APPENDIX T

Comprehensive Downtown Parking Study

WALKER
PARKING CONSULTANTS

COMPREHENSIVE DOWNTOWN PARKING STUDY

ROCHESTER, NEW YORK

PREPARED FOR:
CITY OF ROCHESTER, NEW YORK

JANUARY 2008

WALKER PARKING CONSULTANTS

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Prepared for:
CITY OF ROCHESTER, NEW YORK

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Walker Parking Consultants has been retained to provide a professional parking study for the City of Rochester. This includes a review of the current parking supply, an evaluation of current and future parking demand, and provides an evaluation of alternatives to increase the future parking supply to meet any anticipated future parking space shortfalls and parking perceptions.

The goal of this study is to make recommendations for improvements to the current parking system by:

- Analyze current and future parking shortages or deficits
- Identifying solutions to areas where parking may be inadequate
- Recommending alternatives that may improve the overall perception of parking in Rochester, NY

The Walker Parking Consultants/C & S Engineering team conducted focus group meetings and interviews to engage stakeholders in discussing parking concerns, future expansion/growth plans, ways to meet the existing and future parking needs, and other parking and transportation related issues. Attendees included a cross-section of people representing different businesses, institutions, governmental agencies, and non-profit organizations. The common theme for most stakeholders is a general lack of parking, perceived/real safety issues, and the cost of parking downtown. The stakeholders in most focus groups indicated that sufficient parking is not available in downtown Rochester and many attendees indicated that there is shortage of short-term parking. Many attendees expressed concerns regarding panhandling and overall safety in the downtown area.

In addition to the focus group meetings, a survey questionnaire was conducted to determine parking preferences/habits, walking distances, mode choice, etc. of the individuals who park in downtown Rochester. The survey provided additional statistical data about downtown parking patrons, their recommendations and preferences, and their perceptions about parking in downtown Rochester. The following are the key survey results:

- 1,882 people completed the survey, 1,537 or 82 percent (82%) park in downtown Rochester as employees. Nine percent (9%), 176, come to Rochester to visit, shop, or attend cultural or entertainment events. Business owners in Rochester comprise just three percent (3%), 59, of parkers in Rochester, while just one percent (1%), 24, are downtown residents.
- Ninety-five percent (95%) of the population use a private vehicle as a primary mode of transportation
- Ninety-three percent (93%) of people who take a personal vehicle to work drive alone
- Seventy-seven percent (77%) of employees use public spaces, while twenty-one percent (21%) use private
- The cost of parking is a factor considered by seventy-two percent (72%) of respondents
- Cost, location, and security are three of the most important factors when considering parking

STUDY AREA PARKING SUPPLY

The study area was defined by fifteen subgroups which contain seventy combined city blocks located in the central business district of Rochester, New York. The study area is generally bordered by the Inner Loop; however, two sub areas were identified outside of the Inner Loop which includes the High Falls and Upper East End districts.

Parking Supply:

- 26,306 Total
- 1,637 On-Street
- 24,669 Off Street

The study area for the evening weekends is identified as the Saint Paul Quarter, East End and Upper East end districts as identified by the City of Rochester.

There are 26,306 spaces in the study area of which 1,637 are on-street, 24,669 are off-street. Of the 24,669 off-street spaces 16,245 are available to the public and 8,424 are private or restricted-use spaces.

STUDY AREA CURRENT PARKING OCCUPANCY

The observed peak parking occupancy for the study area is 15,394 vehicles utilizing 59% of the total parking supply. This occurred during the morning weekday count. The on-street spaces are occupied at approximately 57% for the daytime period. The off-street public parking occupies 51% of the supply. The off-street private parking occupies 63% of the supply during the peak morning hours.

Weekday Occupancy	
On-Street	57%
Off-Street Public	51%
Off-Street Private	63%

During weekend evening times, occupancy rates of on-street spaces rise significantly to 91%. The off-street public occupancy rates decrease significantly as compared to the weekday morning and afternoon occupancy with rates at 8%. Off-street private occupancy rates also decrease to 29%.

Weekend Evening Occupancy	
On-Street	91%
Off-Street Public	8%
Off-Street Private	29%

Occupancy rates of the off-street private and public system do not indicate a shortage of parking during the weekdays or weekend. However, the on-street parking system is identified to be near full with a utilization of 91% utilization during the weekend evening in the entertainment districts.

LOCALIZED PARKING DEFICIT RECOMMENDATIONS

Parking conditions will change as development occurs within the study area. Our analysis reviewed three growth scenarios and several future developments in the area as well as the impact they will have on added parking demand and changes to the parking supply. The study area as a whole continues to have an adequate parking supply, when the sum of all the blocks is totaled. However, some blocks may experience parking deficits or be at near capacity situations depending on the type of special event that may be occurring.

Though parking as a whole in Rochester is adequate, "hot spots" or parking shortages, are identified in specific districts, sub groups, and blocks. Those "hot spots" are identified below, as well as their associated recommend improvements. Areas in the study area not identified as hot spots are recommended to be improved using other parking alternatives described later in the report. Those parking alternatives generally don't require that additional parking supply be created.

Localized Parking Deficits

- Cascade District
- Renaissance Square
- Midtown

WEEKDAY

The Cascade district is identified as an area where current parking shortages are present. The current supply shortages stem from on-street and off-street public parking. Future private off-street parking inadequacy will occur for this district. The construction of additional on-street spaces is recommended if street geometrics are appropriate in locations where short term parking is used regularly. Example of such a location would be the County Office Building or City Hall where visitors generally have short visits. The construction of additional surface or structured parking is recommended for private and public parking. The largest private parking inadequacy is located around the Civic Center and the City School Central Office. Other current significant inadequacy was identified for off-street public parking west of the Strong Museum.

Future inadequacy has also been identified due to the Midtown Development. The demolition and re-building of that block will impact the parking in this area. Due to the tight development density in this area, additional structured parking should be constructed to account for the re-development of this area.

The re-development of Renaissance Square will also create an impact on parking. A shortage of off-street parking is been identified due to changes in the current land use. Additional surface or structured parking should be considered as well as sharing the available parking spaces in the surrounding blocks. The bus loading/unloading on Main Street as part of this development will also provide opportunity for additional on-street spaces in that area.

WEEKEND EVENING

Current and future on-street parking deficiencies in the entertainment districts are identified. Street geometrics do not suggest additional on-street parking is available to be built as a majority of the street system already allows for on-street parking. Furthermore, additional off-street parking is not recommended to be constructed. Parking patrons should be encouraged to use existing off-street parking rather than on-street parking to account for the high demand during the weekend evening. These strategies are described in the alternatives analysis later in the report.

ON-STREET RECOMMENDATIONS

1. Due to the high percentage of users utilizing on-street parking, increased and improved wayfinding (signage) is recommended to direct patrons to other parking options (parking lots and garages). Signage may even be targeted to specific end users (long-term parkers) to utilize off-street parking. Signage/wayfinding should be expanded to include pedestrian signs from the point of parking (garages and lots) to merchant/business locations.

2. No wholesale changes are recommended to the existing time limits for on-street parking. The goal of the on-street supply is to make short-term parking readily available. Patrons should be encouraged to utilize off-street parking.

3. Upgrading parking meters in the downtown core area to keep parking revenue generated in the downtown area, to be used for parking improvement/marketing projects downtown only.

4. Implementation of a Parking Ambassador program, emphasizing a hospitality approach to enforcement of parking regulations. (ticketing and enforcement will still occur) (Refer to Alternatives analysis for details)

5. Re-evaluate location of bus loading zones on Main Street, consider placement of bus loading zones on perimeter streets that are less traveled or a consolidated transfer facility. Consolidation or relocation of the bus line allows for additional on-street parking as well as the improved visibility of street level businesses.

6. Detailed engineering/traffic studies should be conducted on streets to determine if additional on-street parking can be gained where not already present as deemed appropriate.

OFF-STREET RECOMMENDATIONS

1. As the City grows and continues to develop its parking assets, an important step is to continue to seek means of efficiency. One way to identify sources of improved

efficiently is through an audit. Third party audits can identify areas of improvement financially and operationally.

2. Explore shared parking between different land uses for existing parking facilities. Private and public parking facilities should consider sharing existing supply in order to maximize use of available parking spaces. Educate planning officials and developers as the potential for shared parking and procedures for implementing it become available.

3. Explore shuttle program downtown to include regular routes between parking locations and business generators. This will help offset any parking deficit in isolated block areas.

4. Wherever possible, paint walls and ceilings in parking garages white to increase feel of passive safety and comfort for patrons.

5. Signage/wayfinding should be expanded to include pedestrian signs from the point of parking (garages and lots) to merchant/business locations.

6. Evaluate current lighting resources, and update to new fixtures that are more energy efficient. Cost of update is usually paid for by energy savings over a short period of time.

PARKING PRECEPTION RECOMMENDATIONS

1. Implement an overall public relations and marketing campaign for Parking Services. Coordination of this effort with existing city departments is encouraged. Parking should be promoted in various media outlets, coordinated with known special events.

2. Establish dedicated funds for Parking Services marketing efforts. Promote parking operations by disseminating facts about parking downtown (number of spaces available, low crime rates, etc.).

3. Develop a mission statement for Parking Services.

4. Evaluate parking rates, based on demand and location. Keep rates current with market influences.

5. Current parking operations office has inadequate waiting facilities for patrons. Expansion of waiting area or relocation of offices is recommended.

