DMC TRANSPORTATION & INFRASTRUCTURE PROGRAM

INTEGRATED TRANSIT STUDIES

Parking & Transportation Management Authority (TMA) Study Report

Prepared for:

Destination Medical Center Corporation

City of Rochester, Minnesota

DMC Transportation & Infrastructure Program

DMC
A Global Destination for Health & Healing

CITY OF ROCHESTER MINNESOTA

DMC TRANSPORTATION INFRASTRUCTURE PROGRAM MANAGEMENT

Prepared by:

SRF

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City Project No. J8618, J8622

This report is one of five Integrated Transit Studies (ITS) Reports and an Executive Summary that were prepared for the Destination Medical Center Corporation (DMCC) and the City of Rochester, Minnesota. The ITS reports were accepted by the DMCC on June 28, 2018 (Resolution No. 69-2018) and by the City of Rochester on July 2, 2018 (Resolution 237-18).

The Integrated Transit Studies are comprised of the following reports:

- Executive Summary
- Transit Circulator Study Report
- Parking & Transportation Management Authority (TMA) Study Report
- City Loop Study Report
- Street Use & Complete Streets Study Report
- Street Operations Study Report

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Parking and Transportation Management Association (TMA) Study: Introduction & Overview

Study Team

The project team for the Parking and Transportation Management Association (TMA) Study included the following firms: Kimley-Horn and Associates (Lead firm – Parking focus), UrbanTrans (Transportation Demand Management(TDM)/TMA Development focus) and Nelson Nygaard (Zoning and Access Requirements focus). SRF Consulting Group, Inc. served as the study coordinator handling the overall DMC Transportation Infrastructure Program Management function, helping facilitate the Parking and TMA Study.

Community Context

Rochester has been growing steadily for the last 20+years and that growth is projected to continue for the next 20 years, supported by private and public investment anticipated as part of the Destination Medical Center (DMC) initiative. Mayo Clinic is the largest employer in Minnesota and has 35,000 employees in Rochester. The State of Minnesota has committed $396M to support DMC growth in Rochester. Planning over the last eight (8) years has identified that a different pattern of development needs to occur in downtown Rochester to support its evolution into a widely recognized world-class destination for health.

Why This Matters

The Parking and TMA Study is critical to the success of the multi-modal visions for the DMC District. It focuses on the location and management of district parking, which is tied to successful deployment of a transit circulator, as well as how parking demand can be minimized through measures that encourage and incentivize reduced single-occupant vehicle demand.

The TMA component of this study is meant to determine if a defined Transportation Management Association is the right mechanism within Rochester to help facilitate access to Transportation (Travel) Demand Management (TDM) strategies among area businesses and employers. TDM is generally the provision of services and programs to encourage/support commuters to choose more sustainable modes of transportation such as transit and shuttle, carpooling, walking, biking, or telework.

DEFINITION: What is Travel Demand Management?

The U.S. Department of Transportation, Federal Highway Administration defines TDM:

Managing travel demand is about providing travelers, regardless of whether they drive alone, with travel choices, such as work location, route, time of travel and mode. In the broadest sense, "demand management is defined as providing travelers with effective choices to improve travel reliability."

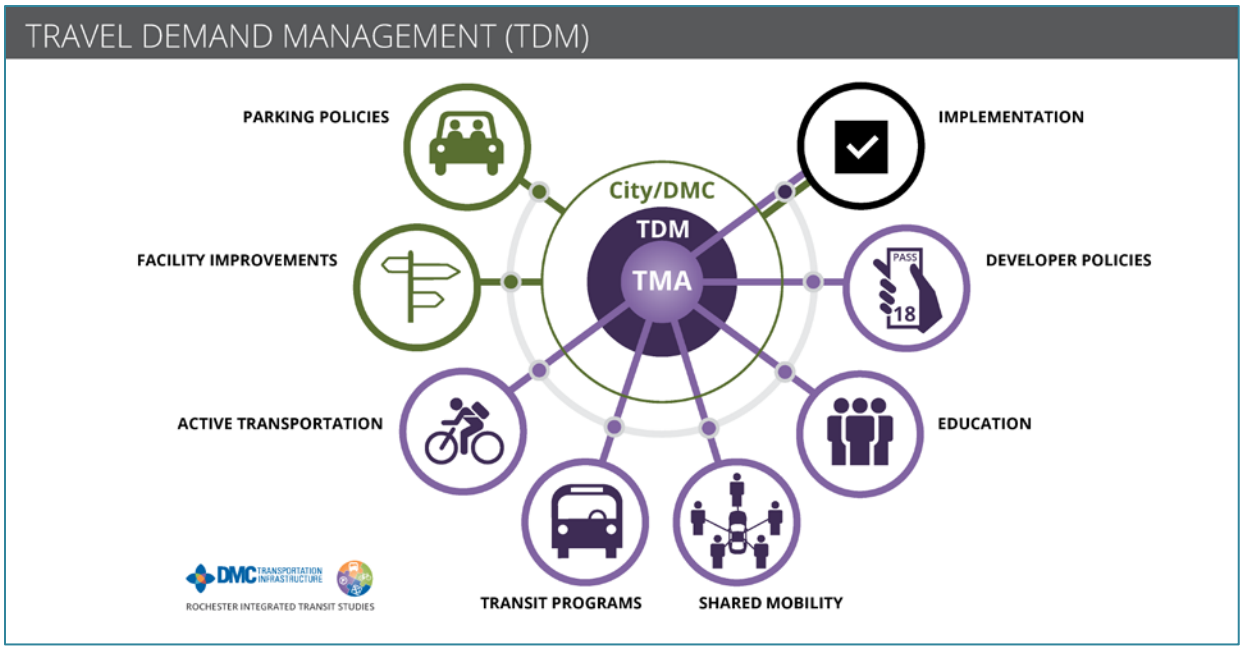
Federal Highway Administration, 2006

The City of Rochester anticipates significant growth over the next 25 years, with approximately 50,000 people, 50,000 jobs, and 23,000 housing units projected to be added by 2040. Over half of the approximately 50,000 jobs – 25,000 to 30,000 – are expected to occur within the DMC District. This level of growth will have significant impacts on land use patterns within the DMC District as well as on its transportation needs.

With Rochester's anticipated downtown growth, this study will serve as the framework and foundation of a parking and TDM plan that can support the larger DMC vision. Implementing new strategies and programs will be essential to provide efficient travel options and maximize the benefits of existing infrastructure.

Much of the existing parking in downtown Rochester is occupied by employees who drive alone. If access by downtown workers continues to be accommodated by providing parking for users who utilize a single parking space for the full duration of a work shift, the DMC Plan estimated that 80 acres of surface parking (equivalent to seven city-blocks of nine-story parking structures) would be needed in the future. Provision of parking to meet this type of demand would use a significant amount of land that could be put to productive economic use in the DMC district, in addition to the cost to construct, operate, and maintain parking at an estimated $35,000 to $45,000 per stall.

With the increase in employees, patients, residents, and students, the demand and need for expanded transportation options, and new programs, becomes crucial. This can be accomplished by promoting a broader focus on sustainable community access strategies by creating a more balanced combination of parking, transportation, and shared mobility options. This study includes a wide range of recommendations and strategies specific to Rochester (see Chapter 5), to support the DMC vision.



Study Approach

Preparation of this Study included extensive evaluation of existing and anticipated future conditions, including:

- Parking Supply, Demand, and User Type
- Land Uses, Travel Patterns, and Travel Trends
- Parking and TDM Programs, Operations, and Policies
- Parking and TDM Best Practices and Emerging Strategies

Integration with Other Transportation Infrastructure Program Studies

The Parking and TMA Study component of the DMC Transportation Infrastructure Program was completed in coordination with the Transit, Street Use, and City Loop studies. Some key ideas and issues that emerged from the coordination between the studies are:

- Available downtown portal capacity limits the number of additional commuter vehicles that can enter the downtown core in the a.m. and p.m. peak periods. To accommodate growth in private commuter travel, parking facilities for commuters need to be located at or outside a downtown cordon defined by TH 52 on the west, the Canadian Pacific rail corridor on the north, the Zumbro River on the east and 6th Street on the south.
- The commuter parking facilities outside the downtown cordon need to be served by transit to effectively use the capacity of the existing public rights of way into downtown. Transit routes and transit ridership forecasts depend heavily on parking locations and magnitude.
- Patients, visitors, and residents are the main user types that need to be accommodated via automobile in downtown. These user groups typically access the downtown outside the a.m. and p.m. peak periods, and are therefore not affected as much by the peak period portal capacity constraints.
- A meaningful amount of existing employee parking will need to shift over time to parking areas outside the downtown cordon so that additional patients, visitors, and residents can find convenient parking near/in downtown.

What about New Trends & Advances?

With continuing advances in technology and communications that are impacting personal mobility, there will be a need to continually assess and monitor the evolution of the emergence of autonomous vehicles, the sharing economy and the rapid rise of new shared mobility options and their impact on parking demand and commute patterns. Two specific trends were identified as part of the ITS study program that need to be considered as near term changes are made in the realm of parking and TDM:

- Consideration should be given to incorporating "adaptive reuse" strategies into the design of future parking ramps as a hedge against future parking demand reduction projections due to increased adoption of autonomous vehicles.
- Remote parking structure or mobility hub development may require a new approach to parking infrastructure funding as the downtown parking system changes to accommodate parking supply outside of the district.

Chapter 1 Current Conditions and Data

1.1 Parking Supply/Demand Assessment Introduction

Introduction to Rochester DMC Park+ Parking Supply/Demand Modeling

Park+ is an interactive parking scenario planning tool that can evaluate existing parking supply and demand, identify and test changes in parking demand caused by new development and parking facilities, and test the application of parking management strategies. The results of the demand model represent how much parking is needed, where parking is desired, and where existing parking supply can either meet the demand for existing and additional demand in future scenarios, or where available parking may be insufficient. The Park+ model built for the Rochester DMC captures the existing municipal and medical campus parking areas that serve as the backbone for downtown Rochester, and considers the impacts on parking from the anticipated heavy growth downtown.

Parking supply refers to the total number of parking spaces available on-street, in surface parking lots, and in structured parking ramps.

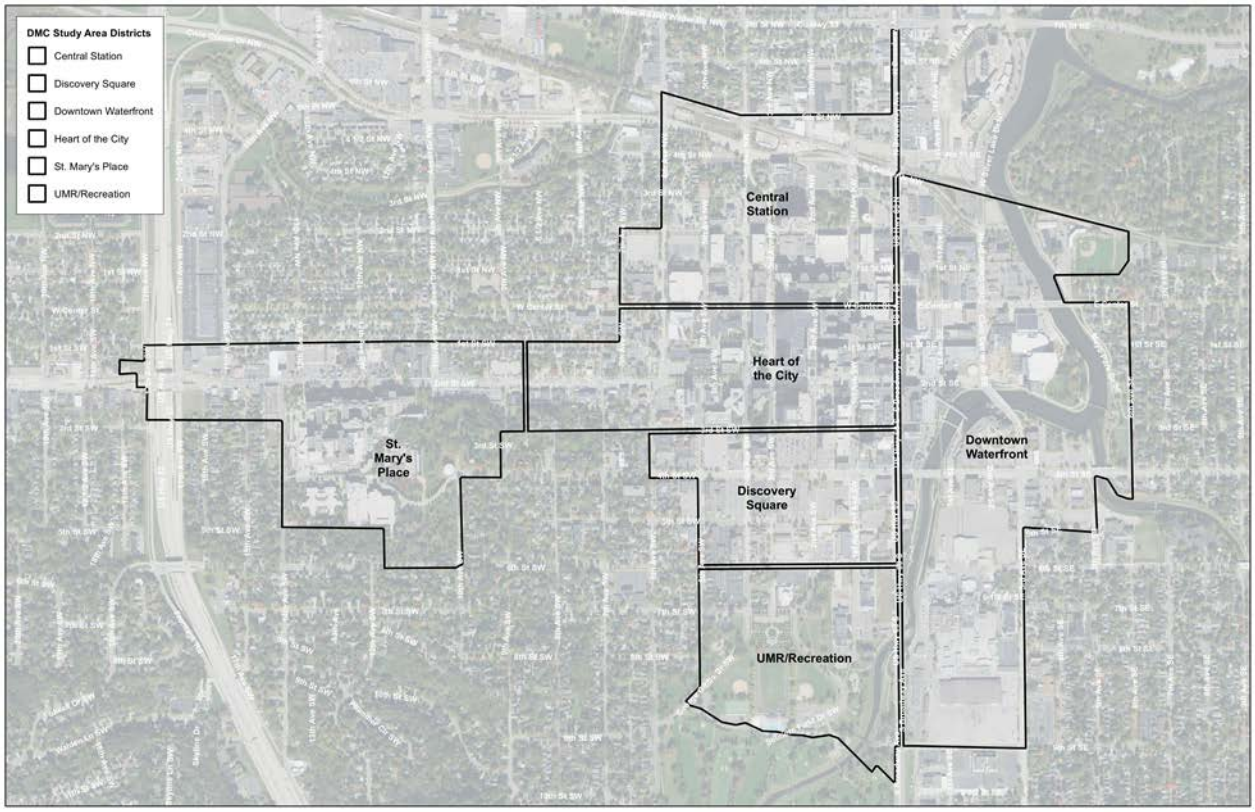
Parking demand is based on each specific building or complex, and is characterized by rates or ratios of parking spaces desired by employees, residents, or visitors, etc.

The predictive gravity demand modeling algorithm that drives Park+ is built using a proximity parking approach that dynamically links the land use (parking demand) and parking (supply) datasets based on existing/observed parking occupancy data, land use intensities, walking tolerances, and traditional supply/demand modeling processes. Unlike traditional supply/demand methodology, the Park+ model can localize parking generation rates to individual land uses rather than a land use category. The proximity parking approach assumes that parking demands from individual land uses are generally handled with a specific walking radius of the land use-based demand generator.

For model calibration purposes, all user types were assumed to have a walk tolerance of 1,200 feet from their parking space to their destination, except for Mayo employees. Because of the high rate of utilization of P&R lots, by Mayo employees, and the robust supporting commuter transit network no limit was used between parking spaces and building pairs for Mayo employees.

