



City of Rochester



Center City Circulator Study

Executive Summary

April 2011

Prepared by



INTRODUCTION

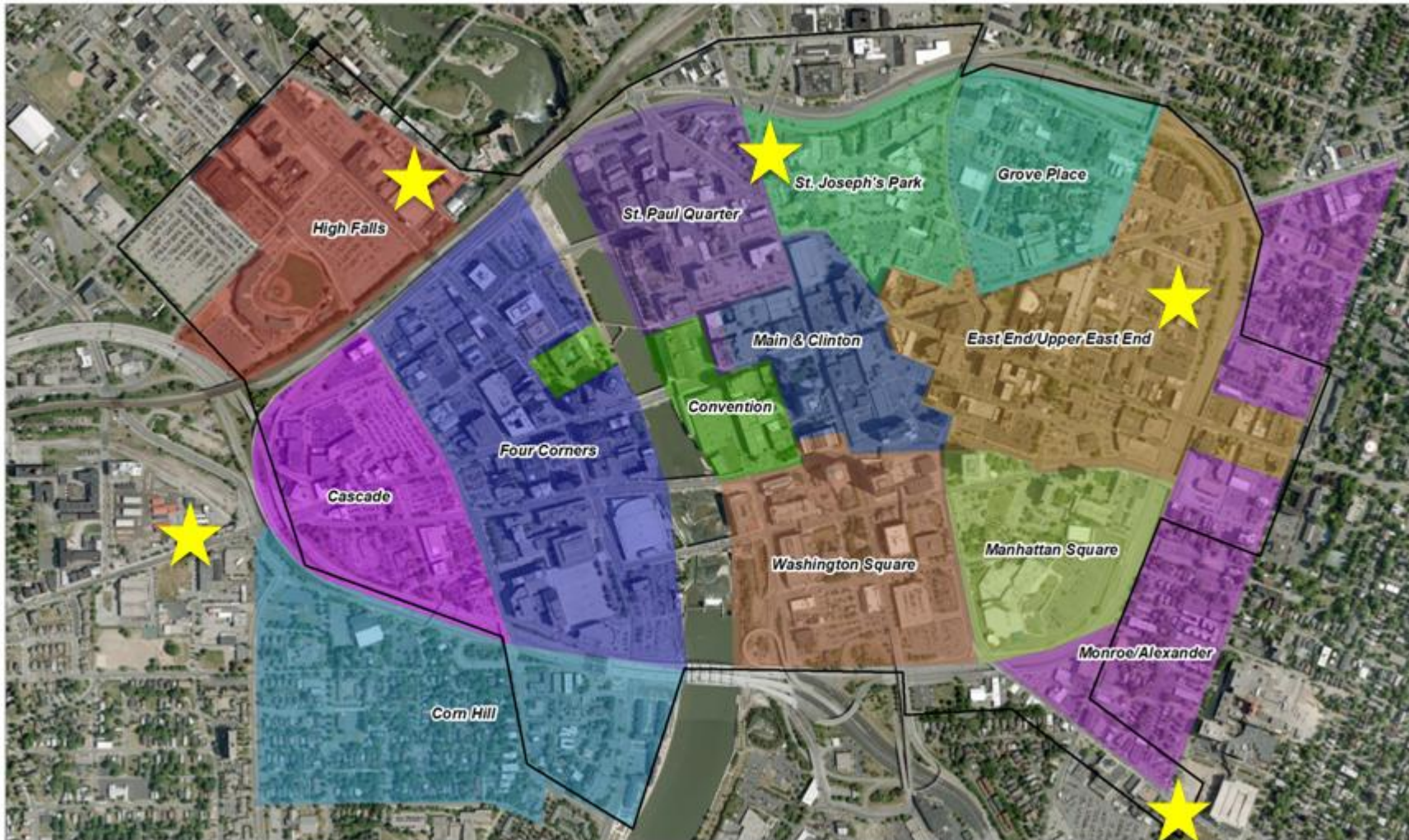
The City of Rochester completed a Comprehensive Downtown Parking Study in 2008 that concluded that, as a whole, there is adequate parking downtown; however, parking shortages do exist in certain downtown sub-areas. In addition, current and planned development will remove additional parking from already constrained downtown districts. Among the more promising and ambitious recommendations of the report is a transit “shuttle” to connect underutilized and new parking facilities within and adjacent to downtown with major downtown destinations. Such a transit “shuttle” or “circulator” would help to balance out the existing supply within and adjacent to the CBD, improving overall utilization and at the same time promoting economic development by reducing developer and tenant concerns about parking. The circulator would also support the City’s environmental sustainability initiative by maximizing the use of the existing parking supply and changing consumer behavior to reduce vehicle trips within downtown, thereby reducing traffic congestion and emissions. In addition to promoting local economic development, a circulator can also promote tourism and improve the attractiveness of the Downtown for conventions.