6. Improve current web site by incorporating intuitive commands. Incorporate the ability to search the web site by address, which will then give the user the closest parking available. Utilize mapping technology to have interactive maps, with clickable links to parking locations.

7. Incorporate more pictures on the web site that will help patrons orient themselves from parking destinations. Pictures would show what is currently visible from each direction of the parking facility. This will aid the patron in determining where they should turn to reach their destination.

8. Implementation of a Parking Ambassador program, emphasizing a hospitality approach to enforcement of parking regulations (ticketing and enforcement will still occur).

9. Incorporate advertising in parking decks on walls, in elevators and on tickets and gate arms, as a means of raising funds to pay for improvements to decks (i.e. painting).

10. Allow businesses to "sponsor" levels in the parking decks. This will aid the parking patron in remembering where they park in the structure, and give merchants much needed exposure.

11. Consider a "first hour free" parking program in the parking structures as a way to entice parking patrons to utilize the parking structures.

SECTION 1
INTRODUCTION

INTRODUCTION

The City of Rochester, New York, is currently evaluating the parking needs within the downtown central business district. The City has retained Walker Parking Consultants to conduct an analysis of the current and future parking supply and demand to determine the adequacy of the parking system.

The purpose of this comprehensive parking study is to provide clarity and direction in regards to the development and management of existing and future parking resources for the downtown area. This study identifies the current supply and demand and; analyzes the impact of future development. The study also provides strategies and alternatives for parking improvement for both your current parking system as well as your future parking system. These alternatives will be identified for both on and off street parking. Important questions that are addressed include:

- What are the current parking conditions in Rochester?
- How will future developments impact the parking system?
- What are the alternatives to alleviate both current and future parking problems?
- How does the City's master plan affect how these parking alternatives are implemented?

SCOPE OF SERVICES

In order to effectively address the entire project, we performed our study with using a four step approach:

- Task #1 – Survey and Focus Group Meetings
- Task #2 – Parking Analysis
- Task #3 – Strategies and Alternatives for Improvements
- Task #4 – Recommendations

Focus group meetings were held to identify important goals, objectives and concerns about parking in Rochester. Participants of those meetings included key stakeholders, City officials, and businesses in Rochester that are affected by parking on a daily basis. A survey was conducted to determine the satisfaction of parking users of the Study Area.

During this task we also reviewed additional background information such as previous studies and reports allowing us to gain a better understanding of the area.

A parking analysis was performed during a typical weekday and weekend evening. The analysis included a physical inventory of the current supply and occupancy of the system. Other parking geometrics and general observations of the parking system were reviewed during data collection. The inventory and occupancy counts were then analyzed to "paint" a picture of the current and projected future parking conditions in the Study Area.

Once the parking analysis was performed strategies and alternatives for improvement were identified both for the parking system as a whole and specific areas in the study area that were found to have "hot spots" or a parking problem.

STUDY METHODOLOGY

Walker Parking Consultants and C & S Engineering conducted a physical inventory of all parking spaces in the study area. The inventory was tabulated by block and categorized by on-street vs. off-street, public or private and surface lot or garage. Occupancy counts were taken in the study area, resulting in a tabulation of the physical number of vehicles found utilizing parking spaces located within the study area. Weekday counts were taken on June 21, 2007 with one count in the morning between 10:00 a.m. and 11:30 a.m., and one count in the afternoon between 2:00 p.m. and 3:30 p.m. A weekend evening count was performed on June 22, 2007 between 8:00 p.m. and 9:30 p.m. By comparing the supply with the observed occupancy of the parking facilities on a block-by-block basis, Walker Parking Consultants was able to determine the occupancy levels of each block in the study area and quantify specific demand for each block.

To calculate the projected future parking demand, Walker reviewed the planned future developments and growth rates provided by the Steering Committee and other stakeholders including the City. These future developments and growth rates were applied to the existing inventory to determine potential parking demand or surpluses. The basis of these parking demand ratios were also compared with Walker Parking Consultants' research and the Urban Land Institute's recommended demand ratios. Additions and subtractions to the supply and demand, considering both the block and development type, show how the City's parking adequacy will be impacted in the future.

DEFINITION OF TERMS

Several terms are used in this report that might be considered parking jargon and thus not readily understood by the reader. Definitions of these terms are presented below.

- *Inventory* – The total number of parking spaces counted during survey day observations within the study area.
- *Effective Supply* – The inventory adjusted by the optimum utilization factor.
- *Optimum Utilization Factor* – The occupancy rate at which a parking facility operates at peak efficiency. This factor allows patrons to spend less time looking for the last available spaces and allows for the dynamics of vehicles moving in and out of spaces. It also allows for spaces lost to poor or improper parking, snow removal, derelict vehicles, and spaces lost for repair.
- *Demand* – The number of spaces required to satisfy visitor, employee and resident needs on a given day.
- *Occupancy (Counts)* – The number of vehicles observed parked on a survey day.
- *Parking Adequacy* – The difference between parking supply and demand.
- *Demand Generator* – Any building, structure, business, or attraction that brings individuals into the study area, thereby increasing parking demand and occupancy.
- *Survey Day* – The day that the parking occupancy counts were conducted in the study area.

STUDY AREA

The study area is identified by fifteen sub groups and further by seventy combined city blocks generally located in the central business district of Rochester, New York. The study area is generally bordered by the Inner Loop; however, two sub areas were identified outside of the Inner Loop which includes the High Falls and Upper East End districts. Specific districts that were studied include:

- High Falls
- St. Paul Quarter
- Cascade District
- Washington Square
- East End
- Upper East End
- Grove Place

A smaller study area of three sub-groups, which include twenty one blocks, are identified for the weekend evening. The study area for the evening weekends is identified as the St. Paul Quarter, East End and Upper East end districts as identified by the City of Rochester.

Maps of the complete study areas are detailed in the following figures.