The Study Area for the Parking Supply/Demand Assessment is the DMC Core boundary, subdivided into districts as shown in the graphic below.

Study Area



1.2 Existing Rochester DMC Parking Supply/Demand

Existing Parking Supply

The study area currently holds approximately 28,650 parking spaces in the five sub-districts shown within the Study Area, plus some additional peripheral/ remote parking that serves the downtown area. Peripheral parking areas are those just outside of the DMC boundary area but close to downtown; remote parking areas are those that are at park and ride locations or spots much further out. There are approximately 1,200 on-street parking spaces, with the remaining supply located off-street in lots and ramps. Parking user restrictions are varied throughout the downtown core and include common themes such as employee-only monthly contracts and public hourly parking. The breakdown of parking space supply by district and user restriction is summarized below.

Existing Parking Supply by District and Facility Type

Existing Parking Supply	Employee Contract Parking	Private/ Reserved Off-Street	Public Off-Street	Mayo Patient Parking	On-Street Parking	Total Supply
Central Station	4,399	1,244		1,090	346	**7,079**
Discovery Square	2,085	639	394	48	349	**3,515**
Downtown Waterfront	1,456	2,631	2,066		266	**6,419**
Heart of the City	1,585	792	330	941	187	**3,835**
St. Mary's Place	2,303	1,093	136	710	27	**4,269**
UMR/ Recreation		826			54	**880**
Peripheral/ Remote	2,646					**2,646**
Total Supply	**14,474**	**7,225**	**2,926**	**2,789**	**1,229**	**28,643**

** Parking supply data was provided by Olmsted County, the City of Rochester, the Mayo Clinic, and field review of existing parking facilities.*

Existing Parking and Peak Demand

Land use characteristics are essential to provide a baseline for parking demand rates. Existing land use data includes block-level development information for existing land use types and intensities, such as office square footage, hospital square footage, and dwelling units, was collected for all land uses throughout the DMC area. These data were translated to employee and visitor data that inform transportation and parking demand. Parking demand rates in the urban center differ from suburban settings, and rates reflective of the urban condition were applied to the analysis.

The existing conditions supply/demand assessment included a comprehensive review of existing parking utilization and a review of how many parking spaces were occupied during three separate time periods on an average weekday: morning, noon, and late afternoon.

The parking utilization data collected and land use intensity information underwent an iterative model calibration process that utilized proximity-based parking algorithms to result in a base parking model that mimics existing, observed parking occupancies tied to associated parking rates by individual land uses and their locations. The parking occupancy/ utilization data identified that the study area peak parking demand on an average weekday occurs around 1 p.m., so while the base model considered morning, mid-day and late afternoon time periods, future scenario planning model runs consider the 1 p.m. peak.

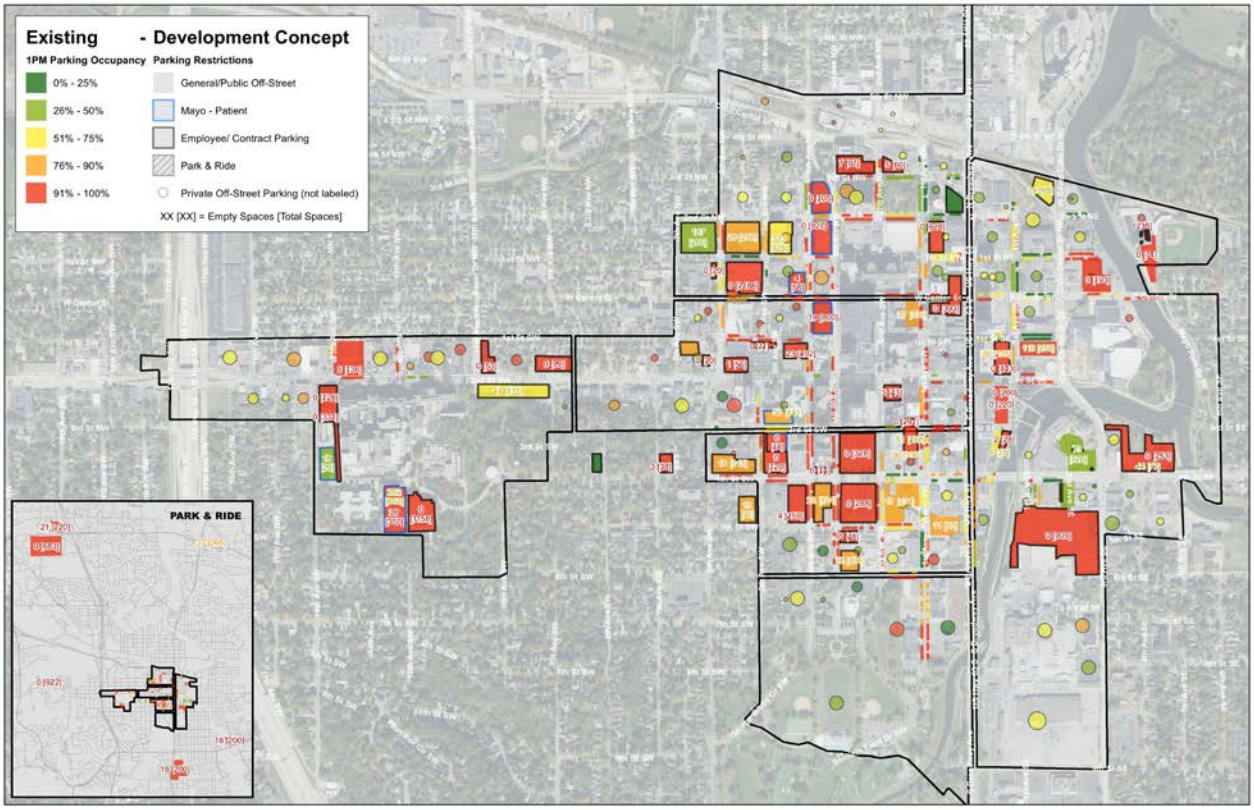
When calibration of the model is fully realized, the localized parking demand rates prepared for the model are unique to the Rochester DMC study area, and are not based on general rates provided by industry standards.

Peak parking demand on an average weekday occurs around **1 p.m.** and is approximately **23,800** parking spaces!

The total existing peak parking demand for an average weekday is approximately 23,800 parking spaces. Compared with the existing parking supply, the study area overall parking occupancy is approximately 83 percent. Industry standards today have identified optimal parking utilization at approximately 85 percent occupancy. At 85 percent, most the parking spaces are full, yet open or empty spaces are still frequent enough to not require excessive circling to find an open space.

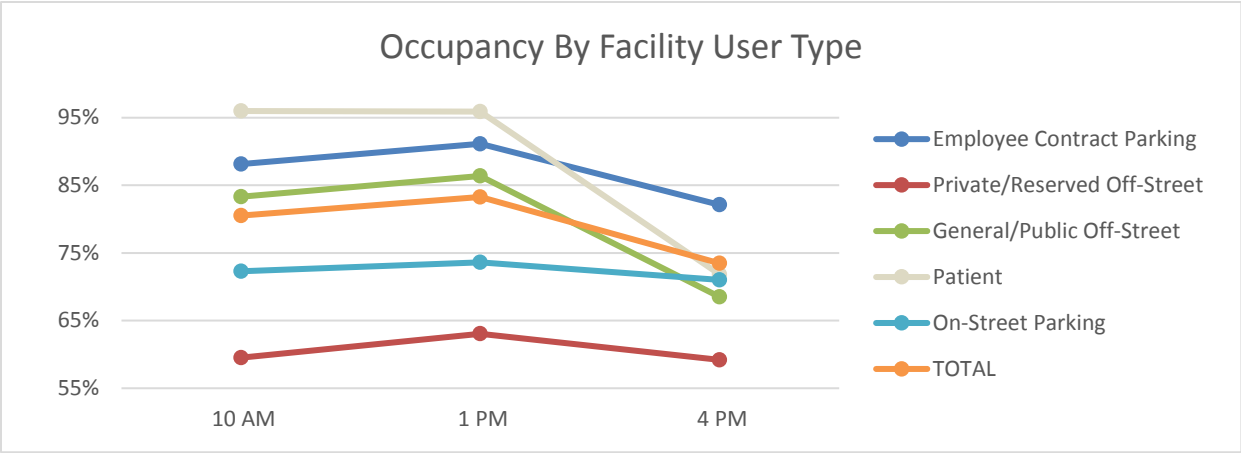
Of course, the study area is large, and some concentrations of land use do not perfectly correspond to adjacent parking facilities. Also, user restrictions may leave some parking facilities underutilized while adjacent parking facilities without restrictions are over capacity. A more detailed look at existing parking demand is shown below in the following graphic highlighting existing (model calibrated) parking utilization, and the chart of time-of-day occupancies by facility user type.

Existing (Calibrated Model) Study Area Occupancy



Notable in the chart below and map above, it is not surprising that private/reserved parking facilities are generally underutilized during the periods evaluated since these private/reserved facilities are unlikely to share between land uses throughout the day. Nor is it a surprise that Mayo patient parking is heavily utilized during the morning and afternoon, but drops significantly in the late afternoon as clinic appointments taper off toward the end of the business day.

Existing Occupancy by Parking Facility User Type



1.3 Existing Parking Program, Assessment Overview, and Key Findings

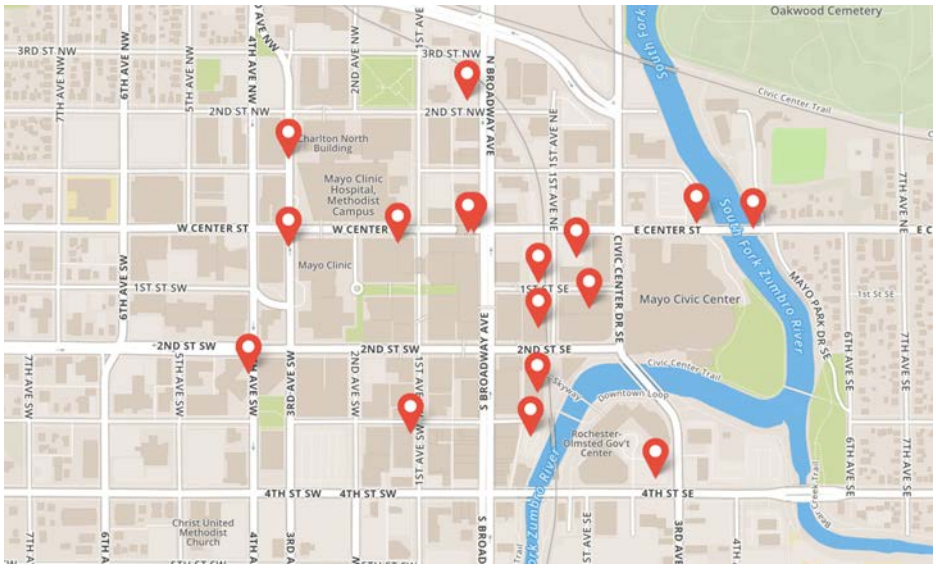
Existing Parking Program - Introduction

This section provides an overview of the current Rochester transit and parking program, which is housed within the Transit and Parking Division of City of Rochester's Public Works department. It reviews planned parking capital investments and parking asset inventory, utilization, and monitoring. An abbreviated list of recent program accomplishments is also provided. Supplementary information is provided in the more comprehensive, full document that reviews in more detail program organization and staffing, budget and finance.

Program Organization

The City has integrated parking management and transit program management together under the Department of Public Works. Day-to-day parking management is outsourced to a private parking management company. Rochester Public Transit (RPT) provides safe and convenient public transportation services to the City of Rochester. RPT's bus routes consist of 40 weekday fixed-routes and eight Saturday routes. Specialized or paratransit service is available for individuals unable to use fixed route buses. This specialized service, called ZIPS, can be accessed once individuals are certified as ADA Paratransit eligible. More information on ZIPS can be found by clicking on the ZIPS web page link: http://www.rochestermn.gov/departments/public-transportation/zips-paratransit-service. Day to day operations of both the fixed route transit and ZIPS services are outsourced as well to private management companies.

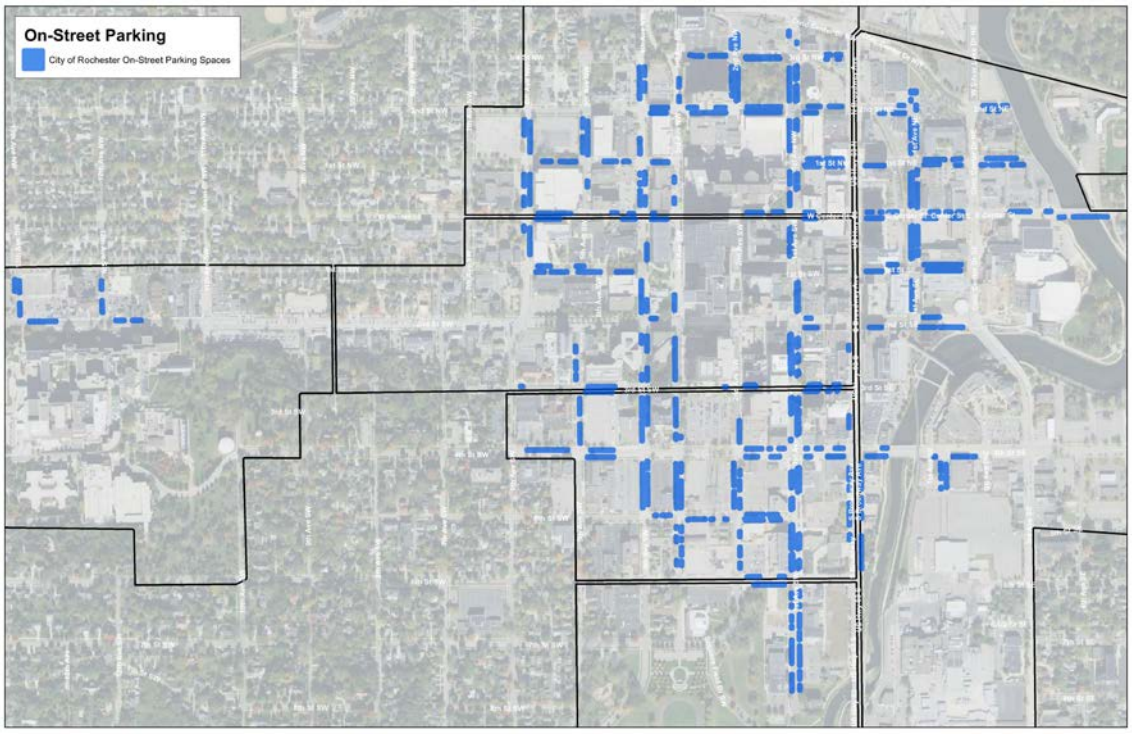
Off-Street Parking



The City of Rochester currently has approximately 4,064 total off-street parking spaces in the downtown area. This consists of 2,973 spaces in five parking ramps and 1,091 spaces in eight surface parking lots. All of the City ramps have indoor skyway connections to adjacent office buildings, retailing, hotels, banks, and civic buildings. Many downtown businesses will validate parking in the City ramps.