The Rochester Center City Circulator Study was initiated by the City to determine the elasticity of parking demand in Downtown Rochester through a Workforce Transportation Survey and to conduct a feasibility study for the establishment of a Center City Circulator transit service for daily commuters, tourists, and visitors. The study area, refer to following figure, includes the area bound by the Inner Loop, as well as the High Falls, East End, Corn Hill, and Monroe/Alexander Park districts, and the Central Avenue area near the Amtrak and Greyhound stations. For purposes of this study, several potential locations for future parking facilities were identified.

WORKFORCE TRANSPORTATION SURVEY

Through a web-based survey, downtown employees were asked to describe their most recent trip to downtown, including questions on number of vehicle occupants, travel time, departure and arrival times, schedule constraints (including employer policies), current parking location and amount of walking time, reasons for not carpooling or using transit, and barriers to using remote parking. These questions were followed with a stated preference experiment in which characteristics of the potential new transit shuttle – cost, vehicle type, and distance from downtown – were systematically varied in order to test a wide range of attribute levels.

Study Area



The survey was active March 8 through March 29, 2010 and a total of 4,213 survey records were collected. In general, the survey respondents are representative of the downtown employees and broader metropolitan area. Some of the key survey results include:

- The majority (95%) of survey respondents worked full-time and worked downtown Monday through Friday.
- Half of the respondents had a one-way commute between 5 and 15 miles, with 71% of respondents indicating a commute time of 29 minutes or less.
- Arrival and departure times are concentrated between 7 and 9am and 4 and 6 pm.
- Driving alone was the primary mode (87%) followed by carpool (5%) and transit (4%).
- 75% of survey respondents park in a public parking garage or lot, 21% park in an employer owned facility, and 3% park on-street.
- The majority (60%) of respondents pay the full cost of parking. Although 34% of respondents' employer paid for some or all of their parking costs, only 10% of employers offered benefits for alternative travel modes.
- The average daily parking cost was \$4.73 and the median daily cost was \$3.50. As a comparison the monthly rate in most city-owned garages (\$79) equates to a daily rate of \$3.95. Approximately 1/3 of respondents pay more than the city rate, just less than 1/3 pay the city rate and the remaining pay less than the city rate.
- More than 50% of the respondents indicated that nothing would encourage them to use an RTS bus or carpool. The most effective measures to encourage RTS bus use include a Guaranteed Ride Home, more frequent service and real-time information. A Guaranteed Ride Home and more/better information about finding carpoolers would encourage carpool use.

The stated preference choice section of the survey found that a reasonable share of downtown employees would use a new downtown parking circulator shuttle. However, the share of employees that would use the system is affected by parking price, shuttle frequency, shuttle ride times, and season of the year. Survey respondents indicated that cost and time were the most critical factors with a greater sensitivity to cost.

BEST PRACTICES

To inform the feasibility study, a review of best practices of urban transit circulator systems was conducted based on the following systems:

- Raleigh, NC – R Line Circulator
- Orlando, FL – Lymmo
- Little Rock, AR – River Trail
- Charlotte, NC – Gold Rush Trolley
- Chattanooga, TN – Downtown Electric Shuttle
- Grand Rapids, MI – DASH
- Des Moines, IA – D Line Shuttle
- Buffalo, NY Metro Rail
- West Palm Beach, FL – Downtown Trolley Services

The following are key features of these successful circulators:

- Systems are fare-free
- Frequent service: less than 10 min headways
- Minimum hours of operation: 7AM to 6 PM
- Unique vehicle: branding or type
- Operated by local transit authority
- Strong local champion
- Dedicated funding