Figure 1: Study Area

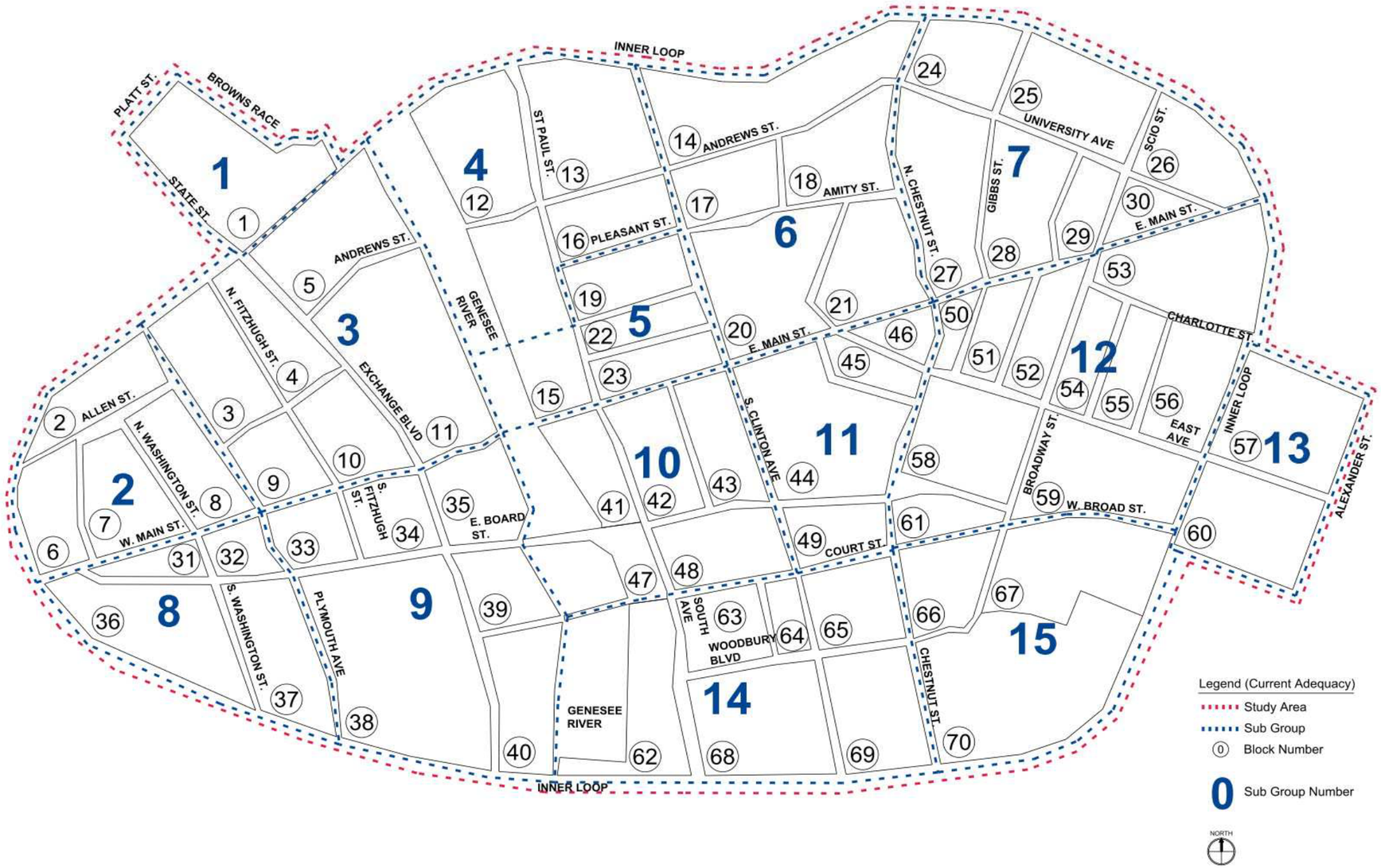
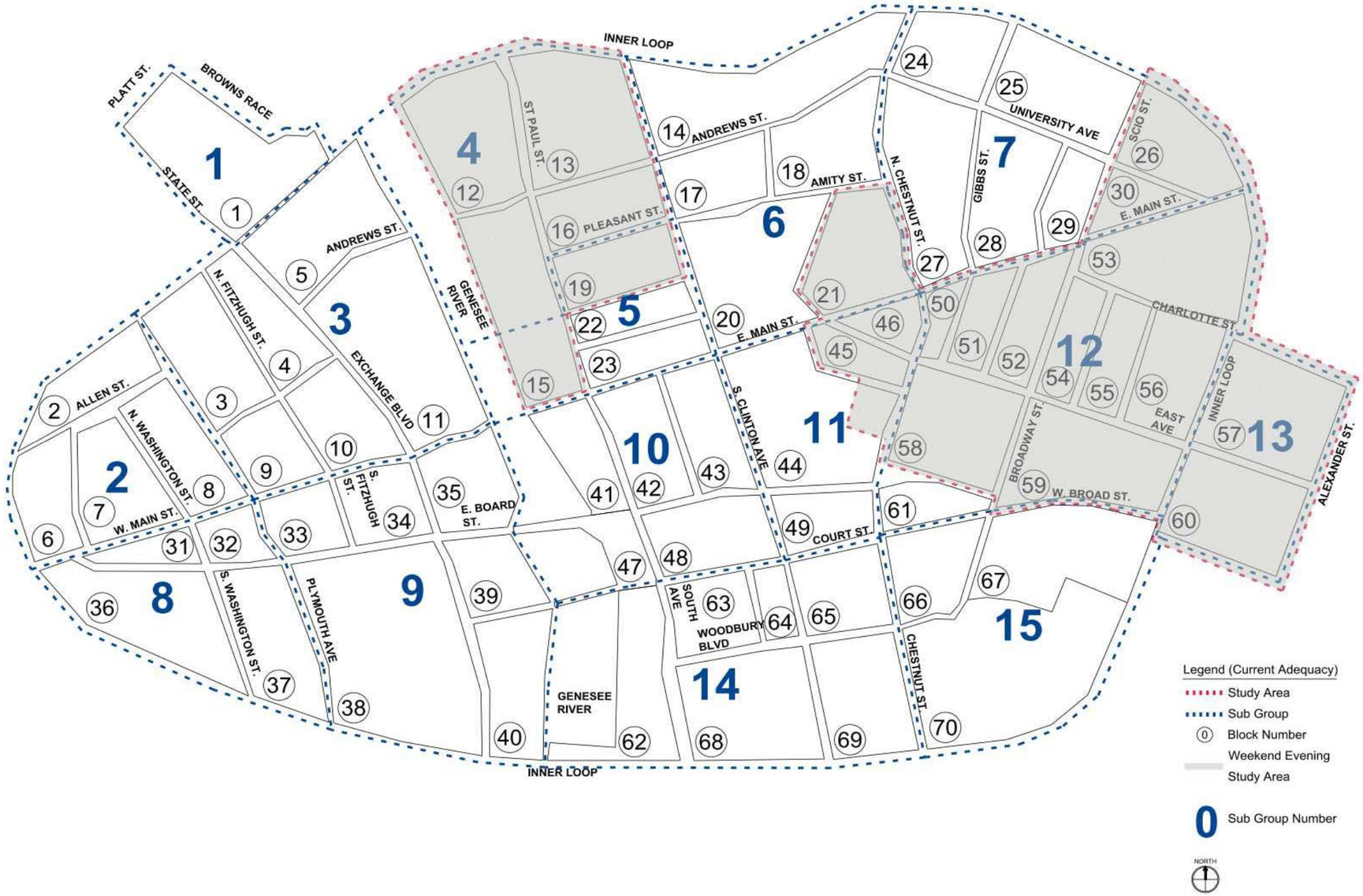


Figure 2: Weekend Study Area



SECTION 2
TASK #1 – FOCUS GROUP MEETINGS AND SURVEY

TASK #1- FOCUS GROUP MEETINGS AND SURVEY

The purpose of Task #1 is to identify and receive input regarding parking and transportation issues/concerns and to identify available parking/land use data for the downtown Rochester area. Because the businesses, institutions, social/cultural groups and non-profit organizations located in downtown Rochester are diverse in their missions, land use, size and location, this task was achieved by meeting separately with three focus groups. The main purpose of the focus group meetings and interviews are to engage stakeholders in discussing parking concerns, future expansion/growth plans, ways to meet the existing and future parking needs, and other parking and transportation related issues.

The other subtasks for Task #1 include development of a survey questionnaire to gather input from a cross-section of downtown Rochester parkers. The purpose of the survey questionnaire is to determine parking preferences/habits, walking distances, mode choice, etc. of the individuals who park in downtown Rochester. Another subtask was to collect available land use data necessary to support the study.

OVERVIEW

Three separate focus group meetings were conducted on May 16, 2007. The meetings involved the following groups:

- Large institutions and employers
- Property owners and developers
- Entertainment facilities

Attendees included a cross-section of people representing different businesses, institutions, governmental agencies, and non-profit organizations. These meetings were facilitated by the project consulting team of Walker Parking Consultants and C&S Engineers.

The focus group meetings were conducted in a relaxed and professional environment. The meeting attendees openly expressed their opinions/perceptions about parking in downtown Rochester. The consulting team recorded comments during the meeting. These comments are included in Appendix of this memorandum.

OUTCOME/CONCLUSIONS

PARKING

The common theme for most stakeholders is a general lack of parking, perceived/real safety issues, and the cost of parking downtown. The stakeholders in most focus groups indicated that sufficient parking is not available in downtown Rochester and many attendees indicated that there is shortage of short-term parking. Many attendees discussed concerns regarding panhandling and overall perceived safety in the downtown area.

Each focus group raised particular concerns and perceptions about parking and safety issues in the downtown area. While a wide range of issues were raised in each focus group, some of the common concerns and comments included:

The project team collectively reviewed the input provided by the members of focus group. The team focused on common themes that were important to all stakeholders. The common themes are as follows:

- Lack of convenient parking – Most stakeholders expressed an opinion that convenient parking is not available in the City of Rochester. They also shared their dissatisfaction about the lack of short-term parking. There is not enough turnover on on-street spaces as well.
- Perceived safety concerns – This was a common theme for all focus groups. They all indicated that there is a perceived safety issue especially as it relates to panhandling and break-ins in downtown Rochester. Lighting and landscape sometimes play a role in perceived safety, leading to many opting not to walk downtown if areas are dark and/or hidden by overgrown landscaping.
- Downtown Rochester is not easily accessible – Signage, when available in the area, is old and unclear. The inaccessibility has caused businesses to loose customers as well as potential employees. Most stakeholders indicated that a system for directing parkers to lots that are not full would be helpful.
- On-street parking system – Stakeholder opinion indicates that the existing parking is unfriendly as it relates to enforcement, parking meter hours, meter rates, etc. The stakeholders indicated that the existing on-street parking supply is the issue. Many stakeholders would like enforcement to be more consistent, and that restrictions on meters are not long enough for their needs, more short term parking is needed.
- Most stakeholders expect the City will develop parking solutions – Most stakeholders expect the City of Rochester to take the lead in developing permanent parking solutions.
- Traffic and vehicular access is an issue – The flow of traffic and the direction was indicated by stakeholders to be an issue in the downtown area.
- Availability of Free Shuttle – Stakeholders in the downtown area felt that free shuttles together with lower garage rates would encourage parking further away from destinations. For private institution shuttles, regulatory restrictions are required.
- Night time and weekend parking is an issue – Due to Crossroads garage closing after 10:00 pm and on weekends, as well as a second garage being closed for over a year, parking is perceived to be short during these times. Four Corners needs an increased parking supply.

SURVEY INTRODUCTION

The City recognizes that parking in Rochester's Central Business District (C.B.D.) is a very important issue, and that it is essential to improve the parking experience for downtown parking patrons. Thus, Walker Parking Consultants developed and conducted an internet survey to determine supply and demand characteristics in Rochester's C.B.D., such as parking preferences, walking distances, use of public transportation, mode choices, and parking habits. Walker contracted Zoomerang, an internet survey services firm (www.info.zoomerang.com), to administer the survey. 1,882 responses were received for the survey.

This survey is not intended to be a comprehensive study of parking on its own. Walker Parking Consultants has already completed field work and conducted focus group meetings from major users of parking downtown as part of the data collection process. This survey provides additional statistical data about downtown parking patrons, their recommendations and preferences, and their perceptions about parking in downtown Rochester. The following section summarizes the outcomes and conclusions of the survey.