On-Street Parking

The City also has 1,229 on-street parking meters in the downtown and St. Mary's areas. Parking meters are enforced 8:00 a.m. to 5:00 p.m. Monday through Friday except the following holidays; New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. On-street parking is prohibited on most streets in the downtown from 2:00 a.m. until 6:00 a.m. Visit City of Rochester's website for details (http://www.rochestermn.gov/departments/public-works/parking).



Residential Parking Permit Program

A Residential Parking permit is required to park on certain streets in the City of Rochester. In 2016, Residential Parking permit enforcement changed from a physical tag on the vehicle to a license plate permit.

Existing Parking Program - Assessment Methodology and Summary

In addition to the documentation of current parking program elements, a special program assessment tool was applied to the City of Rochester and the Mayo Clinic parking programs. This parking assessment program, referred to as the "20 Characteristics of Effective Parking Programs," is applicable to most parking programs, but was developed specifically for municipal parking programs.

To the right is a summary of the "20 Characteristics" system evaluation categories.

A program that effectively addresses these 20 program categories into an integrated approach to parking and access management, will have a solid foundation for a sound and well-managed operation.

A transportation and parking system that has all twenty of these characteristics is well on its way to being in a class apart from most parking programs. The goal of this program development and management approach is to create a parking and access management program that will be positive contributor to improving the overall experience of traveling to, and around, Downtown Rochester.

Existing Parking Program - Key Findings

In applying this evaluation process to over two dozen programs across North America, the City of Rochester scored higher than 95 percent of the other programs previously assessed. In the category of mid-sized US municipal parking programs (Population less than 500,000), the City of Rochester scored higher than any program previously reviewed.

A few key observations are noted below:

1. The City of Rochester's Transit and Parking program is one of the best integrated and managed transit and parking programs observed anywhere in the country. Normally transit and parking are entirely separate divisions that, many times, function at cross-purposes.

2. Additionally, within the parking section of the program, there is an effective "vertically integrated" structure in place whereby all aspects of parking program management are consolidated into one operational entity. This is not always the case, especially in mid-sized municipal programs, but is considered a fundamental parking management best practice.

3. The City of Rochester's Transit and Parking program is also structured as an enterprise fund with revenues from on-street, off-street, and enforcement all funneled into the same account. Contributions to the City's general fund are made in the form of a defined formula as part of a "PILOT" (Payment in Lieu of Taxes) arrangement.

4. This degree of parking and transportation program integration reflects an emerging trend within the industry whereby parking and a wide range of transportation program elements are being merged into a more holistic approach to provide community "mobility/access management services." Clearly Rochester has been functioning with this basic philosophy for several years quite successfully (see list of program accomplishments in Appendix 1).

5. This study and its focus on creating a robust set of TDM and shared mobility programs and strategies will further round out the solid program base already in place.

6. The full report assessing the current City of Rochester Transit and Parking Programs provides in-depth information including an extensive list of program accomplishments from 2009-2016. It also documents awards and program recognition, program grants, planning, facilities maintenance/restoration projects, contract management, and other management functions.

7. The extensive list of accomplishments by the City reinforces our positive assessment of not only the relatively unique program organization and well-integrated transit and parking functions, but also the high quality of program management and the broad scope of program operations. It is rare, in our experience, to see such an impressive listing of program accomplishments in a mid-sized community parking program.

Chapter 2 Future Conditions and Scenario Assessment

2.1 Future Rochester DMC Parking Supply/Demand

Initial assumptions for the scenario planning process regarding future parking supply changes were provided by Rochester-Olmsted Planning in coordination with the portal capacity analysis conducted by the Street Use Study team. The calibrated Park+ supply/demand model was modified and updated to incorporate these anticipated changes within the study area. Future parking demand is anticipated to behave similarly to existing parking demand, anticipating some similarities to local development and parking/driving characteristics. Therefore, parking demand estimates for the future scenarios considered the localized land-use based parking demand rates identified during the model calibration process, which are unique to the Rochester DMC study area.

Projected changes in parking supply included net additions to and net removals of the existing parking supply throughout the downtown core area. A demand for approximately 16,300 net new parking spaces were estimated based on anticipated development, with approximately 6,600 of these spaces to be built in locations peripheral or remote to the DMC District primarily to serve employee monthly contract parking. This growth is projected to increase overall parking demand from approximately 23,800 spaces existing to nearly 40,100 spaces in the future. The locations of future peripheral/remote parking concentrations were tested in several scenarios that considered more than simply parking utilization, but also traffic volumes and transit potential to identify the best opportunities for future parking reservoir locations.

Parking supply for scenario alternatives based on the July 2017 parking supply considerations differed primarily in the peripheral, remote, and park & ride locations. Because remote and park & ride facilities will be linked to the DMC study area by some form of transit connection, proximity to the study area was not assumed to be a factor in the demand for the facilities. After completion of the Park+ modeling effort, a Hybrid Scenario was developed that adjusted the location of the future base parking supply given the results of the scenario analysis that was completed.

Parking Supply Changes by District (for Development Scenarios Analysis, July 2017)

Parking Facility Type	Employee Contract Parking	Private/ Reserved Off-Street	Public Off-Street	Mayo Patient Parking	On-Street Parking	Net Supply Change
Central Station	874	398	204	(58)	-	1,418
Discovery Square	508	701	172	84	-	1,465
Downtown Waterfront	1,186	1,345	1,696	-	-	4,227
Heart of the City	(306)	572	247	300	-	813
St. Mary's Place	526	584	334	125	-	1,569
UMR/ Recreation	-	30	135	-	-	165
Peripheral/ Remote	6,600	-	-	-	-	6,600
Net Supply Change	9,388	3,630	2,788	451	-	16,257

Future Land Use Data

Future land use data was provided by Rochester-Olmsted Planning at the block level. This dataset was compared to the existing land use data and the future changes were interpreted for use in the Park+ model. The land use changes in the future model were applied against the localized parking demand generation rates identified for the District in the calibrated existing model, with the assumption that future parking demand will have similar characteristics to today's demands. The assumption that parking will be demanded like it is today, assumes similar mode split characteristics among travelers. Increased potential mode shift, or technological advances in the DMC area may have an additional effect on parking trends in the future.

The initial future condition scenario provides a baseline to understand how today compares to the future. Although potential mode shift is not included as part of the parking demand calculations it is the intent of the parking professionals that mode shift be a key strategy to limit the amount of parking infrastructure and single occupancy vehicle use under future conditions. Mode shift goals/targets have been established that employers and developers will strive to achieve through development practices and transportation demand management strategies. Success in meeting mode shift goals will reduce overall demand for parking and costs associated with parking facilities.

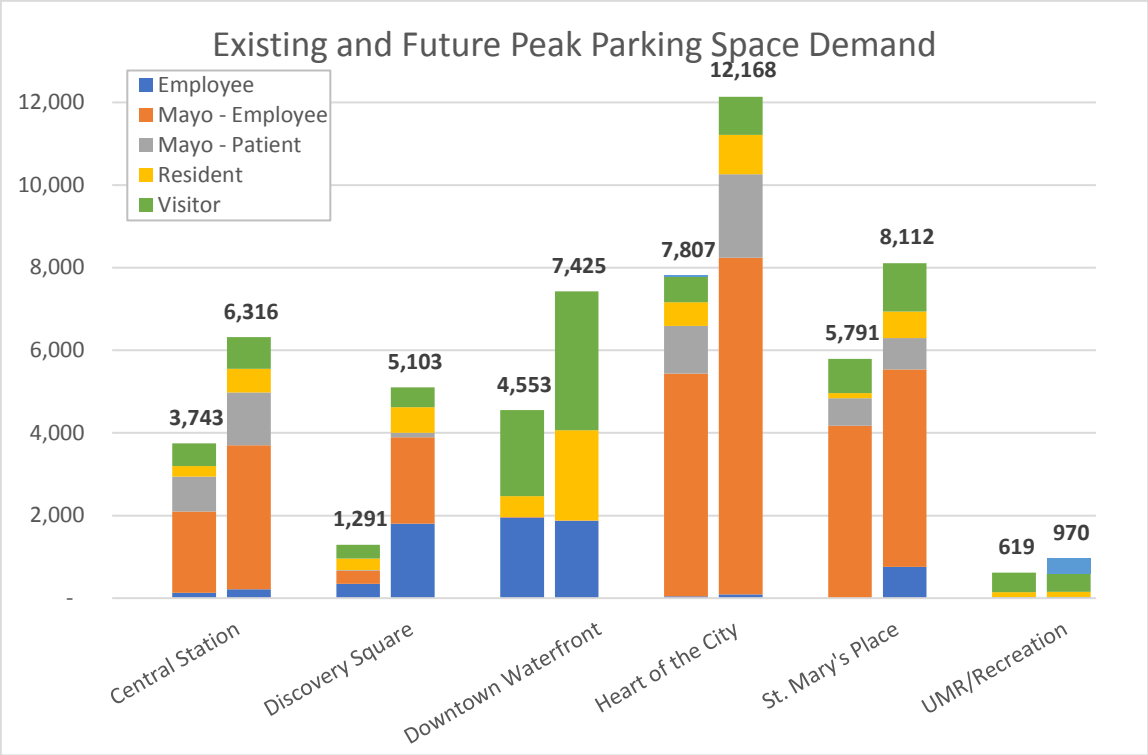
Future Parking Demand Scenarios

The Park+ model can localize parking generation rates to individual land uses rather than a general land use category. This feature of the model was used to estimate the change in parking demand for the future scenarios based on observed/ calibrated parking-to-land-use rates of nearby similar developments, which can anticipate similar parking demand patterns in the future. With the anticipated supply changes based on the table below, the change in parking space demand by subdistrict and user type is shown in the figure on the next page, and is applicable for all future scenarios where the land use assumption is constant.

Future Parking Space Change in Demand

User Type by Land Use	Central Station	Discovery Square	Downtown Waterfront	Heart of the City	St. Mary's Place	UMR/ Recreation	Net Demand
Employee	81	1,455	(78)	45	759	7	**2,269**
Mayo - Employee	1,519	1,660	-	2,755	602	-	**6,536**
Mayo - Patient	433	212	-	875	97	-	**1,617**
Resident	324	338	1,678	379	514	-	**3,233**
Student	-	-	-	-	-	385	**385**
Visitor	217	147	1,272	306	349	(41)	**2,250**
Net Demand	**2,574**	**3,812**	**2,872**	**4,360**	**2,321**	**351**	**16,290**

Existing and Future Peak Parking Space Demand



2.2 Scenario Evaluation

Initially, four transportation scenarios were developed for consideration as part of the overall DMC Transportation Infrastructure Program. The parking component of the scenarios was based on developing around 16,000 net new parking stalls, some inside the existing district boundaries and some outside current boundaries. The scenarios were differentiated by how those new stalls would be allocated to different user types and placed in different locations. In all scenarios, the new patient and visitor parking demand is met in the downtown core; whereas the new and reassigned employee parking demand is met outside the downtown core. One scenario, the "Transit Alternative Phase #1" option, was intended to reflect simply the expansion of current systems, with up to 100 percent of new and reassigned employee parking demand in park and ride lots supplemented by implementing the City's Comprehensive Plan 2040 land use and transportation strategies to increase commuter access through a future Primary Transit Network, transit oriented development, walking, and bicycling.

In all scenarios, the new patient and visitor parking demand is met in the downtown core; whereas the new and reassigned employee parking demand is met outside the downtown core.

The following sections summarize preliminary assessment and evaluation of the alternatives. After completion of this effort, a final "Hybrid Scenario" was developed.

DMC Modified Future Scenario

The DMC modified scenario results in many facilities reaching and exceeding the maximum effective capacity of 85 percent. Employee contract parking, public off-street, and Mayo patient parking all exceeded effective maximum utilization during the peak period. St. Mary's Place and the Downtown Waterfront districts also passed this critical threshold. However, the overall parking demand and supply are in balance as indicated by the overall district occupancy rate of 83.4%

DMC Modified - Occupancies by District and Parking Facility Type

Parking Facility Type	Employee Contract Parking	Private/ Reserved Off-Street	Public Off-Street	Mayo Patient Parking	On-Street Parking	District Occupancy
Central Station	75.2%	70.3%	95.0%	95.0%	88.7%	77.7%
Discovery Square	81.4%	66.9%	95.0%	95.0%	61.6%	78.0%
Downtown Waterfront	94.8%	71.3%	95.0%		71.5%	85.5%
Heart of the City	88.5%	61.1%	95.0%	95.0%	72.1%	82.3%
St. Mary's Place	80.8%	75.7%	95.0%	95.0%	91.5%	82.6%
UMR/ Recreation		35.7%	95.0%		62.3%	44.8%
Peripheral/ Remote	94.4%					94.4%
Facility Type Occupancy	86.9%	67.2%	95.0%	95.0%	73.7%	83.4%

Based on the development intensities and parking supply in the DMC Modified Scenario, there are expected to be over 2,500 spaces of latent (unmet) demand. This indicates that while the total parking supply exceeds total parking demand, the supply is not either in the right location or user restrictions limit opportunities to satisfy the latent demand. Most of the latent demand is for Mayo patients. Reclassification of Mayo employee spaces and shared parking agreements with private off-street lots in the Central Station and Heart of the City areas would help alleviate excess parking demand.