CIRCULATOR FEASIBILITY

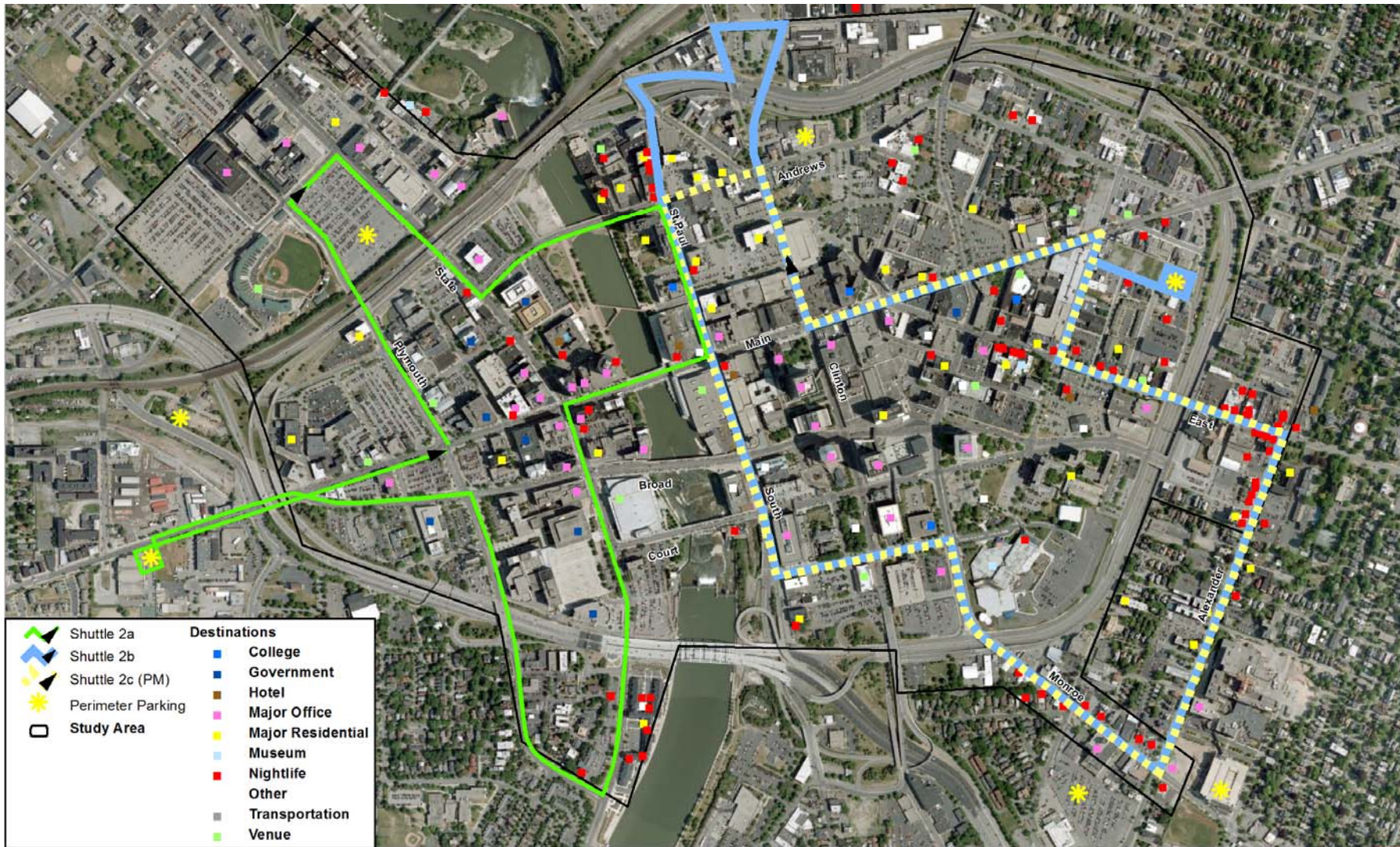
Early in the study, the following goals and characteristics were defined for the circulator service:

- Hi-frequency peak period parking service (6:30-9:30 AM; 3:30-6:30 PM)
- Moderate frequency CBD daytime service (9:30 AM - 3:30 PM)
- Evening entertainment/night life service (6:30 PM - 2:30 AM)
- Fare-free
- Full-sized, uniquely branded buses
- Alignment and service quality could lay groundwork for future fixed-guideway service