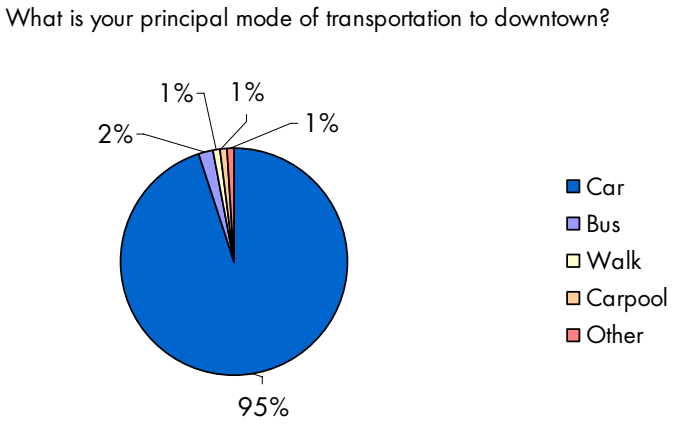
MODE OF TRAVEL

The primary mode of transportation by 95% of commuter's is by car, truck, van or SUV.

The private vehicle (car and truck/van/SUV) is the primary mode of transportation to Rochester. Based on the responses to the first question of the survey, ninety-five percent (95%) of the population use this mode of transportation. Only two percent (2%) of survey respondents use the Rochester bus system, while one percent (1%) walk. An additional one percent (1%) choose to carpool or vanpool. The various modes of transportation are illustrated in Figure 1 on the following page.

Additionally, ninety-three percent (93%) of people who take a personal vehicle to work drive alone. Figure 2 on the following page details average the number of people per vehicle, or vehicle occupancy.

Figure 3: Mode of Travel



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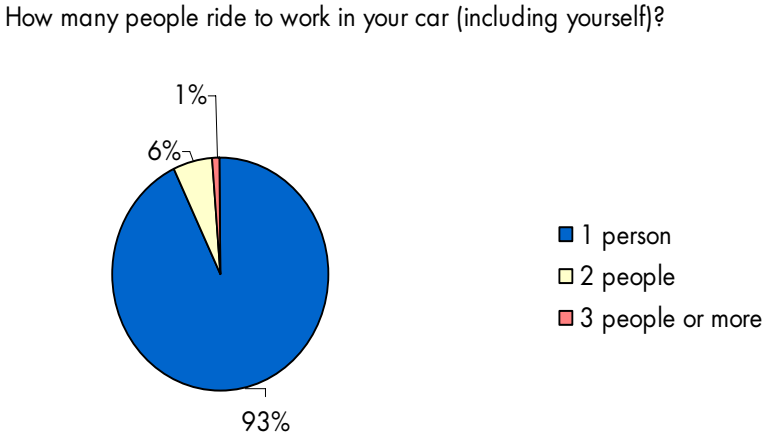
VEHICLE OCCUPANCY

Figure 4: Vehicle Occupancy



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As demonstrated above, most parkers in Rochester drive alone in private vehicles. Table 1 illustrates how parkers responded to alternative modes of traveling in Rochester.

Table 1: Alternate Modes of Travel

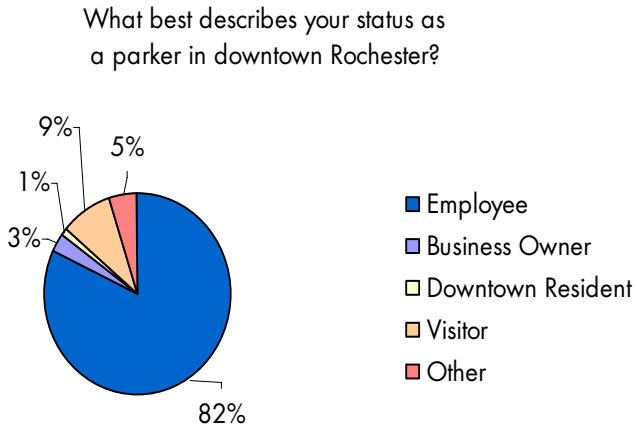
For each of the following ways that people travel to work, please indicate the ones you would be most likely to try.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	**Not likely to try**	**Somewhat likely**	**Likely to try**	**Do now**
Carpool	889	483	304	92
	50%	27%	17%	5%
Vanpool	1283	272	137	4
	76%	16%	8%	0%
Bus	1115	372	199	76
	63%	21%	11%	4%
Bicycle	1375	177	117	51
	80%	10%	7%	3%
Walk/Run	1472	118	66	61
	86%	7%	4%	4%
Telecommute	938	262	373	140
	55%	15%	22%	8%
Park-n-Ride	1089	417	204	36
	62%	24%	12%	2%

PARKING USER GROUP

Of the 1,882 people who completed the survey, 1,537 or 82 percent (82%) park in downtown Rochester as employees. Nine percent (9%), 176, come to Rochester to visit, shop, or attend cultural or entertainment events. Business owners in Rochester comprise just three percent (3%), 59, of parkers in Rochester, while just one percent (1%), 24, are downtown residents. Figure 3 illustrates the various user groups.

Figure 5: User Groups



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PRIMARY USER BEHAVIORS

As employees are the primary user group for parking in downtown Rochester, it is important to understand their parking uses and habits. Additional survey data confirmed that seventy-seven percent (77%) of Rochester employees travel downtown between 7:00 a.m. to 9:00 a.m., with eighty-nine (89%) staying for seven or more hours. Consistently, over ninety percent (90%) work Monday through Friday. Eighty-seven (87%) of respondents are full-time employees. Figures 4 through 7 on the following pages demonstrate typical characteristics of Rochester employees.

Figure 6: Average Arrival Time

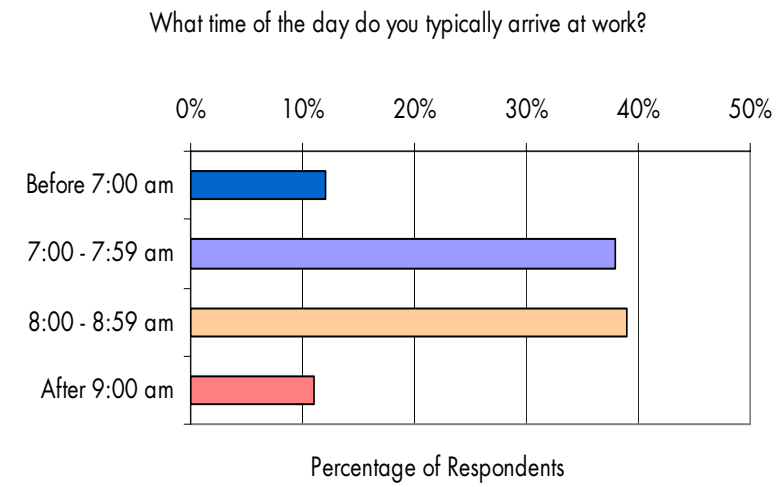

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Figure 7: Average Length of Work Day