DMC Modified - Unmet Demand

Unmet Demand	Central Station	Downtown Waterfront	Heart of the City	St. Mary's Place	Grand Total
Employee	11	11	27	43	92
Patient	652		652	90	1,394
Visitor	182	176	38	232	628
Resident	119	207	4	210	540
TOTAL	963	394	722	575	**2,653**

Scenario A

Scenario A results in many facilities reaching and exceeding the maximum effective capacity of 85 percent. Public off-street, Mayo patient parking, and on-street parking all exceed effective maximum utilization during the peak period. St. Mary's Place and the Downtown Waterfront districts also passed this critical threshold. However, the overall parking demand and supply are in balance as indicated by the overall district occupancy rate of 82.1%

Scenario A - Occupancies by District and Parking Facility Type

Parking Facility Type	Employee Contract Parking	Private/ Reserved Off-Street	Public Off-Street	Mayo Patient Parking	On-Street Parking	District Occupancy
Central Station	63.2%	77.8%	95.0%	95.0%	95.0%	71.9%
Discovery Square	80.2%	70.6%	95.0%	95.0%	90.1%	80.4%
Downtown Waterfront	94.9%	73.3%	95.0%		84.1%	88.1%
Heart of the City	88.9%	61.8%	95.0%	95.0%	95.0%	83.6%
St. Mary's Place	66.6%	75.7%	95.0%	95.0%	95.0%	75.7%
UMR/ Recreation		35.7%	95.0%		90.6%	46.2%
Peripheral/ Remote	94.2%					94.2%
Facility Type Occupancy	82.4%	69.6%	95.0%	95.0%	91.1%	82.1%

Based on the development intensities and parking supply in Scenario A, there are expected to be over 3,000 spaces of unmet demand. This indicates that while the total parking supply exceeds total parking demand, the supply is not either in the right location or user restrictions limit opportunities to satisfy the latent demand. Reclassification of Mayo employee spaces and shared parking agreements with private off-street lots in Central Station, Downtown Waterfront, and Heart of the City would help alleviate excess parking demand.

Scenario A - Unmet Demand

	Central Station	Downtown Waterfront	Heart of the City	St. Mary's Place	Grand Total
Employee	46	18	-	43	108
Patient	652	-	652	90	1,394
Visitor	256	176	14	232	678
Resident	382	444	-	234	1,060
TOTAL	1,336	638	666	599	**3,240**

Scenario D

Scenario D results in many facilities reaching and exceeding the maximum effective capacity of 85 percent. Employee contract parking, public off-street, Mayo patient parking, and on-street parking all exceeded effective maximum utilization during the peak period. St. Mary's Place and the Downtown Waterfront districts also passed this critical threshold. However, the overall parking demand and supply are in balance as indicated by the overall district occupancy rate of 83.4%

Scenario D - Occupancies by District and Parking Facility Type

Parking Facility Type	Employee Contract Parking	Private/ Reserved Off-Street	Public Off-Street	Mayo Patient Parking	On-Street Parking	District Occupancy
Central Station	75.2%	77.8%	95.0%	95.0%	95.0%	79.4%
Discovery Square	81.4%	70.6%	95.0%	95.0%	90.1%	81.0%
Downtown Waterfront	94.8%	73.3%	95.0%		84.1%	87.0%
Heart of the City	88.5%	61.8%	95.0%	95.0%	95.0%	83.5%
St. Mary's Place	69.8%	72.6%	95.0%	95.0%	95.0%	76.4%
UMR/ Recreation		35.7%	95.0%		90.6%	46.2%
Peripheral/ Remote	93.2%					93.2%
Facility Type Occupancy	85.1%	69.1%	95.0%	95.0%	91.1%	83.4%

Based on the development intensities and parking supply in Scenario D there are expected to be over 2,600 spaces of unmet demand. This indicates that while the total parking supply exceeds total parking demand, the supply is not either in the right location or user restrictions limit opportunities to satisfy the latent demand. Reclassification of Mayo employee spaces and shared parking agreements with private off-street lots in Central Station and Heart of the City would help alleviate excess parking demand.

Scenario D - Unmet Demand

Unmet Demand	Central Station	Downtown Waterfront	Heart of the City	St. Mary's Place	Grand Total
Employee	46	18	-	-	65
Patient	652	-	652	90	1,394
Visitor	208	176	-	-	384
Resident	382	417	-	-	799
TOTAL	1,288	611	652	90	**2,642**

Scenario Transit Alternative Phase #1 (TAP-1)

Scenario TAP-1 results in many facilities reaching and exceeding the maximum effective capacity of 85 percent. Employee contract parking, public off-street, and Mayo patient parking all exceeded effective maximum utilization during the peak period. Central Station, St. Mary's Place, and the Downtown Waterfront districts also passed this critical threshold. However, the overall parking demand and supply are in balance as indicated by the overall district occupancy rate of 83.6%

TAP-1 Scenario - Occupancies by District and Parking Facility Type

Parking Facility Type	Employee Contract Parking	Private/ Reserved Off-Street	Public Off-Street	Mayo Patient Parking	On-Street Parking	District Occupancy
Central Station	93.5%	76.9%	95.0%	95.0%	95.0%	90.6%
Discovery Square	70.2%	73.5%	95.0%	95.0%	91.9%	76.1%
Downtown Waterfront	94.9%	75.8%	95.0%		85.2%	86.5%
Heart of the City	91.2%	61.9%	95.0%	95.0%	95.0%	84.2%
St. Mary's Place	46.7%	68.5%	95.0%	95.0%	95.0%	64.0%
UMR/ Recreation		36.2%	95.0%		95.0%	46.8%
Peripheral/ Remote	93.1%					93.1%
Facility Type Occupancy	85.2%	69.7%	95.0%	95.0%	92.0%	83.6%

Based on the development intensities and parking supply in this scenario, there are expected to be over 2,500 spaces of unmet demand. This indicates that while the total parking supply exceeds total parking demand, the supply is not either in the right location or user restrictions limit opportunities to satisfy the latent demand. Reclassification of Mayo employee spaces and shared parking agreements with private off-street lots in Central Station and Heart of the City would help alleviate excess parking demand.

Transit Scenario - Unmet Demand

Unmet Demand	Central Station	Downtown Waterfront	Heart of the City	St. Mary's Place	Grand Total
Employee	36	18	-	-	54
Patient	652	-	652	90	1,394
Visitor	223	176	-	-	399
Resident	250	441	-	-	691
TOTAL	1,161	634	652	90	**2,538**

2.3 Summary Table

Note that future parking supply changes are scenario specific for several peripheral, remote, and park & ride facilities. Recall that after completion of the Park+ modeling effort, an additional "Hybrid Scenario" was proposed. While detailed modeling results are not available for this scenario by subarea with utilization percentages, below is an allocation of parking spaces based on this scenario and the needs of users to minimize unmet demand by location while serving employees well.

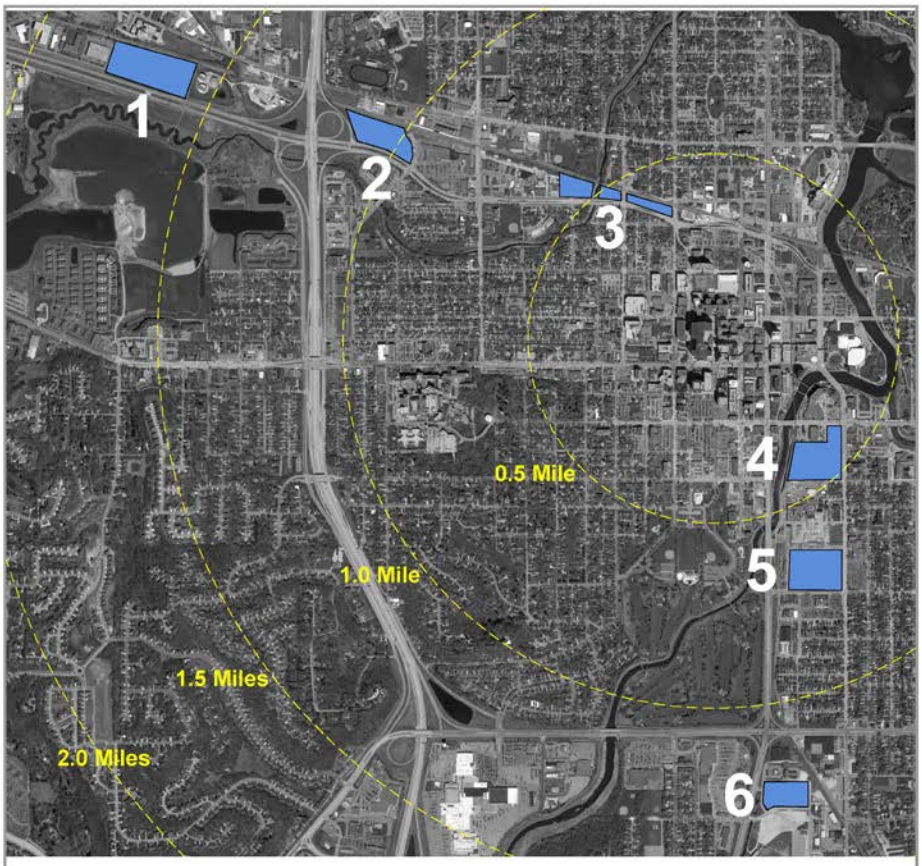
Summary of Projected Parking Supply by Scenario

Employee-New	1: DMC Modified	2: Scenario A	3: Scenario D	4: Transit Alternative Phase #1	5: Hybrid Scenario
Downtown Core	0	0	0	0	0
Peripheral	4,000	3,000	2,500	0	2,000
Remote	3,000	4,000	4,000	0	4,000
Park & Ride	2,000	2,000	2,500	9,000	2,650
Employee-Relocated					
Downtown Core	0	0	0	0	0
Peripheral	700	0	0	0	0
Remote	1,000	2,000	0	0	0
Park & Ride	800	500	2,500	2,500	0
Patient / Visitor – New					
Downtown Core	1,500	1,500	1,500	1,500	1,000
Peripheral	0	0	0	0	0
Remote	0	0	0	0	0
Park & Ride	0	0	0	0	0
Patient / Visitor - Reassigned					
Downtown Core	2,500	2,500	2,500	2,500	3,450
Peripheral	0	0	0	0	0
Remote	0	0	0	0	0
Park & Ride	0	0	0	0	0
Student					
Downtown Core	0	0	0	0	385
Peripheral	400	400	400	0	0
Remote	0	0	0	0	0
Park & Ride	0	0	0	400	0
Total New	**15,900**	**15,900**	**15,900**	**15,900**	**13,485***

* Does not include assumed private development in downtown core

2.4 Parking Site Assessment Evaluation Summary

Conceptual plans for parking facilities were developed for six sites that were identified as possible locations for commuter parking outside of the DMC boundary area. The conceptual plans provided an estimate of the total number of spaces that could feasibly be provided at each site, including the number of levels and the spaces/level. Due to their location, outside of the DMC boundary area, with most outside of a reasonable walking distance, all sites require some form of transit connection to and from the downtown area. The following exhibit presents a summary of the potential parking that can be accommodated at each site. The technical memorandum - "Parking Sites – Initial Site Assessments 05-04-20170" - provides additional detail regarding each site (included in full document appendices.



Site	Existing Stalls[1]	Parking Sq.Ft.[2]	Stalls Per Level[3]	Parking Capacity[4]	Levels Req'd	Adaptive Reuse	Residential Units	Transit Hub
1	0	509,000	1,450	1,000 - 7,500	1 - 5			
2	170	217,000	620	1,000 - 3,000	2 - 5			
3	75	181,200	500	500 - 3,000	1 - 6			
4	860	309,900	880	1,750 - 4,750	2 - 6			
5	900	383,900	1,090	1,000 - 2,500	1 - 3			
6	532	144,000	410	1,000 - 4,500	3 - 11			

1 - Based on count from Google Earth Pro
2 - Based on 20' boundary setback on all sides
3 - Based on 350 sq. ft/ per stall
4 - Based on peripheral parking capacity analysis see attached Table 1

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Parking Site Assessment Summary

Kimley»Horn

Parking Site Assessment
DMC Parking & TMA Study
Rochester, Minnesota

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Chapter 3 Future Parking Structures and Mobility Hubs

3.1 Parking Garage Design Guidelines

Appendix 5 of the full report includes a document identifying recommended Parking Garage Design Guidelines. The document was developed for the City of Rochester as a guide for future parking structure design in the Downtown area, and provides guidance to be considered along with the adopted DMC District Design Guidelines. It contains information to help guide program administrators, developers and designers incorporate desired parking structure components into proposed projects. The intended purpose of the garage design guidelines tool is to:

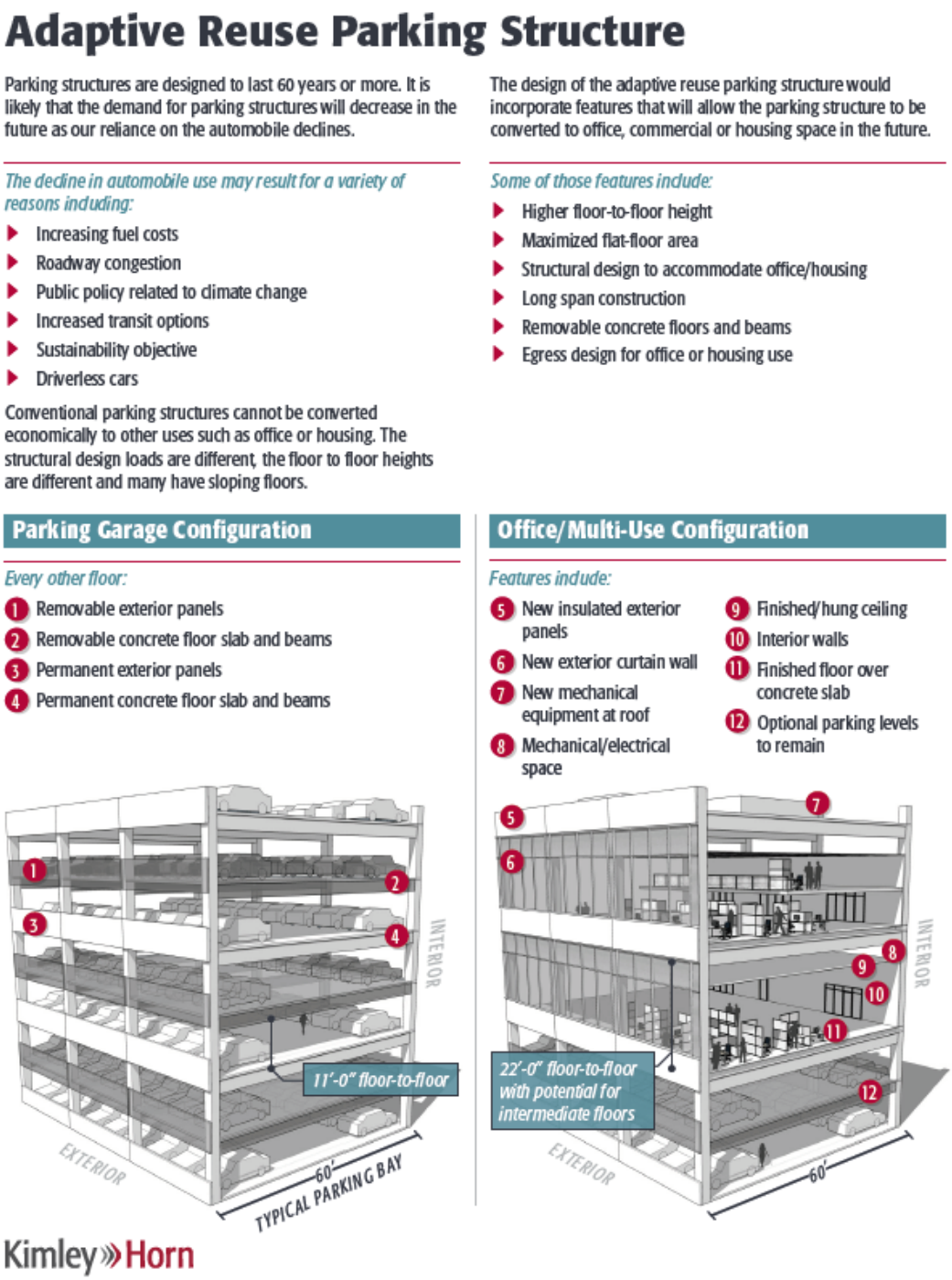
- Produce functional, well-designed and patron friendly parking structures that will become valued infrastructure elements for the downtown and surrounding areas.
- Suggest considerations that can eliminate or minimize common design mistakes by addressing specific issue/concerns early in the design process.
- Enhance and facilitate the shared use of parking and public/private partnerships going forward.
- Educate staff on the basics of good parking garage design, leading to better projects and improved development planning.

Two considerations, planning for the Adaptive reuse of parking structures, and incorporating mobility hub features in structures, are emerging design considerations described below.

3.2 Planning for the Adaptive Reuse of Parking Structures

Looking to the future, parking professionals, architects, planners and designers are all considering the impact to traditional parking structures if the promise of autonomous vehicles becomes a reality. Early projections estimate a potential reduction in parking demand could reach 30 to 50 percent – within 20 – 30 years if these technologies are aggressively adopted.

The service life of many parking structures designed is 50-75 years. As such, these facilities are, and will continue to be, fixtures of our urban landscape. We realize that mobility options and preferences are going to change over time along with the needs of the community. Given the potential of a reduction in parking demand, consideration should be given to designing new structures such that they could be adapted to other uses. The graphic illustrates some potential features that could facilitate this change.



3.3 Mobility Hubs – an Emerging Best Practice

Mobility hubs are multimodal transportation nexus points intended to integrate various transit and emerging mobility services to facilitate a wide range of linked trips. The mobility hub concept originated as branded public spaces designed and programmed to integrate travel modes with information to guide trip planning and mode-selection. An initial emphasis on on-site information kiosks soon eased as smartphones became widely adopted.

The concept has proven useful to call attention to points of intersection between two or more travel modes, and to reduce barriers to their use. As emerging mobility options increasingly diversify travel options in more places, and as technology makes it increasingly easier to find immediate information on and access to these options, informal mobility hubs are emerging across many of our communities. A bus rider who hails a Lyft ride when a next-bus-arrival sign indicates a trip delay is one example of an informal mobility hub in action. Mobility hubs can include a variety of multimodal infrastructure components customized for their location within the transportation network, and they can range from simple to complex in their range of features.

Mobility Hubs Can Be as Simple or as Complex as they Need to Be

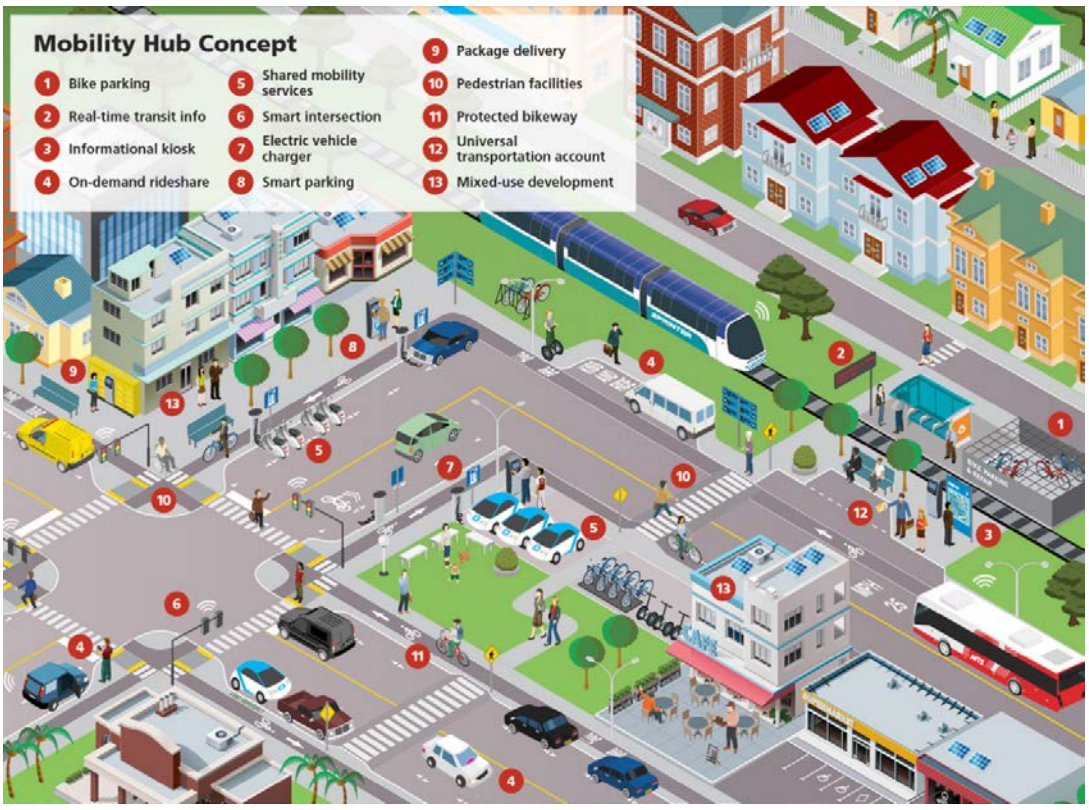


Image Source: SANDAG

Parking and Mobility Hubs

From the beginning, parking has been a common component of mobility hubs. Depending on the place and circumstance, mobility hubs are typically viewed either as a means of reducing the need for parking, or as an opportunity to make use of existing parking facilities to facilitate non-driving travel modes for longer stages of a trip. In the former case, parking will be minimized, eliminated, or restricted to shared cars or ride-service vehicles. In the latter case, however, placing alternative modes and services near concentrations of parking can greatly increase awareness of the available transportation alternatives.

For the purposes of this document, the term "**mobility hub**" refers to any intentional co-location of two or more publicly accessible travel modes within a public space or facility, complemented by information/services to make these options broadly useful and accessible.

Hubs may also include supportive retail options – such as dry cleaners, coffee shops, bike shop, grocery, day care facility, etc.

Mobility Hubs and the Future of Parking

As uncertainty regarding the future of parking[1] (and parking garages specifically[2]) increases, it is becoming clear that the evolution of the parking garage must accelerate to address the risk that such change might present for the financial investment in infrastructure meant to provide 40-plus years of value.[3] The mobility hub concept has emerged as a promising means of diversifying the functional role of parking facilities, and of directly accommodating many of the travel modes and services likely to reduce personal-vehicle travel in many city centers.[4]

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[1] Rao, Santosh. 2017. "Managing the Parking Transition — A Call for More Data." *Medium*. January 5. https://medium.com/uber-under-the-hood/managing-the-parking-transition-a-call-for-more-data-afb76772d36c.

[2] Marshall, Aarian. 2016. "It's Time to Think About Living in Parking Garages." *WIRED*, November 2. https://www.wired.com/2016/11/time-think-living-old-parking-garages/.

[3] Rusch, Emilie. 2016. "Denver Developers Have Seen the Future of Parking, and It Is No Parking at All." *The Denver Post*, October 16. http://www.denverpost.com/2016/10/15/denver-developers-future-parking-self-driving-cars/.

[4] Bouton, Shannon, Stefan M. Knupfer, Ivan Mihov, and Steven Swartz. 2017. "Urban Mobility at a Tipping Point | McKinsey & Company." Accessed May 19. http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/urban-mobility-at-a-tipping-point.

3.4 Multimodal Hub Implementation

Two levels of mobility hub implementation are recommended for DMC-focused parking facilities in the Hybrid Transit Scenario. The Hybrid Transit Scenario proposes accommodating future DMC growth at park-and-ride locations (referred herein as "Remote Facilities"), at peripheral parking facilities within about one mile of the DMC (referred herein as "Peripheral Facilities"), and within the Downtown Core (referred herein as "Downtown Facilities"). Each type of location lends itself to different mobility hub features and services

Location Considerations

Three selections of mobility hub elements are proposed for each type of parking facility, depending on its location at a Remote, Peripheral, or Downtown Facility. The exact locations of these facilities have yet to be determined. Following is a guide to mobility hub implementation.

At Remote Facilities (Park-and-Ride Facilities Located a Few to Several Miles Outside the DMC)

For facilities planned to function as remote parking options, mobility hub features should focus on amenities that help enable a primarily-transit commute – or a park-and-pedal commute, if regional trails are present – with parking located closer to the home end of the commute trip.

At Peripheral Facilities (Parking Offering First/Last-Mile Connectivity to the DMC Core)

For facilities designed to intercept driving commuters just outside the DMC, mobility hub features should focus on "first-mile/last-mile" solutions, such as those listed below. The primary mobility connection is assumed to be high frequency transit, offering short rides into the DMC, complemented with distinctive first-mile/last-mile components, as indicated below.

At Downtown Facilities

Most of those parking within the DMC will presumably be within walking distance of the destination, and thus not in need of modal connections. However, DMC-located mobility hubs can provide an ideal location for a "one-stop shop" for learning about and accessing non-driving "primary mode" commute options, with the on-site population of drivers as the primary target audience. Primarily, this is about using garage space, and particularly the ground-floor spaces that interact with surrounding sidewalks, to accommodate and display the diversity of mobility options available throughout the DMC. This can be particularly valuable in locations and within facilities that might otherwise struggle to attract/retain private retail uses as "liner" spaces.

Mobility hub implementation in these locations should focus on the following.

- Raising awareness of non-drive-alone mobility options among drivers likely using some of the most expensive parking in Rochester.

- Raising awareness of all non-drive-alone mobility options among all those who pass by these parking structures, including those who might not otherwise know about car-sharing, bike-sharing, or ride-matching services.
- Providing retail storefront space for the DMC TMA.
- Providing staffed assistance to make "shared mobility" services, which tend to rely heavily on smartphone apps and credit-card payments, more broadly accessible.
- Seek synergies with public facilities and gathering spaces, such as outdoor plazas, Skyways, libraries, public Wi-Fi hotspots, etc.
- The study recommends mobility hub implementation at a site northwest of the District and a site southeast of the District, as well at two sites within the DMC District in the Heart of the City sub-district and the St. Mary's Place sub-district at locations to be determined. Limited additional mobility hub functions to meet the needs of commuters at remote park-and-ride facilities are also recommended.

Mobility Hub Implementation Site Characteristics

Site	Name/Address	Existing Stalls	Acres	Parking Capacity	Facility Type
1	NW of District	0	14	1,000 – 7,000	Remote Facility
5	SE of District	900	10	1,000 – 2,500	Peripheral Facility
N/A	Downtown (Various sites)	0	N/A	7,850 patient/visitor (new)	Downtown Facility
N/A	Park-and-ride[5]	0	N/A	2,650 employee (new)	Remote Facility

The following table reviews various Mobility Hub features, identifying what type of service or amenity is appropriate for each and typical implementation considerations.