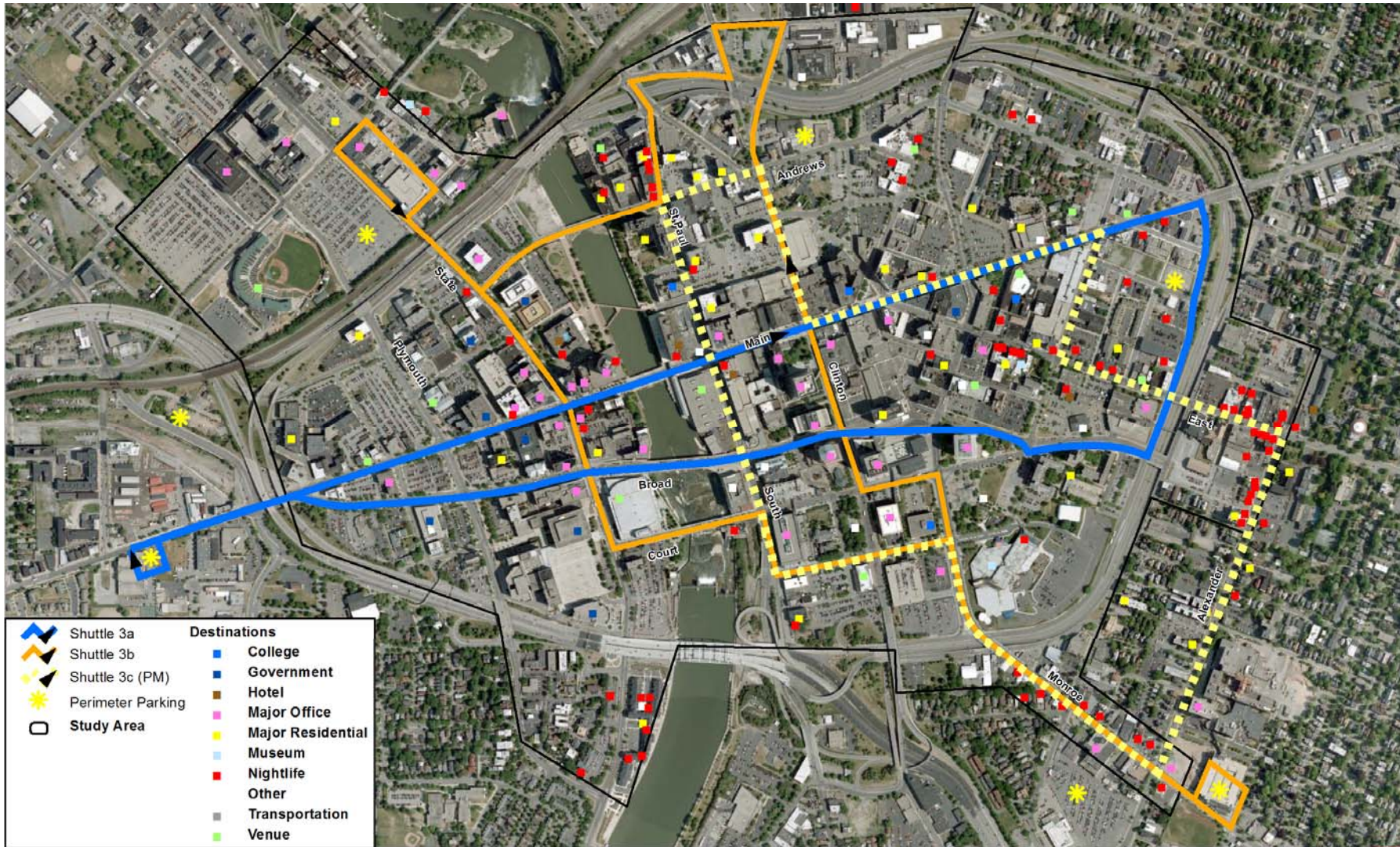
Initially a dozen alternatives were developed. These alternatives were then refined and combined into five circulator options which were evaluated based on the goals including route frequency, cost, service coverage and ease of use. While all five options are viable, overall, Circulator Options 2 and 3 (summarized in the following table and figures), generally provide the best balance of serving commuters and visitors. In general, the community response to the concept of a circulator service was well received. There appeared to be a slight preference towards Option 3 because it offers an east-west connection and reflects an often discussed alignment of a potential fixed guideway system. However, the lack of connection to Corn Hill was noted as a disadvantage of Option 3.