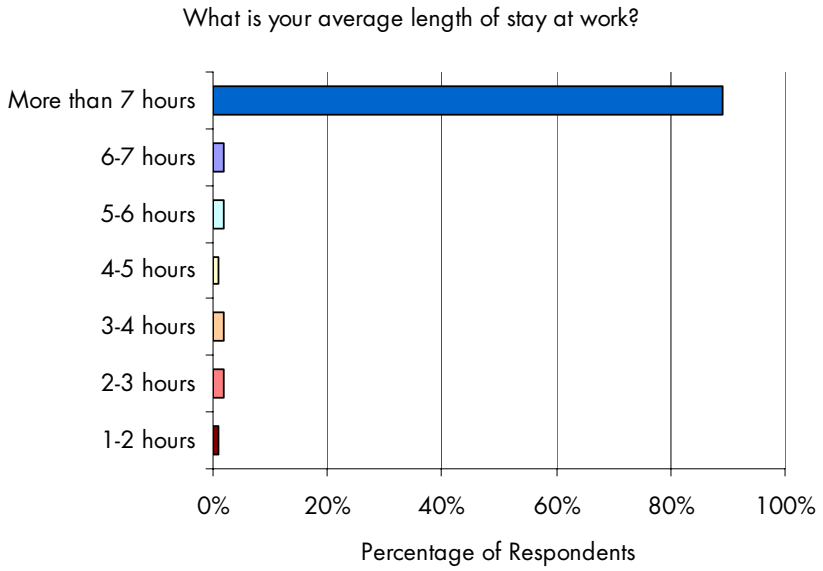

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Figure 8: Average Work Week

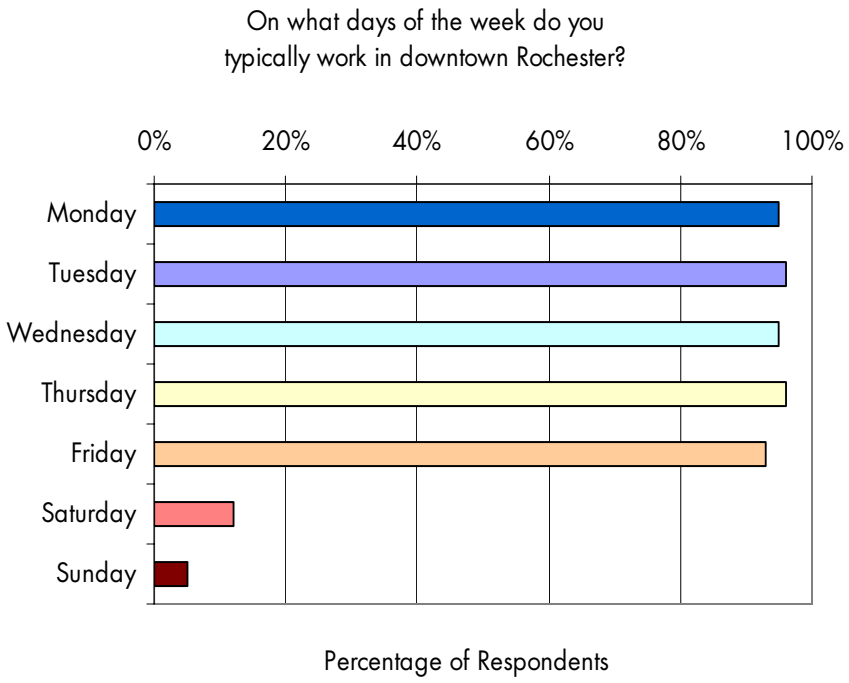

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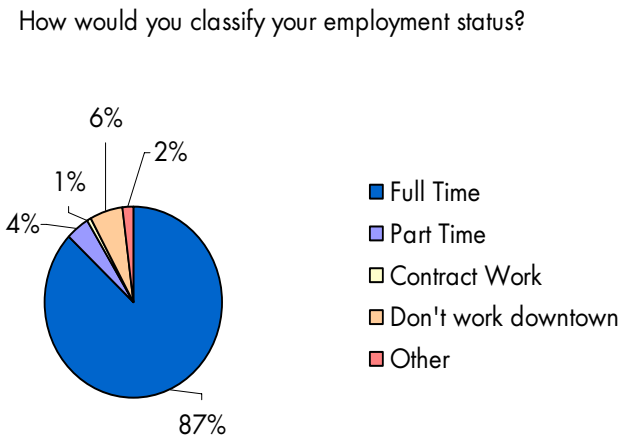
Figure 9: Type of Employment



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PRIMARY USER PARKING PREFERENCES

In addition to capturing the habits of the primary user group in downtown Rochester, this survey found several pervasive preferences in the parking habits of employees. Seventy-seven percent (77%) of employees use public spaces, while twenty-one percent (21%) use private, employer-specific lots or structures. Furthermore, seventy percent (70%) of Rochester's parkers prefer structures over lots (17%), on-street parking (9%), or any other type. Figures 8 and 9 below demonstrate these primary user preferences.

Figure 10: Type of Space Used

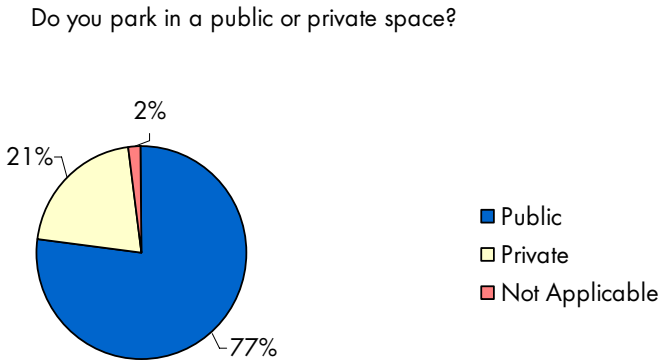

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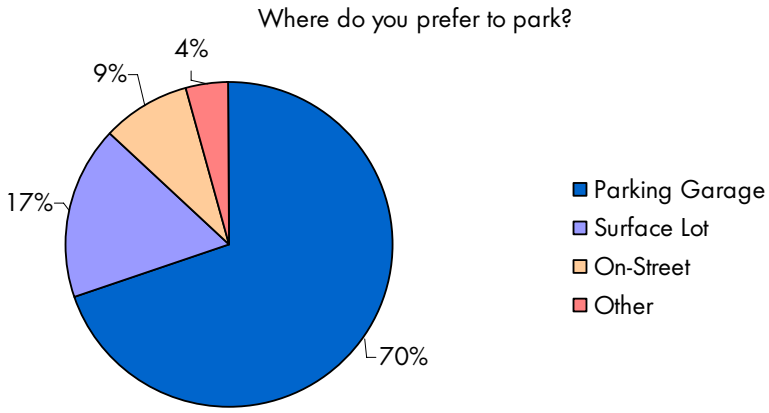
Figure 11: Preferred Parking Venue



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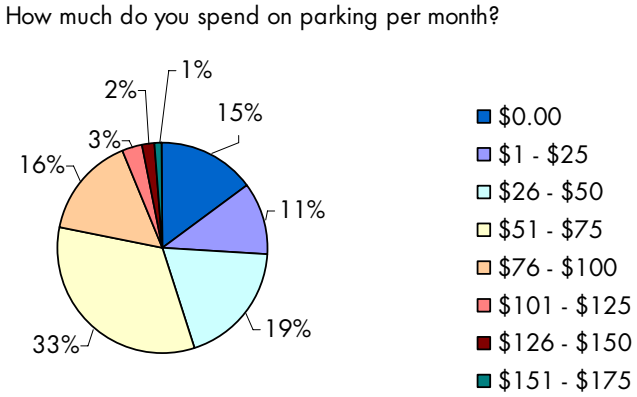
Additionally, the survey demonstrated that sixty-seven (67%) of people were not deterred from driving by the cost of parking, even though over half pay partially or wholly for their own parking. Employees also perceive parking to cost a similar amount in Rochester as it would in comparably sized cities. Figure 10 illustrates the cost per month to park in downtown Rochester.

Figure 12: Cost per Month for Parking



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The survey results related to employee parking preferences are not limited to areas or cost. Employee parking preferences related to walking distance were also measured. The survey showed that eighty-three percent (83%) of employees are willing to walk two blocks or more from their parking space to work. The study further showed that currently, eighty-eight percent (88%) of employees are able to walk from their vehicle to their place of employment in five minutes or less, meaning that current walking distances are deemed acceptable by the survey respondents.

Figure 11 illustrates the various acceptable walking distances and Figure 12 shows current walking distance in terms of minutes.

Figure 13: Distance to Walk

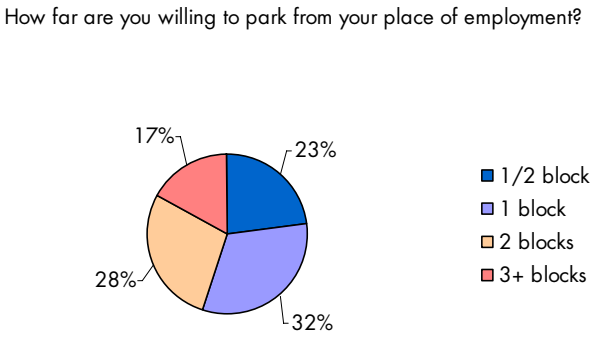

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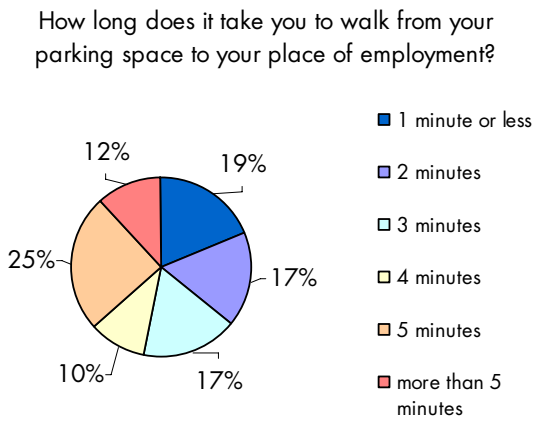
Figure 14: Length of Walk



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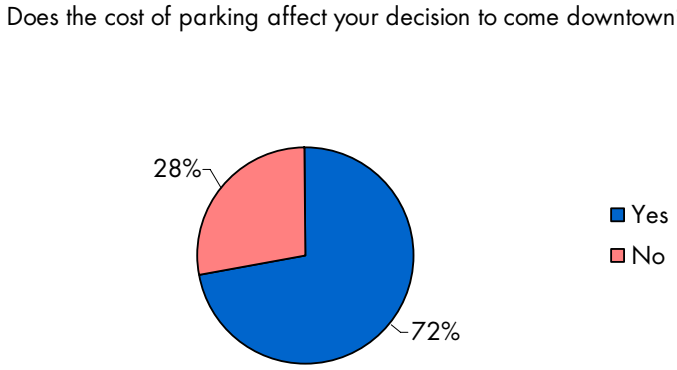
VISITOR PARKING

While employees make up an overwhelming majority of the parkers in downtown Rochester, visitor accessibility is also an important aspect of downtown parking. Survey results show that the cost of parking is a factor considered by seventy-two percent (72%) of respondents. See Figure 13 below.

Figure 15: Cost Effect



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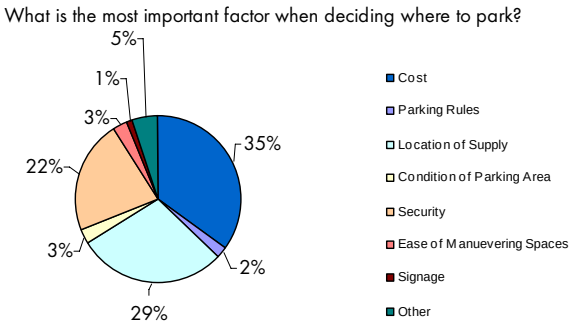
Cost is, in fact, the most important factor parkers consider when coming to downtown Rochester. As shown in Figure 14, thirty-five percent (35%) of respondents cite cost even over location (29%) or security (22%).