Mobility Hub Elements Summary/Overview

Hub Elements	Most Appropriate Hub Locations	Typical Space Requirements	Essential Infrastructure Needs	Owner/Operator
Bike Parking	All	Minimum set-aside of 240 square feet (SF)	Shelter, bike racks, bike lockers	Rochester Downtown TMA, Rochester Municipal Parking
Park and Pedal Amenities	Remote Facilities	Varies	Oversized elevators to accommodate bicycles Bike drop-off zone	Rochester Municipal Parking

[5] Site location to be determined

Hub Elements	Most Appropriate Hub Locations	Typical Space Requirements	Essential Infrastructure Needs	Owner/Operator
On-Site Trip Chaining Land Uses	Remote Facilities	• Coffeehouse – 1,000-2,000 SF • Daycare – 1,500 SF • Bank – 3,000 SF • Copy/mail services – 1,500 SF • Pet services – 3,500 SF • Cleaners – 2,000 SF • Wine and beverage - 2,000 SF • Pharmacy – 2,000 SF	Standard retail-space amenities	Rochester Downtown TMA, leased as commercial space
Bike House	Peripheral Facilities, Downtown Facilities	1,500 SF	Repair station, restrooms, showers/lockers Class B retail-space amenities	Rochester Downtown TMA, Rochester Municipal Parking, Local bike non-profit
Bike-share Station	Peripheral Facilities, Downtown Facilities	Minimum of 300 SF	10-20 bikes, wayfinding/signage, mobile app	NiceRide or Other
Kiss-and-ride	Remote Facilities, Peripheral Facilities	Circulation space 200 SF per dedicated parking space	Circulation lanes, Dedicated parking spaces, Signage	Rochester Municipal Parking, Rochester Public Transit
One-way Car-sharing	Peripheral Facilities	200 SF per space	Dedicated parking spaces, Signage	Rochester Municipal Parking + car-sharing vendor (e.g. car2Go, Maven, Zipcar)
Ride-sharing	Peripheral Facilities	200 SF per space	Signage, mobile app to facilitate ride-matching (e.g., Scoop)	Rochester Downtown TMA, Rochester Municipal Parking, ride-matching technology vendor (e.g., Scoop)
Ride-services	Peripheral Facilities	200 SF per space	Signage	Uber, Lyft
Car-Share Parking	Downtown Facilities	Minimum of three spaces	Signage	Rochester Municipal Parking + car-sharing vendor
Transit Fare Purchases	Downtown Facilities	500-1,000 SF	Standard retail-space amenities	Rochester Downtown TMA, Rochester Public Transit
Ride-share Waiting Lounges	Peripheral Facilities Downtown Facilities	250 SF	Standard retail-space amenities + Real-time transit information (e.g., TransitScreen, Roadify)	Rochester Downtown TMA, Rochester Municipal Parking
Commuter Store	Downtown Facilities	At least 200 SF	Utility hookups (e.g., electric, Internet)	Rochester Downtown TMA

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Chapter 4 Transportation Demand Management (TDM) & Transportation Management Association (TMA)

4.1 Transportation Demand Management Program Development

Overview

A Transportation Demand Management plan was developed by UrbanTrans North America for the City of Rochester as part of this Parking and TMA study. The following is a summary of the proposed TDM Plan. For more details see the full report document entitled: "City of Rochester Transportation Demand Management Plan – March 2017".

The TDM Plan builds on the process initially begun in developing the DMC Plan, where a Transportation Demand Management (TDM) strategy was created to identify strategies and tools to reduce the number of vehicle trips associated with intensified land uses and to minimize parking demand.

Transportation demand management is a collection of strategies designed to reduce roadway congestion and demand for single occupancy vehicle travel while redistributing travel demand to alternative travel modes, times, and routes. In other words, TDM manages how people travel to, from, and within the downtown.

TDM is part of an overall access management strategy, that includes transit, pedestrian, bicycle, and parking improvements. This plan is primarily focused on the DMC district, which includes downtown Rochester. However, additional data and analysis from the wider City of Rochester area is provided for comparison to the downtown area and to identify other possible areas in the city that may benefit from TDM strategies.

TDM Plan Development

Developing TDM strategies as part of the Integrated Transit Studies (ITS) plan development process included the following steps:

1. a review of existing and planned conditions and transportation services that will affect travel to, from, and within the DMC district and City of Rochester and TDM programs and efforts;
2. identification of best TDM practices from
    a. select cities across the U.S.;
3. stakeholder interviews and an employer survey;

4. development of a draft TDM Plan;
5. stakeholder review;
6. development of a final plan.

TDM strategies of most interest include parking policies, small-scale infrastructure improvements, active transportation programs, bus programs, shared mobility, education, developer- focused policies, and implementation.

The success of the recommended programs, incentives, and infrastructure improvements will be dependent on the implementation of a strong TDM delivery structure and associated educational efforts through a Transportation Management Association (TMA).

TDM at Mayo Clinic

It must be recognized that Mayo Clinic operates many traditional TDM program elements in-house, working with the City of Rochester to offer various alternative travel options to its workforce. Among the key elements of the Mayo program include:

Staggered Work Shifts: The Mayo Clinic spreads out employee start times which help alleviate peak period, localized traffic congestion.

Carpool: The Mayo Clinic encourages carpooling to decrease employee parking demand. Incentives include preferential on- site parking at the Baldwin Ramp (downtown location) and the ability to use the Guaranteed Ride Home program.

Guaranteed Ride Home Program: The Mayo Clinic provides access to a Guaranteed Ride Home program for those who bike or walk to work. The program allows employees to take a free taxi ride home for family emergency purposes or due to illness. Employees asked to work beyond their scheduled time may use this service as well. This service may be used up to four times per year by an employee.

Transit Pass Discounts: RPT offers a 10 percent transit pass discount to all employers that commit to purchasing passes for 10 percent or more of their workforce. The Mayo Clinic supports a robust transit pass program, subsidizing up to $80 per employee per month. This subsidy fully covers the monthly cost of an RPT transit pass. For Rochester City Lines (RCL) regional commuter routes, employees must pay the difference between the $80 subsidy and the cost of their RCL pass. To qualify for an annual transit pass, employees must purchase two monthly passes before the Mayo Clinic purchases an annual pass for the employee.

Private Route Sponsorships: Mayo also provides route sponsorships for night service on certain routes in the urban area and increased frequency of service to remote city park and ride sites during peak morning and afternoon periods.

The Mayo Clinic has been recognized over multiple years as one of the Best Workplaces

for Commuters© by the Center for Urban Transportation Research for its exceptional work in assisting and supporting employees who choose alternative travel options for commuting.

4.2 Transportation Management Association (TMA)

A **Transportation Management Association**, or **TMA**, is a partnership between public and private sector employers and stakeholders with a mandate to address transportation concerns within the community it serves. A TMA generally provides programs and services to encourage and support commuters to choose more sustainable commute modes such as carpooling, transit, walking, cycling and telework. It serves as a vehicle to deliver many of the TDM strategies.

A TMA Feasibility Study was completed in 2017 and it was determined that a TMA is feasible to coordinate the delivery of TDM services within the city of Rochester. The study recommended that a Rochester TMA should provide commute options programming to downtown Rochester employers and property managers and contribute to the trip reduction goals of the Destination Medical Center (DMC) plan.

Several meetings with a stakeholder committee and subsequent advisory committee determined a set of initial goals for the TMA.

The goals established for the Rochester TMA are as follows:

1. **Governance**: Create a sustainable organization to deliver TDM programming
2. **Infrastructure/Programming**: Encourage a seamless transportation system for Rochester commuters
3. **Communications**: Create Awareness of transportation options and the TMA
4. **Recruitmen**t: Encourage TMA participation from all employment sectors
5. **Behavior Change**: Measurably reduce Single Occupant Vehicle (SOV) travel in downtown Rochester at peak hours

An employer survey was conducted in January 2017 to obtain input from Rochester employers regarding the transportation issues that affect their worksites and employees, their interest in potential strategies and programs to reduce negative transportation impacts, and interest in participating in a TMA or similar organization. The resulting TMA workplan identifies the objectives and key metrics for each of these goals and recommends initial activities and tactics required to achieve them. The workplan also identifies delivery timelines and proposed budget allocation.

4.3 TDM Strategy Summary

Mitigating parking demand and increasing alternative transportation use while ensuring a thriving downtown will be supported through a combination of parking management strategies, demand-based parking pricing, development of new parking infrastructure for commuters (outside the roadway portal capacity constraints), and the development of a set of transportation alternatives

combined with ongoing community education regarding transportation options. The result will be programs that support travel behavior change as well as a more sustainable transportation mode split. Additionally, providing high quality parking options and services for downtown visitors, patients, and event attendees will remain a high priority.

Some specific tactics recommended for Rochester include:

- Maintaining vehicular access and parking for customers, visitors and patients. These groups are the lifeblood of downtown and need to be accommodated primarily in traditional/expected ways.
- Expansion of existing transit services and the introduction of alternative transit modes
- A Transportation Management Association (TMA) to foster proactive engagement with businesses and commuters to find/customize the best commute solutions
- "Mobility hubs" as a strategy to make remote parking more attractive to commuters
- Parking rate adjustments
- Location and distribution of new parking infrastructure
- Zoning and development regulation changes that support multi-modal transportation

An extensive amount of parking and TDM "best practices" research was conducted as part of the study. A library of successful strategies and peer-city case studies is provided in the full report appendices.

The following table summarizes the TDM strategies that have been recommended. It includes a general timeline as to when the strategies should be implemented and their general impact on travel mode choice. In addition, for strategies identified for implementation immediately or in the short term, first year staffing and funding requirements are listed.

Strategy	Start Up Staff Time	Estimated Start Up Costs	Timeline*	Mode Shift Impacts**
Parking Policies				
Expand carpool parking incentive to all municipal ramps	Existing city staff		In Progress	Medium
Provide support for parking cash out programs	0.1	$30,000	Immediate	High
Move from monthly to daily parking charges	Existing city staff		Immediate	High
Leverage ramp loss			Medium Term	Low-Medium
Include mobility hubs into Transit and Parking plans			Long Term	Low-Medium
Integrate park and bike program into park and rides			Long Term	Low
Small-Scale Infrastructure Improvements				
Include walking times with wayfinding			Short-Medium Term	Low

Strategy	Start Up Staff Time	Estimated Start Up Costs	Timeline*	Mode Shift Impacts**
Encourage employers and building owners to provide end-of-trip facilities			Short-Medium Term	Low
Active Transportation Programs				
Subsidize bike share memberships			Medium-Long Term	Low
Create bike loans and discounted bike purchase programs			Short-Medium Term	Low
Bus Programs				
Encourage employers and building owners to add real-time transit displays			Short-Medium Term	Low-Medium
Study a Regional Transit Pass Program		$32,000	Immediate	High
Shared Mobility				
Consider a Mobility Pass		Included in RTP study	Immediate	Medium
Facilitate Carsharing Downtown* **	Existing city staff	$6,000	Immediate	Low
Dedicate Street Space to Share Mobility	Existing city staff		Immediate	N/A
Education				
Assure the availability of a travel planning tool	0.05		Immediate	Low-Medium
Conduct educational workshops/events	0.15		Immediate-Short Term	Low
Incorporate TDM communications into overall city communications	Existing city staff		Immediate	Low
Conduct bike education classes			Short Term	Low
Use virtual reality to educate about biking and taking transit to work			Short Term	Low
Create and distribute new employee travel kits			Short Term	Medium
Create and distribute new resident travel kits			Medium Term	Medium
Develop materials and training to promote living near work			Medium Term	Low
Developer-focused Policies				
Encourage the installation of infrastructure that supports TDM and non-auto travel			Short Term	Medium
Encourage parking management			Short Term	High
Provide free transit passes			Short Term	High
Encourage participation in a TMA or similar organization			Short Term	N/A
Next Steps and Implementation				
Conduct TDM pilot with the city employees and a key downtown employer	0.45		Immediate	
Develop Work Plan and Start Up Materials for DMC Focused TDM Organization	0.5		Immediate	

Strategy	Start Up Staff Time	Estimated Start Up Costs	Timeline*	Mode Shift Impacts**
Hire a TDM Coordinator at the City			Short Term	
Study the need for a "retail outlet" for TDM services	0.1		Immediate	
Develop TDM Evaluation Plan	0.05		Immediate	
Total	**1.4**	**$68,000**		

Note: 1.4 FTE staff time covered through UrbanTrans contract

**Immediate, Short-term (2-3 years), medium term (4-5 years), long term (6 years plus). Specific timeline to be developed in consultation with the DMC Transportation Plan*

***In the case of a study, mode shift impacts are based on an assumption that the study would result in implementation of the study recommendations.*

****Maximum monthly cost based on a revenue guarantee of $1,500 per month per car for four cars*

4.4 TDM/TMA PILOT PROGRAM

To test the TDM strategies and develop support for the TDM delivery model (via a Transportation Management Association – TMA), a pilot TDM program was conducted. The pilot included the City of Rochester's city hall employees and employees of HGA Architects. The pilot program identified an employee transportation coordinator who implemented the program at each employment site. A site analysis and employee commute survey was conducted at each employment site. Urban Trans developed commute options for each employment site, including employer policy changes, recommended incentives and TDM strategies. Each employment site had a week-long campaign to incentivize employees to use an alternate commute mode. Employees pledged to try a commute mode and receive incentives based on commute mode. Employees recorded how they travelled each day during "Try-It Week." "Try-It Week" employees were encouraged to maintain their new commute behavior for 8 weeks.

City of Rochester had 103 participants, with 215 non-drive alone trips logged during "Try-It" week. HGA had 11 participants with 39 non-drive alone trips logged. Alternate transportation modes were carpool, bike, walk and transit.

Of those that agreed to maintain their new commute behavior for 8 weeks:

- 75 staff logged at least one non-single occupancy vehicle (SOV) trip
- 937 non SOV trips logged
- 15 employees logged 10-20 trips
- 16 employees logged 20-30 trips
- 6 employees logged 30+ trips

Lessons learned include:

- Commuters are interested in alternatives
- Incentives are vital
- Trip planning information, especially for transit, is important
- Trip tracking technology will allow for less resource intensive campaigns

TMA Launch and TDM Next Steps

The TDM pilot program led to the formation of a new TMA for Rochester, which was launched in late 2017. The TMA will be branded as "ARRIVE ROCHESTER" and UrbanTrans will continue to oversee the TMA's development through 2019.

TDM strategies must be comprehensive and integrated into the fabric of local policies, programs and investments. In addition to the summary table above, a more comprehensive collection of recommendations and strategies is provided in the following chapter. Though not all will be carried out by the TMA, committing to the TMA's successful operations will be critical to supporting access to the DMC, while meeting objectives for economic development and walkability.

The following chapter identifies recommendations and TDM strategies to be implemented. Further details are encapsulated in the full-length report and appendices.