	Option 2	Option 3
Number of Buses/Routes	4/2	4/3
Daytime Headway	10-11 min	10-12 min
Evening Headway	17 min	17 min
Coverage	100%	94%
Commuter Service	Good	Excellent
Visitor Service	Good	Good
Approximate Operating Cost	\$2M	\$2M
Approximate Bus Cost	\$1.75-2.5M	\$1.75-2.5M

Circulator Option 2



Circulator Option 3



The circulator service could be directly operated by RTS/RGRTA or contracted to a private transportation provider. RTS operation would benefit from shared resources, such as facilities, maintenance tasks (e.g. clearing of snow), and personnel. RTS operation could also provide more flexibility in terms of number of buses and total capacity for special events or periodic fluctuations in demand. Purchased operation would provide the benefit of fixed, predictable costs and less financial risk. Most private-operator contracts include service standards and other provisions to guarantee high levels of service and customer satisfaction in a way not possible with public operators – though there is typically a price premium associated. If a private operator is selected to operate the service, assuming the federal dollars are available, it would likely be much more cost-effective to have the RGRTA own (and possibly maintain) the buses.

Operating costs for the circulator service could be funded through a number of sources including:

- Parking tax
- Business Improvement District (BID)
- City-funded
- Voluntary merchant contributions

As noted in the review of best practices, it is important to have a reliable and dedicated source of funding to ensure continuity and reliability of service.

While many in the community were highly positive about the concept of opening up remote parking for use by visitors and employees downtown, there were many questions about the location and size of this parking. While such details are beyond the scope of this study, it will be an important early step to identify the size and funding sources for such facilities. Also, it will be important to understand how this demand may be affected if one or more new garages were to be constructed within the CBD. Additionally, unless center-city parking rates are raised, the introduction of the circulator could result in a sizable decrease in parking revenue.

The following steps are recommended to progress the circulator service:

1. Select preferred alternative (Option 2 or 3)
2. Identify and progress development of new parking facilities
3. Establish metrics that would define a successful system
4. Estimate ridership of preferred system
5. Refine costs of RGRTA or private operation
6. Prepare funding plan
7. Select an operator

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is a collection of strategies to reduce vehicle trips and encourage alternative modes. Effective TDM can save both employers and employees money while reducing parking demand. The implementation of TDM measures alone or in conjunction with a circulator service will support the goal to make more parking available within the central business district.

The results of the Workforce Transportation Survey indicated that approximately 25% of downtown commuters would be willing to take public transit or carpool more frequently. An additional 14% indicated they would be willing to bike or walk more frequently. Therefore, an effective TDM program could substantially reduce parking demand.

One of the critical components to a successful TDM program is marketing and promotion. Promotion of alternative modes of transportation will be supported by the web-based Regional Commuter Choice Program. This program, to be implemented in spring 2011, will provide a ride-matching system along with functionality that enables individuals and organizations to estimate air pollution reductions and cost savings. It will also integrate bicycle routing and transit trip planning. This program addresses one of the top measures needed to promote carpool use.

The following is a list of recommended TDM measures for the City of Rochester.

- Financial Incentives
 - Transportation Allowance
 - Pre-tax Allocation of Transportation Expenses
- Transit Incentives
 - Transit Subsidy
 - On-site bus pass sales/distribution
 - Modifications to Routes and Stops
 - Provisions to Accommodate Bikes
- Carpool Incentives
 - Matching Services
 - Preferred Parking
 - Reduced Rates
 - Vanpools
- Bike/Walk Incentives
 - Bicycle Master Plan
 - Bicycle Storage
 - Rewards Program
- Back-up Programs
 - Guaranteed Ride Home
 - Occasional Parking Permits
- Car Sharing Programs
- Flexible Work Arrangements

Some of these TDM measures can be addressed by the City and others need to be implemented at the employer level. TDM programs can be implemented in a few different ways. The most successful programs are typically those provided collaboratively or by large employers: not only are there efficiencies of scale, but successful TDM is about having a wide range of options so that everyone has access to the programs that best suit their needs, something that's hard to accomplish when done piecemeal. At a minimum, the City should encourage all businesses to participate in voluntary TDM programs and promote available resources such as the Regional Commuter Choice Program and services through RGRTA/RTS. The City should also consider the establishment of a Transportation Management Association (TMA) for downtown or the requirement of TDM programs as part of large project review.