Figure 16: Factors Affecting Parking Decisions



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Additionally, Table 2 demonstrates how people prioritize different factors when considering parking in downtown Rochester. As has previously been shown, cost, location, and security are three of the most important factors when considering parking; each of these categories ranked around seventy-five percent (75%) or higher under "Very Important."

Table 2: Factor Ranking

Please rate the following factors with regards to forming your perception of parking in downtown Rochester.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	**Very important**	**Somewhat important**	**Not important**	**No opinion**
Cost	1311	408	44	17
	74%	23%	2%	1%
Parking Rules (Hours of operation, etc.)	811	767	154	34
	46%	43%	9%	2%
Location	1499	262	6	5
	85%	15%	0%	0%
Physical condition of parking area	1047	658	54	7
	59%	37%	3%	0%
Security	1454	299	14	4
	82%	17%	1%	0%
Ease of getting into and out of parking space	1066	620	68	11
	60%	35%	4%	1%
Wayfinding/Signage	529	772	366	86
	30%	**44%**	21%	5%

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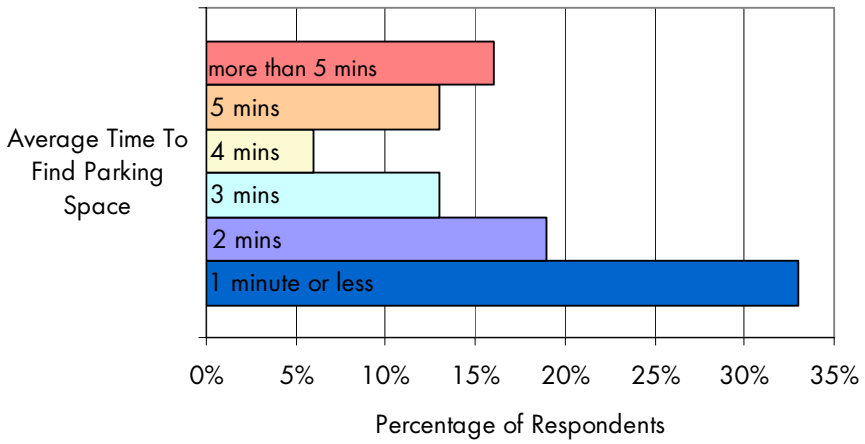
Top 3 Parking Perception Factors

1. Location
2. Security
3. Cost

Survey results also show very positive feedback related to the location of downtown parking supply. Figure 15 on the following page illustrates that eighty-four percent (84%) of people can find a parking space in five minutes or less when looking for a parking space.

Figure 17: Time to Find a Space



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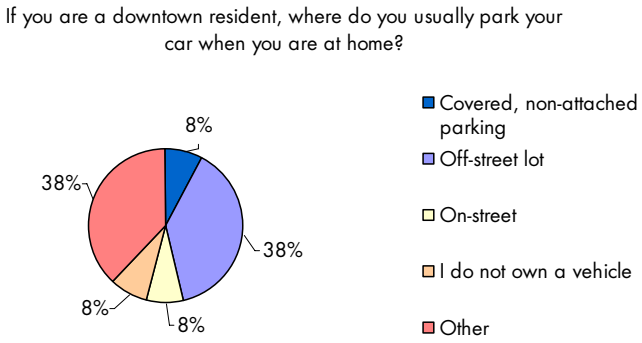
DOWNTOWN RESIDENTIAL PARKING

Parking for downtown residents is also an important consideration. Those residents who responded to the survey (24) answered three questions about their parking habits that lends some insight to the parking preferences, uses, and needs of downtown dwellers. Figure 16 on the following page illustrates the spread of various parking locations used by downtown residents. Of the thirty-eight percent (38%) of respondents who selected "Other," the majority park in private garages attached to their residence, such as would be found in a single family residence.

Figure 18: Downtown Resident Parking



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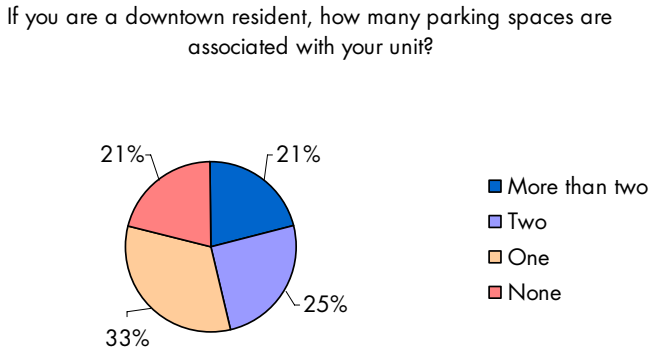
Downtown Rochester tends to associate at least one parking space per unit for seventy-nine percent (79%) of its residents. Figure 17 demonstrates the detailed split of Rochester's unit to space ratio.

Figure 19: Spaces per Downtown Residential Unit



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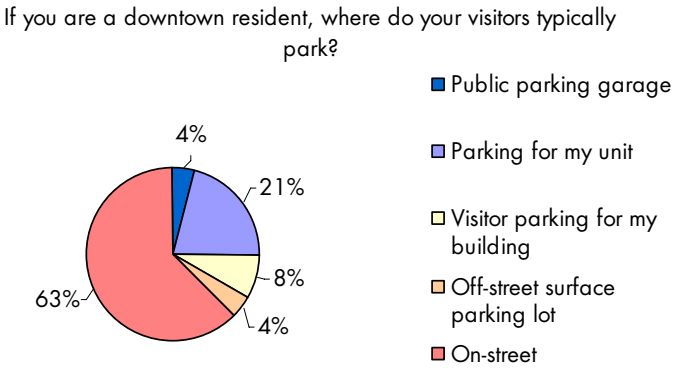
Downtown residents typically rely on on-street spaces for their personal visitors, as shown in Figure 18. Sixty-three percent (63%) of residents' visitors park on-street, while twenty-one percent (21%) park in spaces allocated for the unit. The remaining percentage of visitors use a combination of public parking, off-street lots, or specified visitor parking for their building or complex.

Figure 20: Downtown Residential Visitors



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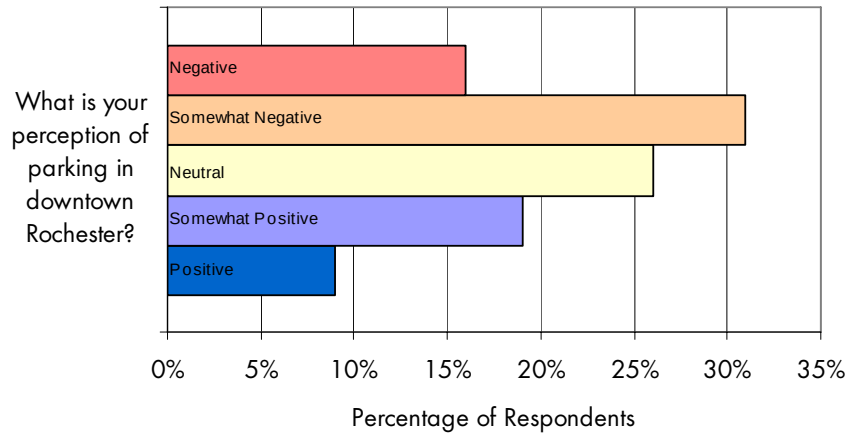
PARKING PERCEPTIONS

The overall perception of parking in downtown Rochester, as has been previously demonstrated, is impacted by several things. The cost of parking is a major factor of consideration for not only people who work downtown, but for visitors as well. The location of the supply, while considered a major potential inhibitor of downtown visitors (see Table 2), is in actuality allowing employees, visitors, and residents to find parking spaces relatively quickly (see Figure 15).

However, thirty-one percent (31%) of respondents view parking in Rochester as "Somewhat Negative" and sixteen percent (16%) had a "Negative" perception. Additional comments provided by the respondents indicate that cost and a lack of safety/security are the two most detrimental aspects they perceive in Rochester's parking. Figure 19 demonstrates the overall perception of parking by survey respondents.

Figure 21: Overall Perception



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SECTION 3
TASK #2 – PARKING ANALYSIS

CURRENT CONDITIONS

TASK #2- PARKING ANALYSIS

This section of the report documents our understanding of the current parking characteristics of the study area. The information contained herein serves as the basis for analysis of the parking supply and needs of the study area. Included in this section is a discussion of parking supply, effective supply, observed parking occupancy, current parking demand and dynamics of the parking system.

PARKING SUPPLY

The foundation of a parking supply and demand study is an inventory of the existing parking supply. Parking in the study area is available in several forms. The on-street parking system utilizes a combination of both metered and non metered parking spaces. Generally, on-street parking is signed and restrictions clearly marked. The majority of the on-street spaces have fifteen minute and one or two hour parking restrictions in the core of the central business district. Off-street parking is available to the public in surface lots and above/below grade garages. Off-street parking is both publicly and privately owned and operated. Private parking is available for specific user groups in the study area in both surface lots and garages that are restricted for use by the individual businesses.