Chapter 5 Parking and TDM Recommendations

5.1 Guiding Principles for Programs

"Peer Cities" were identified by the consultant team relative to Rochester. In some cases, the places where parking management and TDM innovations are occurring cannot truly be called "peer cities" to Rochester due to their size or other factors; however, due to the advanced nature of many of Rochester's programs, we looked beyond programs of the same size or geographic character. These innovative communities/programs were simply classified as "Cities We Can Learn From" to distinguish them from true "peer cities."

In addition, given the advanced and progressive nature of the programs currently in place in Rochester, many of the identified "best practices" are already in place.

Apply Guiding Principles to Programs

The following is a set of recommended program "Guiding Principles" which provides a set of criteria that can be used to both guide program development in terms of overarching goals as well as to assess the relevance and appropriateness of specific best practices that should be evaluated and refined as tools to advance the City of Rochester's parking and access management programs.

- **Provide for All Transportation Modes and Safety**: Support a balance of all modes of access for a safe transportation system: pedestrian, bicycle, transit, and multiple forms of motorized vehicles—with the pedestrian at the center.
- **Customize Tools by Area**: Use of a toolbox with a variety of programs, policies, and initiatives customized for the unique needs and character of the city's diverse neighborhoods both residential and commercial.
- **Support a Diversity of People**: Address the transportation needs of different people at all ages and stages of life and with different levels of mobility – residents, employees, employers, seniors, business owners, patients, students and visitors.
- **Seek Solutions with Co-Benefits**: Find common ground and seek mutually supportive outcomes among community character, economic vitality, and community well-being with elegant solutions—those that achieve multiple objectives and have co-benefits.
- **Plan for the Present and Future**: While focusing on today's needs, develop solutions that address future demographic, economic, travel, and community design needs. Align with the city's Master Plans, including the updated Comprehensive Plan, as well as the city's and DMC's sustainability goals.
- **Cultivate Partnerships**: Be open to collaboration and public and private partnerships to achieve desired outcomes.

5.2 Overall Parking and Access Management Strategies

The following section provides a summary listing of parking and access management recommendations for the City of Rochester's Transit and Parking program to consider in the short to mid-term timeframe.

Summary of Recommended Parking Strategies

1. Adopt a broader mobility management program development model centered around the concept of finding the most efficient strategy for moving people, not vehicles, in and out of the downtown.

    - Utilize a strategic approach like that reflected by the Boulder Access Management and Parking Strategy (AMPS) program as a basis for developing a broader mobility management program development model
    - Develop a set of parking and TDM performance metrics and track data on an on-going basis
    - Expand the transit and parking program's scope by incorporating recommended TDM strategies into the portfolio of services provided

2. Incorporate parking as a key element of a community-based economic development policy

3. Adopt recommended parking rate strategies and continue to evaluate demand-based parking pricing strategies in the future as a key element to support achievement of modal shift goals (See parking rate section of this report).

4. Leverage the investment in the Rochester specific "Park+" parking demand model as an on-going parking planning tool. The Park+ modeling tool provides City staff a systematic approach to keep parking inventories up to date as changes occur. Periodic demand surveys can also be conducted to keep the model current. A primary use of the model should be to assess the parking/access needs of new/proposed development project. The model can also be a tool for on-going modal split monitoring.

5. Plan to expand the current residential parking permit program

6. Invest in new parking technology

    a. The following is a list of recommended new parking technology options for the next 5-year period.

        i. New facility count system technologies to improve facility management data and push out parking availability information to dynamic messaging signage and mobility apps

1. For both City-owned ramps as well as remaining surface parking lots and potentially park and ride locations, it is recommended that a simple and cost effective new product be evaluated. The new system is known as "Parking Logix".

ii. Digital "Pay-by Space" parking meters with credit card acceptance technology is already being piloted in approximately 360 on-street spaces in the downtown.

iii. The trend in the industry seems to be moving towards a "Pay-by-License Plate" methodology. This trend has several advantages (less signage, integration of mobile apps, synergy with mobile license plate enforcement technologies, etc.) We encourage the City to carefully evaluate this methodology as it continues to plan for both on-and off-street parking meter system upgrades in the future.

1. Wireless and hosted license plate recognition parking enforcement systems can also be used for periodic data collection and special event parking demand monitoring.

iv. Adding credit card in/out capabilities in all City Ramps

v. Development of mobile apps for parking payment and information

vi. Continued implementation of automatic vehicle location (AVL) technology on all City busses in conjunction with the development of a Transit App.

7. Consider code regulations that shift away from "parking requirements" in favor of a more flexible and mobility oriented approach that utilizes "access requirements" as the preferred methodology

8. Apply parking garage design guidelines and incorporate adaptive reuse strategies into new garage designs going forward

9. Enhance the customer parking experience

10. Develop strategies to maximize the use of existing parking resources (both public and private), as well as aggressively promoting shared parking and demand management strategies

11. As new transit options evolve in the downtown area, adopt recommended "station area design principles" to promote: land-use and development policy, a wider range of mobility management strategies, and support quality urban design to enhance the community identity of station areas and to make them attractive, safe, and convenient places

12. Expand parking and TMA program branding, marketing, and community engagement strategies

13. Focus on curbside space management – this includes policy development for use of curbside space in the downtown core and potential parking districts

14. Development of a parking and access management financial plan document

15. Achieve parking program accreditation through the International Parking Institute

5.3 Summary of Transportation Demand Management Strategies by Initiative

TDM strategy recommendations have a primary goal of supporting the DMC objectives, including more employment, economic growth, activity and livability. Accommodating more people within the compact DMC geography will require a suite of strategies, including modifying travel behavior. Recommended TDM strategies have been divided into the following categories:

- Parking policies
- Small-scale infrastructure improvements
- Active transportation programs
- Bus programs
- Shared mobility
- Education
- Developer-focused policies

The success of the recommended programs, incentives, and infrastructure improvements will be dependent on the implementation of a strong TDM delivery structure and associated educational efforts. Detailed information and actions are included in the full-length Parking and TMA Study report.

TMA Program Launch and Next Steps

Stakeholder engagement and program options resulted in the determination to develop a TMA as a vehicle to execute TDM strategies. Launching the TMA, and developing and maintaining support for the organization will be key in delivering some of the TDM strategies recommended in this report. The following strategies will need to be implemented to assure the broader delivery of TDM services to the community.

- Strategy: Develop Work Plan and Start Up Materials for DMC Focused TDM Organization
- Strategy: Hire a TDM Coordinator at the City
- Strategy: Study the need for a "retail outlet" for TDM services
- Strategy: Develop TDM Evaluation Plan

5.4 Funding Considerations for Future Parking and Mobility Hub Investments

Given the large amount of new parking development needed to satisfy future development and employee growth projections and the proposed strategy to locate much of the commuter parking outside the "portal capacity" boundaries, combined with the need to develop and fund the new TMA and associated TDM strategies, new financial options and funding strategies may be required in the future.

Working collaboratively with major stakeholders to identify resources, strategies and funding models should be priority. Some potential strategies to consider include:

#1 – Dedicate all parking system revenues to fund future parking infrastructure development (after set asides for parking operations, maintenance and maintenance reserves)

Given that the current parking system is generating positive cashflow, excess parking revenues could be dedicated to future parking and mobility management program infrastructure investments after set asides for parking operations, maintenance and maintenance reserves.

#2 – Parking Asset Divestiture to Create Capital for New Parking Asset Development

Having successfully developed several public parking garages which have now had some or most of their debt retired, divestiture of these facilities could generate funds for new capital investments. The City could sell select parking assets to interested property owners or investment firms then reinvest the proceeds to continue strategic parking garage and mobility system development that has the potential to advance the DMC transportation infrastructure plan and stimulate new community and economic development activity.

#3 – Evaluate parking asset privatization/monetization as a potential downtown development or transit system funding strategy

The option to leverage parking facilities through a "monetization" strategy involving a long-term leasing of the City's debt-free facilities in exchange for an upfront payment, is an option being used on a limited basis across the US. The most famous (or infamous) example was the monetization of the Chicago parking system. This deal was largely criticized for several reasons. A more successful use of this approach was implemented at the Ohio State University campus in 2012.

#4 –Parking Tax

Many communities across the country have parking taxes. In some communities, the tax is applied on a per stall basis and in others it is essentially a sales tax added to the value of any parking transaction. Parking taxes are typically used to support larger transportation infrastructure investments. An excellent summary of parking taxes with examples from various communities can be found at http://www.vtpi.org/parking_tax.pdf.

Potentially all private parking garages and lots could be taxed with the money going toward public garage construction or TDM initiatives. To incentivize participation in TDM initiatives large businesses that actively participate in Transportation Demand Management programs could potentially earn credits (rebates) on their taxes as a tool to encourage participation.

#5 – Create a Transportation District Management Model

This alternative would involve the creation of some form of Special Improvement District focused on Transportation Infrastructure similar in structure to Property-Based Improvement Districts (PBIDs/SIDs/LIDs, CDCs).

Property-Based Improvement Districts (PBIDs) – Sometimes called Special Improvement Districts or Local Improvement Districts.

- A PBID is a quasi-governmental entity utilized to foster the growth of commercial business districts. As a financing mechanism, PBIDs are used to provide revenue for a variety of local improvements and services that enhance, not replace, existing municipal services. The PBID is self-imposed and self-governed and must be supported by private sector businesses and property owners to be established. There are currently 200+ PBIDs across California and more than 1,500 across the United States. In California, PBIDs are created pursuant to the "Property and Business Improvement District Law of 1994" as amended. The number of PBIDs in existence across California, the US, and the world, indicate their effectiveness and importance to the health of commercial business districts. Once established, PBIDs have a 95%+ renewal rate. PBIDs have a track record of success for reasons including:

    1. They are flexible in what they can pay for and do. Unlike some special district funding tools that can only pay, for example, for maintenance or infrastructure, PBIDs can fund a wide range of services as well as subsidize management, staff and operational. Additionally, different levels of services within a PBID can be delivered by creating "geographic benefit zones." This allows one overarching district to provide different levels of service in a coordinated way for a larger area.

    2. They are a reliable source of revenue that can leverage other resources. Once established, PBIDs provide a guaranteed revenue stream each year, allowing for future planning and the ability to utilize dependable funds to leverage loans, grants, etc.

    3. The costs of a PBID relate directly to its benefits, making it inherently fair. Assessments are based on characteristics of the properties and are devised to align with the services being delivered. The PBID law requires that the assessment to any individual property be tied directly to the benefits being received, and that a return on investment be demonstrated. Additionally, participation isn't just limited to commercial property owners – all classes of property within a PBID must participate, including commercial, government, residential, non-profits and mixed-use.

Community Development Corporation (CDC)

CDC's are "not-for-profit" entities that allow multiple investors to participate in both the physical and economic development of an area. Because they are stand-alone non-profits created for a community-serving purpose that acquire resources from a broad range of sources, they are highly flexible in how they are used. Their varied benefits include:

- Their 501c3 status. Having 501c3 status means that revenue can be brought in from a wide variety of sources. The public can easily contribute funds to a 501c3, and grant dollars are easier to access. Additionally, private sector donations (either from investors or community entities like banks) are easier to acquire as the contribution brings with it a tax deduction for the contributor.
- They are community-based. They bring together the public and private sectors to achieve common-goals that each could not achieve acting alone.
- They leverage a diversity of funds. General funds, grants, fees, private investment, banks, donations, etc. can all be leveraged for the same purpose.
- They are extremely flexible. They are non-governmental and therefore can fund diverse projects. There are very few limitations on what they can do. A CDC is a great tool for collecting revenues from a variety of sources. A CDC can also be used as a way to bring together funding dedicated to a specific area and collectively manage them for a unified purpose. The CDC is a potential tool to help link a PBID, IFD and Parking District – and leverage these dollars – for downtown Rochester.
- The CDC is another strong funding collection tool that can be helpful in tackling tough-to-address development challenges, can spur economic development, and can unite the public and private sectors.

Local Improvement Districts (LIDs)

In this mechanism, you would determine what properties would benefit by the construction of a garage and assess the cost to those who are benefitted. The City could subsidize the project to some level (such as 30-50-60 percent), with the balance being paid by the benefitted properties. Use of a tool such as this is a way to close the gap between the available public monies and the cost supported by fees. This approach could leverage limited public money to ultimately develop sufficient parking as the property owners contribute money for needed parking. An option that can be considered is to condo the facility with each floor being a condo unit, assessing certain private floors to the private property owners along with a share of the common area land costs while having other floors as public parking. The pooling of resources through an LID has the potential to stretch public dollars a lot further Pooled resources will go a lot further.

#6 - Create a Parking Urban Renewal District (URD)

The creation of a new URD would need to be of sufficient size to provide space for private (i.e. taxable) development to produce revenue allocation proceeds (TIF) to pay off construction costs. How much goes to each type of public investment (parking, streets, utilities etc.) would be a policy discussion by the City Council. Sufficient amenities would be required to attract the private

investment into the new district so that TIF would be generated to pay for parking structures. While the concept has merit, it would need to be tailored to a specific development proposal rather than being a speculative action.

Other options should be explored, including grant opportunities.

Chapter 6 Additional Resources

6.1 Parking and Economic Development - Policy Considerations

Parking as an Economic Development Incentive – General Guidelines

Parking can be a very powerful development incentive but must be applied in a fair and consistent manner that advances the larger community strategic goals. The following issues are examples of the type of recommended criteria to be considered as part of the assessment for either committing a significant number of existing parking resources or the development of future parking assets as an element of a development partnership.

Special attention should be focused on the degree to which the proposed development projects are in alignment with the adopted DMC development and transportation vision as well as community economic development goals.

When evaluating whether the City will consider an investment in parking to encourage or incentivize a new development project, the following standard set of questions should be considered:

1. Does the proposed development contribute to economic health of the downtown/community and is it consistent with the DMC Guiding Principles? What are the envisioned contributions?

2. Does the proposed development project include prioritized or highly valued development goals or program elements supported by the City of Rochester and the DMC vision?

3. Are the proposed land-uses or combination of land-uses associated with this project appropriate the specific area?

4. Is the proposed development project in alignment with the Transportation Principles (Section 7.1.2) and Infrastructure Planning Principles (Section 8.1.2) of the DMC Development Plan and/or the Downtown Master Plan?

