center Street, which reflects a combination of the two routes originally considered as shown in Figure 13-12.

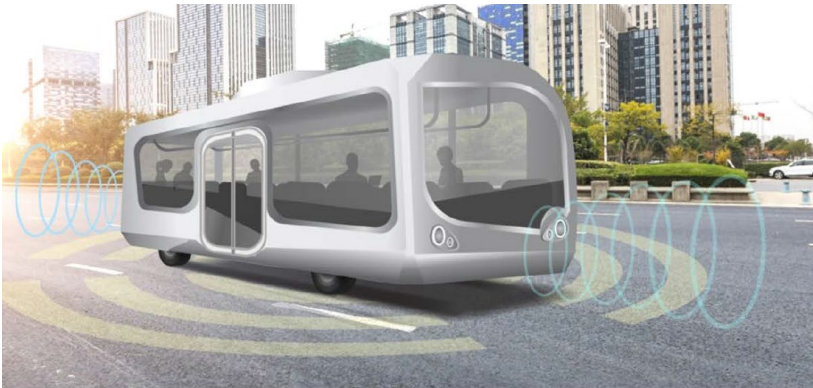
Figure 13-12



Automated Bus Consortium

The second transit pilot project the City of Rochester is involved in is part of the Automated Bus Consortium, a project organized by AECOM, Inc. to test full size automated transit in a range of cities and across a range of service environments.

Rochester was selected as one of twelve cities for this national pilot program. The concept would be to test full sized automated buses on a Park and Ride Express route from the former IBM campus to downtown Rochester. This would involve operation in both a freeway and downtown surface arterial environment.



Ongoing discussions are underway to facilitate preparation of bidding documents. There is a need for local match funding on the order of \$100,000 that needs to be raised as well before the City would move into the next phase of the pilot project program. Characteristics of the proposed route are listed in Table 13-3.

At this point it is too early to speculate as to long term deployment prospects for such a service, but continued investigation will help shape future considerations.

Table 13-3: Automated Express Service Route Characteristics

Route Characteristic	Value/Description
Route Number/Name	18D: IBM Park & Ride to St. Mary's to Downtown
Description	Route 18D in Rochester, MN connects the IBM Campus/Office Park with Downtown Rochester 4.5 miles away. The route utilizes both local roads and the Hwy 52 general purpose lanes in mixed flow condition.
Length (roundtrip)	5 miles
Type of Service	Freeway (Mixed Flow)
Headway (peak)	5-30 minutes
% in Exclusive Lane	0%
Daily Ridership (weekday)	1,600
Operating Speed	30-60 mph
Number of Buses Assigned to Route	7
Number of Left Turns	2
EV Readiness (Low, Med, High)	Medium-High