The inventory is compared to the parking demand to quantify the existence of a parking surplus or deficit. A surplus exists when the supply exceeds the demand; a deficit exists when the supply is inadequate to meet the demand. We conducted this analysis on a block-by-block basis within the study area, segmenting the demand by block.

There are approximately 26, 306± spaces in the study area.

Based on the data Walker Parking Consultants and C&S collected, there are a total of approximately 26,306± spaces in the study area. Following is a breakdown of these spaces: 1,637± are on-street and 24,669± are off-street. Of the off-street spaces, 16,245± are available to the public and 8,424± are private or restricted-use spaces. A complete block-by-block listing of the parking supply is listed in the Appendix B.

Table 3: Parking Supply Summary

		Off-Street				
Public Lot	Public Garage	Private Lot	Private Garage	Subtotal	On-Street	Total Supply
4,058	12,187	7,147	1,277	24,669	1,637	26,306

C & S Engineering /Walker Parking Consultants, 2007

EFFECTIVE PARKING SUPPLY

The inventory of parking within the study area is adjusted to allow for a cushion necessary for vehicles moving in and out of spaces, and to reduce the time necessary to find the last few remaining spaces when the parking supply is nearly full. We derive the effective supply by deducting this cushion from the total parking capacity. The cushion allows for vacancies created by restricting parking spaces to certain users (reserved spaces), misparked vehicles, minor construction, and other factors that may reduce the total number of parking spaces in the system. Walker Parking Consultants identified a parking supply operates at peak efficiency when parking occupancy is 85% to 95% of the supply. When occupancy exceeds this level, patrons may experience delays and frustration while searching for a space. Therefore, the parking supply may be perceived as inadequate even though there are some spaces available in the parking system.

As a result, the effective supply is used in analyzing the adequacy of the parking system rather than the total supply or inventory of spaces. Following are some factors that affect the efficiency of the parking system:

- Capacity – Large, scattered surface lots operate less efficiently than a more compact facility, such as a parking structure, which offers consolidated parking in which traffic generally, passes more available parking spaces in a more compact area. Moreover, it is more difficult to find the available spaces in a widespread parking area than a centralized parking facility.

- Type of users – Monthly or regular parking patrons can find the available spaces more efficiently than infrequent visitors because they are familiar with the layout of the parking facility and typically know where the spaces will be available when they are parking.

- On-street vs. off-street – On-street parking spaces are less efficient than off-street spaces due to the time it takes patrons to find the last few vacant spaces. In addition, patrons are typically limited to one side of the street at a time and often must parallel park in traffic to use the space. Many times on-street spaces are not striped or are signed in a confusing manner, thereby leading to lost spaces and frustrated parking patrons.

WEEKDAY EFFECTIVE SUPPLY

The study area's effective supply is determined to be 85% for on-street spaces, 95% for off-street private spaces and 90% for off-street public spaces. The study area contains a total of 26,306± spaces before any adjustments were made to account for an effective supply. After the effective supply factor is applied to the overall supply numbers, the study area's effective supply is 24,021± spaces. A complete block-by-block listing of the effective parking supply is listed in Appendix B.

Total Effective Supply: 24,021 spaces

Table 4: Effective Weekday Supply Summary

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
16,245	0.90	14,620	8,424	0.95	8,008	1,637	0.85	1,393	24,021

C & S Engineering /Walker Parking Consultants, 2007

WEEKEND EFFECTIVE SUPPLY

The weekend evening area is smaller than the total study area, and includes 5,129± effective supply spaces. Details are outlined in the following table.

Table 5: Effective Weekend Evening Supply Summary

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
2,854	1	2,568	2,289	1	2,177	525	0.85	447	5,192

C & S Engineering /Walker Parking Consultants, 2007

PARKING OCCUPANCY

To determine the parking patterns of patrons in the study area, the usage of all parking facilities located in the study area were evaluated. An understanding of these parking patterns helps define both patron types and parking locations. Occupancy counts were taken for all on-street and off-street parking spaces on June 21, 2007 and June 22, 2007. These dates were representative of a typical weekday in Rochester. Evening counts were performed in the entertainment districts on June 22, 2007 which represent a typical weekend evening.

Weekday counts were taken in the morning between 10:00 a.m. and 11:30 a.m., and one count in the afternoon between 2:00 p.m. and 3:30 p.m. A weekend evening count was performed between 8:00 p.m. and 9:30 p.m. The following tables summarize the observed occupancy rates for on-street and off-street parking by time of day and day of week. Specific occupancy numbers, on a block-by-block basis are listed in the Appendix.

Table 6: Parking Occupancy Summary – Weekday

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	1,637	829	51%	1,033	63%
Off-Street Public	16,245	9,276	57%	8,963	55%
Off-Street Private	8,424	5,289	63%	5,209	62%
Total	26,306	15,394	59%	15,205	58%

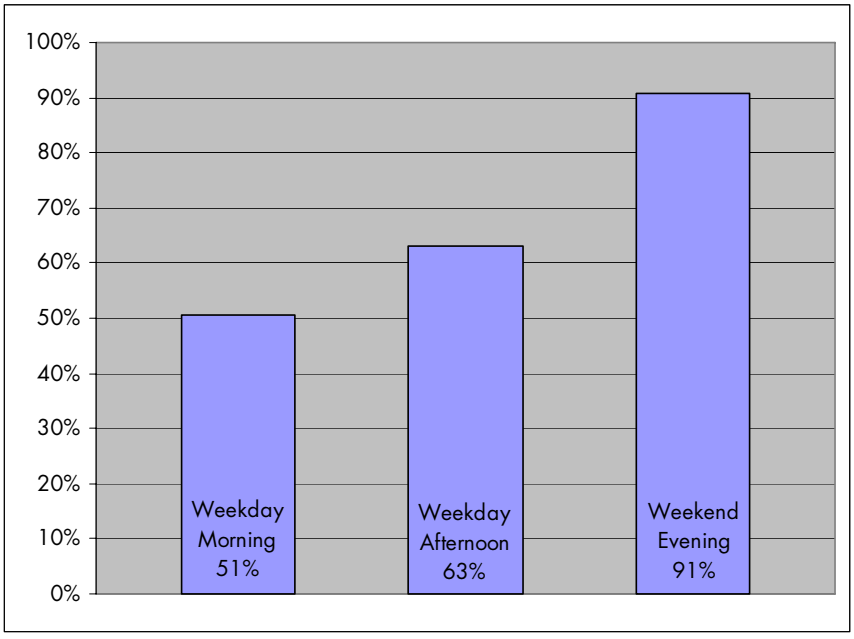
C & S Engineering /Walker Parking Consultants, 2007

Table 7: Parking Occupancy Summary – Weekend

Type	Supply	8:00 PM	Percentage
On-Street	559	507	91%
Off-Street Public	3,351	279	8%
Off-Street Private	2,797	816	29%
Total	6,707	1,602	24%

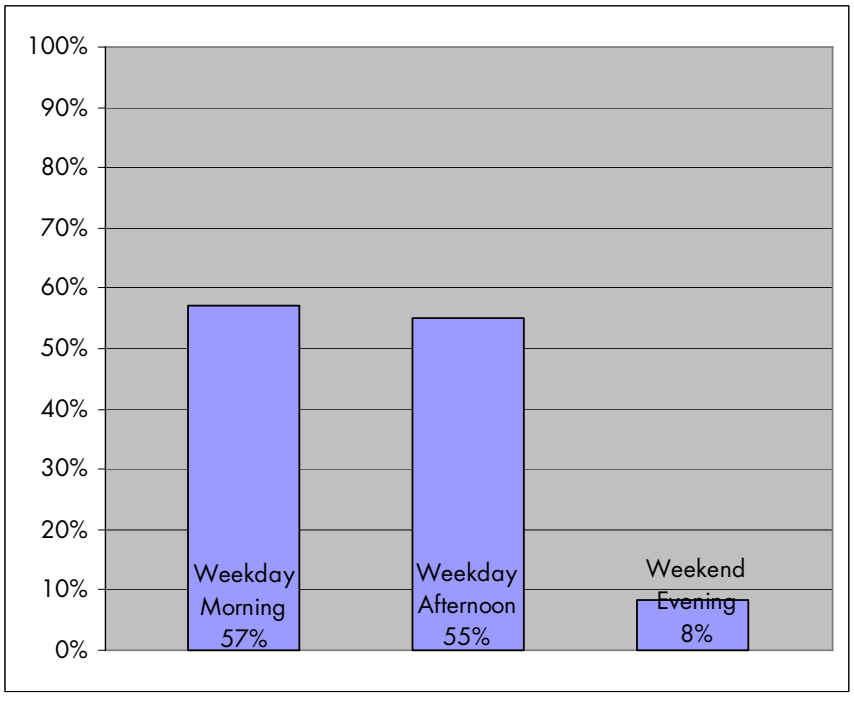
C & S Engineering /Walker Parking Consultants, 2007