5. Does the proposed development project incorporate special elements valued by the City, DMC, Mayo Clinic and other community groups/plans?

6. Has the City/County Planning Department reviewed and endorsed the proposed development plan for consistency with the City's Comprehensive Plan?

7. Does the proposed development project create any unusual or unacceptable parking or traffic impacts (such as "portal capacity" issues) at the gateways into the District or high levels of traffic congestion?

8. Is the developer willing to create new parking assets in accordance with City adopted parking structure design guidelines to ensure compliance with downtown development standards and parking structure design best practices?

9. Has the initial economic development impact of the project been estimated? What is the anticipated project impact in the following areas?

    a. New jobs for downtown?

    b. Jobs retained in downtown?

    c. Increase in property taxes/TIF Contributions?

    d. Estimated increase in sales tax revenue?

    e. Stimulation of additional development?

    f. Stimulation of additional support jobs?

    g. Support of existing retail, restaurant and other existing service providers?

10. Is participation in this development project appropriate and consistent with the Downtown Master Plan or the DMC Plan?.

Aligning Parking Project Development with City Planning Resources – General Guidelines

Beyond the parking focus of the guidelines below, promotion of shared parking, shared mobility strategies and active transportation elements are critical to the development of multi-modal transportation vision for downtown Rochester.

Policy Considerations

Beyond incentivizing quality developments that support the development vision of downtown, the development of some amount of public parking with the new development should be designed to provide additional public parking to support anticipated adaptive reuse and in-fill projects that are likely to occur in the immediate area of the new development.

Shared Parking Assets:

For development projects that are complementary to the downtown vision, provide positive contributions to community and economic development objectives. The joint development of shared parking assets provides the following benefits:

- This approach reduces development costs for both the developer and the City.

- This approach encourages the use of shared parking and reduces the overall amount of parking required in the downtown.

Ideally, the City would manage the jointly developed parking facility ensuring consistent, high quality parking management and promoting use of parking access and revenue control systems that the community is already familiar with (improving ease of use).

The jointly developed parking facility would be designed in accordance with City developed parking design guidelines to ensure high quality design standards reflecting industry best practices. (See design guidelines provided as part of this study).

By providing a supply of public parking in conjunction with the new development (to support additional in-fill development and adaptive reuse of other adjacent properties) this approach will ultimately provide a better distributed public parking supply for hourly parkers and retail support throughout the downtown.

Stand Alone Parking:

Development of a policy on when a stand-alone public parking project may be appropriate such as to help promote infill and adaptive re-use of other properties may be needed. Preliminary policy objective might include:

1. Public parking is an option to facilitate adaptive reuse of an identified significant historic structure to facilitate preservation, or

2. Public parking will be considered as an alternative to facilitate infill on small or irregular shaped lots where it can be demonstrated that efficient on-site parking provision is not feasible, or

3. Leveraging an investment in public parking as an incentive to attract private development in a blighted or underperforming area

Parking Management Framework

To promote the effective management of existing and future public parking resources, a consolidated parking management function within the City organization that is coordinated with shared mobility services such as public transit and transportation demand management services should continue to be strongly supported. The parking management program will be a key partner for creating 'balanced and sustainable community access strategy". To facilitate this, the City parking function will need to be part of a more holistic approach to overall downtown access, developing policies and practices that support a more multi-modal approach.

Integration of good urban design principles relative to parking facility design should be prioritized to better integrate parking infrastructure into the urban fabric and to contribute to a compact, walkable and vibrant downtown.

New Program Initiatives and Strategic Direction

The City, Mayo Clinic, and the DMC are already moving in the proper strategic direction. The City already has in place the foundation for a well-managed and "vertically integrated" parking program (consolidated off-street parking management with on-street resource management and parking enforcement). In fact, it should be emphasized that the City of Rochester already surpasses most communities in this regard as it not only has an existing "vertically integrated" parking program, but one that also is integrated with the community transit agency management. This is a somewhat unique and incredibly valuable arrangement; it is also a solid foundation upon which an enhanced and more comprehensive "access management" program can be built for the future.

To help advance the Rochester Transit and Parking program to a higher level, the following initiatives are recommended:

- Updating parking and mobility planning information and adding new planning tools/ capabilities (parking demand model, parking policy refinement, multi-modal/shared mobility/TDM program development etc.).
- Identifying and addressing specific parking issues such as:
  - On-street time limits
  - Better aligning on-street and off-street pricing and policies
  - Assessment of city employee parking
  - Maximizing utilization of under-utilized private parking resources
  - Evaluating a "district approach" to parking development/management
  - Developing strategies to encourage shared parking

- Assessing investments in new on-street technologies that offer enhanced customer payment options and greater convenience.
- Promoting a broader focus on sustainable community access strategies by creating a more balanced combination of parking, transportation and shared mobility options, etc.

Development of an overall parking strategy/set of policies to support community and economic development.

Recommended Parking Policy

The City should continue to view parking as important civic infrastructure and carefully consider parking as one of several potential incentive options related to attracting new community investment. To support this, the City is encouraged to consider adopting eight keystone parking policies:

1. Maintain Ownership of a Portion of Parking Assets & Grow the System

2. Set an Expectation of a 5 to 1 Return on Parking Investments
3. Strongly Support the Concept of "Shared Parking"
4. Leverage Parking Investment to Support New Development Opportunities
5. Support a Consolidated Parking Management Organization to Promote Effective and Customer Friendly Parking Management
6. Develop a robust parking planning function
7. Create a Balanced and Sustainable Community Access Strategy
8. Promote a "Park Once – Pedestrians First" Approach for Downtown Rochester and integrate Good Urban Design Principles Relative to Parking Facility Design

6.2 Parking Rate Study

In 2017 Walker Consultants was engaged by the City to conduct a parking rate study and identified recommendations for the City of Rochester's Parking Enterprise Fund ("PEF") for a 5-year projection period (2018 – 2022). Key takeaways from the study include:

✓ In general, the City's public parking rates are slightly lower than private parking facilities. Private monthly parking rates vary, but in general are near the upper limits of the City's public rate structure.

- Guiding principles and goals set forth by the City for the parking rate analysis are to achieve the following:
  - Simplify the current parking rate structure;
  - Provide sufficient revenue to cover annual operating expenses;
  - Allow the City to meet future parking related debt service obligations;
  - Fund future financial reserve requirements; and
  - Support smart parking management objectives, and the Destination Medical Center master plan.
- City parking system changes that will occur between 2018-2022 include:
  - Ramp 6 (640 spaces with 90 allocated to a hotel) will open in August 2018, replacing the Center Street ramp (393 spaces); planned for demolition in 2019 (1st quarter).
  - Civic Center North surface lot (200 spaces) will close in the 3rd quarter of 2018 to accommodate the construction of Ramp 7 (1,200-space parking structure); planned to open mid-year 2020.
  - Zumbro Market Lot (65 spaces) will close in the 4th quarter 2018.

  - Second Street Ramp (432 spaces) will be demolished in 2020 (4th quarter).
  - Procure $30,000,000 in general obligation bonds in 2018; attributed to Ramp 6 construction.
  - Procure $7,000,000 in general obligation bonds in 2019; attributed to new parking ramp construction.

- Since many parkers currently park free of charge, this represents a significant source of potential new revenue that can be generated for the parking enterprise fund (PEF). To assess the revenue associated with charging a fee to park after 5:00 p.m., on weekends, and for events; Walker developed an Alternate Case model to assess the value of this potential added source of revenue.
- Walker recommends increasing transient rates by 5 percent in 2020, and again by 5 percent in 2022.
- The fees charged for contract (monthly) parking in the City ramps and lots consistently undervalues the product offered to the public. Industry standard finds the cost for daytime contract parking is typically discounted to about 80 percent of the cost to park for twenty (20) days monthly, and remit payment for the all-day rate (10-hours).
- The City has recommended contract parking rate increases that reflect about 80 percent of the fees charged to park all day in the ramps and lots by 2022 (e.g. $10 all day x 20 days = $200; discounted by 20 percent = $160 monthly rate).
- Moreover, the City desires to implement the array of discounts for the other contract rate categories available at the City ramps.
- Altering contract parking prices to increase rates and reduce the gap between contract and all-day parking, should shift demand away from monthly parking and support encouraging other options for downtown travel.

  Due to planned future development in Downtown, the number of on-street meters will be reduced by 5 percent annually in years 2018 through 2022, resulting in a negative impact on revenue. Currently, 1,323 ± on-street spaces are metered, and the metered flat lots contain 206 ± spaces.

- To accommodate the on and off-street meter rates proposed by Walker, pay-by-phone, and the addition of multi-space meters that accept payment via credit card, must be installed in the future. Walker's meter rate recommendations are shown in the following Table.

  Due to needed technology advancements with metered parking, Walker suggests no increase in 2018. In subsequent years, it's recommend to increase meter rates in 2019, and again in 2022.

  - Walker recommends implementing a revised rate structure for the various citation types governed by the City code.
  - In total, residential permits account for less than one-half percent (.005 percent) of the total annual revenue generated for the PEF. Walker recommends increasing the cost of residential and business permits in 2018, and again in 2020.

- Assuming the proposed rate increases recommended by Walker are implemented by the City, the projected net income derived annually for the PEF will increase significantly over the next five-years. The increase in net income projected in Walker' Base Case is primarily attributed to the following:
  - Proposed rate increases in the cost of contract and transient parking (+ $786,000 - 2018);
  - Increases in the cost to park at an on- or off-street meter (+ $472,000 - 2018).
- Walker's Alternate Case projections mirror those used to develop the Base Case, except for implementing a charge for parking after 5:00 p.m., on weekends and for events (valued at $400,000 annually).
- To accommodate the on- and off-street meter rates proposed by Walker, pay-by-phone, and/or the addition of multi-space meter technology that accepts payment via credit card, must be implemented in the future.

6.3 Full Report and Appendices: Resources for Technical, Policy and Program Administrators

The full Parking and TMA Study report includes more detailed technical and program assessment data, background information, policy discussion, and comprehensive resources and reference material that may be most useful to technical professionals, and policy and program stewards. Professionals who may be responsible for developing or administering policies and programs related to the DMC infrastructure strategies will find the full report and appendix documents of value in guiding priorities, decisions and investments. The appendices, as listed in the full report and outlined below, emphasize the extensive resources available.

1. Appendix 1: J8618-8622_RPT_DMC Parking -TMA Current Program Assessment - Report Draft 12-20-2016 ("20 Characteristics Assessment")
2. Appendix 2: J8618-8622_RPT_DMC_Parking Management and Design Best Practices-Tool Box 12-20-2016
3. Appendix 3: J8618-8622_RPT_DMC Parking - Peer City and Best Practices Research 12-20-2016
4. Appendix 4: J8618-8622_RPT_Parking and Economic Development Policy 12-20-2016
   a. J8618-8622_RPT_Appendix_A_Village Green Parking Agreement FINAL 1007
   b. J8618-8622_RPT_Appendix_B_Sample Business Scorecard – DMC
   c. J8618-8622_RPT_Appendix_C_TPA-CA~1
   d. Appendix 4-d. - Ashley Mews Development Agreement

e. Appendix 4-e. - Ashley Mews Parking Agreement 0600

f. Appendix 4-f. - Ashley Mews PUD 1099

5. Appendix 5: J8618-8622_RPT_COR Parking Design Guidelines_2016 Final Draft_12-20-2016
6. Appendix 6: J8618-8622_RPT_COR Parking Development Scenarios 12-20-2016
7. Appendix 7: J8618-8622_RPT_COR Employee Parking & Commute Option Programs and Strategies to Maximizing Existing Parking Resources
8. Appendix 8: J8618-8622_RPT_DMC Parking -TMA "Assessing an Uncertain Transportation Future - DMC 2017"
9. Appendix 9: J8618-8622_RPT_Parking System - Financial Plan Template 12-20-2016
10. Appendix 10: Boulder AMPS Project Summary
11. Appendix 11a.: J8618-8622_RPT_Shared Use Mobility Overview 12-20-2016

    Appendix 11b.: J8618-8622_RPT_Shared Use Mobility Overview 12-20-2016
12. Appendix 12: J8618-8622_RPT_DMC Parking -TMA Parking Sites - Initial Site Assessments 05-04-2017
13. Appendix 13: "White Paper - Residential Parking Permit Programs 2017"
14. Appendix 14: Mobility Management Program – Parking/TMA Strategic Communications Plan
15. Appendix 15: "Releasing the Parking Brake by Engaging the Customer"
16. Appendix 16: Parking Enforcement Program Audit Checklist
17. Appendix 17: J8618-8622_RPT_Recommended Parking and TDM Program Benchmarks - DMC
18. Appendix 18: IPI Accredited Parking Organization – Manual and Criteria Matrix
19. Appendix 19: IPI Emergency Prep Manual 2015
20. Appendix 20: Sample Crisis Communications Plan
21. Appendix 21: Annual Report Template and Sample Annual Report
22. Appendix 22: J8618-8622_RPT_Task 5_Aligning_Parking_Requirements_V3
23. Appendix 23: J8618-8622_RPT_Park+ Framework 12-20-2016
24. Appendix 24: "Rochester MN Access Over Parking 020617 and NN Zoning Code Update 11-28-2016".

25. Appendix 25: "Mobility Hubs Overview and Implementation Guide_092217"
26. Appendix 26. The Value of On-Street Parking - A Recommended Approach to Prioritizing Uses of On-street Public Right-of-way
27. Appendix 27. J8618-8622_RPT_Parking Requirements Reform Update - 12-6-2016
28. Appendix 28. J8618-8622_RPT_Task 6_Final TDM Plan_April 28 2017
29. Appendix 29 J8618-8622_RPT_Task7_DeveloperTDMRequirements_V1
30. Appendix 30 J8618-8622_RPT_Task 9_City TDM Pilot Program Plan
31. Appendix 31 J8618-8622_Task 10_TMA Work Plan
32. Appendix 32 J8618-8622_Task 11_TMA Evaluation Plan