Figure 22: On-Street Parking Occupancy



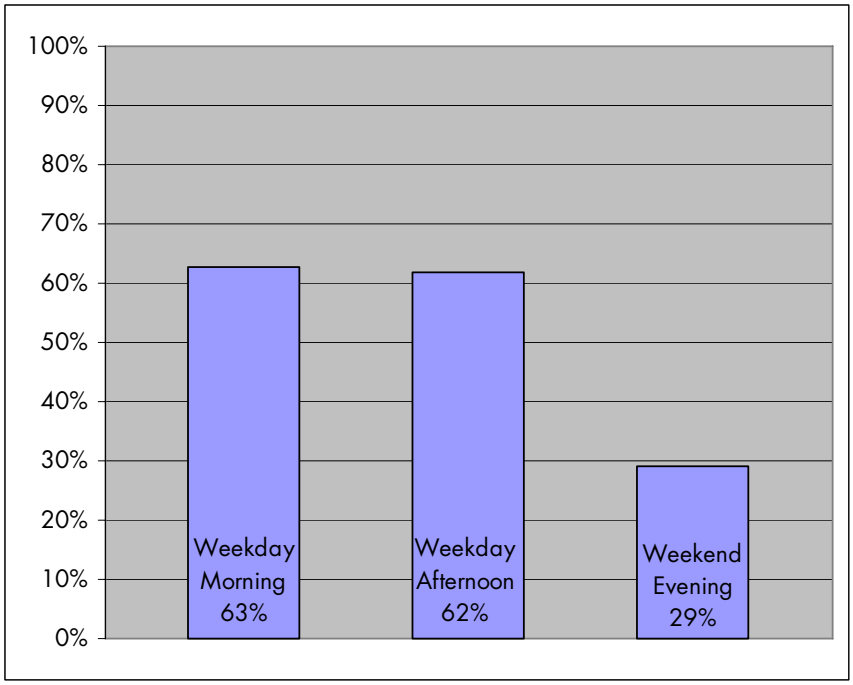
Walker Parking Consultants, 2007

Figure 23: Off-Street Public Parking Occupancy



Walker Parking Consultants, 2007

Figure 24: Off-Street Private Parking Occupancy



Walker Parking Consultants, 2007

Peak parking occupancy for the entire area was approximately 15,394 vehicles.

The observed peak parking occupancy for the entire area was approximately 15,394 vehicles. This occurred during the morning weekday count, utilizing 59% of the total parking supply.

With the weekday morning identified as experiencing the greatest parking demand, we further examined the dynamics of the study area in order to demonstrate the peak occupancy trends. Overall, the on-street spaces are remaining occupied at approximately 57% for the daytime period. The off-street public parking occupies 51% of the supply. The off-street private parking occupies 63% of the supply during the peak morning hours.

The weekday afternoon peak hour identified occupancy rates of the on-street system to be 63% utilized. The off-street public parking occupancy is slightly decreased during the afternoon peak hours to 55%. The off-street private parking occupancy rate is relatively unchanged at 62%.

Weekend evening times indicate occupancy rates of on-street spaces rise significantly to 91%. The off-street public occupancy rates decrease significantly as compared to the weekday morning and

afternoon occupancy with rates at 8%. Off-street private occupancy rates are also decreased to 29%.

Occupancy rates of the off-street private and public system do not indicate a shortage of parking during the weekdays or weekend. However, the on-street parking system was identified to be near full with a utilization of 91% utilization during the weekend evening in the entertainment districts.

Though parking occupancy for the study area is not completely utilized, it is important to understand that parking occupancies in specific areas are nearing or over capacity. This is a function of several factors including:

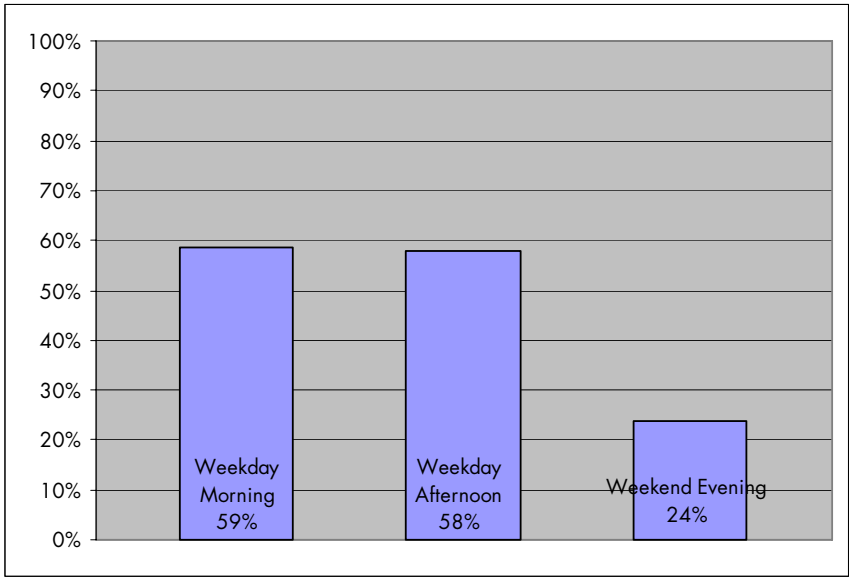
- Low parking supply
- High demand of specific user groups (public vs. private)
- Users un-familiarity of parking options in that specific area (on-street vs. off-street)

Areas in the study group that are discussed in this report.

COMBINED PARKING OCCUPANCY

The following figure presents the combined on-street and off-street occupancy from the occupancy count time periods. Overall peak occupancy occurs during the morning weekday count with occupancy of 59%. Most of the demand during the weekday daytime is generated from the high concentration of office uses in the study area. Weekend evening occupancy accounts for 24% of the weekend evening total supply in the East End, Upper East End and High Falls districts. During the weekend evenings in the East End and the Upper East End districts parking volumes are attributed to the Eastman Theater, restaurants, bars, night clubs and other entertainment venues. The weekend evenings in the St. Paul Quarter district generates parking needs from restaurants, bars, night clubs and other entertainment venues.

Figure 25: Combined Occupancy



Walker Parking Consultants, 2007

WEEKDAY PARKING ADEQUACY

As a whole, the current weekday parking system has a surplus of 8,627 spaces during peak occupancy, which occurs during a weekday daytime shown in the following table.

Table 8: Current Weekday Parking Adequacy

Off-Street Public Effective Supply	Peak Occupancy	Adequacy	Off-Street Private Effective Supply	Peak Occupancy	Adequacy	On-Street Effective Supply	Peak Occupancy	Adequacy	Total Adequacy
14,620	9,276	5,344	8,008	5,289	2,719	1,393	829	564	8,627

Walker Parking Consultants, 2007

The block by block parking adequacy analysis identifies twenty-one blocks have either a negative or close to negative parking adequacy (shown in red). An additional twelve blocks have occupancy rates between 75% and 84% (shown in yellow), indicating that parking on those blocks is becoming tighter. Blocks shown in green currently have adequate parking, while blocks shown in black have more than adequate parking available. Most of the blocks experiencing either shortages of parking, or tight parking conditions are located within the Cascade District and several blocks of the Washington District.

Table 9: Current Weekday Parking Adequacy – Blocks 1 - 35

Block #	Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
1	359	20	26	405	45%
2	0	11	0	11	86%
3	(3)	67	9	73	46%
4	1	(1)	4	4	98%
5	21	69	7	97	76%
6	20	(3)	5	22	79%
7	(10)	66	0	56	85%
8	(28)	0	4	(24)	105%
9	79	11	(14)	76	66%
10	184	16	(12)	188	80%
11	14	58	(1)	71	92%
12	0	41	0	41	61%
13	0	40	15	55	81%
14	2	24	2	28	81%
15	290	24	30	344	32%
16	40	14	(2)	52	79%
17	32	4	12	48	58%
18	31	3	15	49	53%
19	201	0	14	215	38%
20	302	387	14	703	37%
21	7	7	11	25	76%
22	163	0	8	171	69%
23	0	0	0	0	100%
24	0	23	22	45	47%
25	0	39	6	45	80%
26	0	26	0	26	77%
27	28	73	54	155	46%
28	0	47	8	55	40%
29	0	50	2	52	17%
30	0	125	(1)	124	31%
31	0	9	7	16	86%
32	(15)	0	1	(14)	110%
33	(22)	1	(5)	(26)	111%
34	(13)	0	(1)	(14)	109%
35	(3)	(15)	(3)	(21)	119%

Walker Parking Consultants, 2007

Table 10: Current Weekday Parking Adequacy – Blocks 36 - 70

Block #	Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
36	0	(17)	15	(2)	101%
37	0	1	4	5	98%
38	123	10	(5)	128	87%
39	0	0	(3)	(3)	119%
40	87	0	5	92	76%
41	0	9	27	36	22%
42	1,138	0	(1)	1,137	24%
43	0	28	24	52	87%
44	477	0	43	520	69%
45	0	16	9	25	71%
46	0	36	7	43	48%
47	0	1	48	49	13%
48	0	152	(7)	145	85%
49	0	0	5	5	29%
50	0	0	(5)	(5)	145%
51	0	18	(3)	15	67%
52	871	7	10	888	24%
53	0	112	16	128	28%
54	9	17	6	32	69%
55	0	0	29	29	31%
56	65	23	16	104	46%
57	53	197	22	272	42%
58	0	165	17	182	55%
59	585	106	10	701	21%
60	0	142	7	149	46%
61	(4)	61	2	59	81%
62	0	0	(2)	(2)	117%
63	0	1	3	4	73%
64	0	0	18	18	28%
65	0	24	(2)	22	71%
66	0	0	(2)	(2)	115%
67	(3)	199	11	207	45%
68	0	69	1	70	81%
69	(54)	103	0	49	97%
70	317	3	2	322	32%

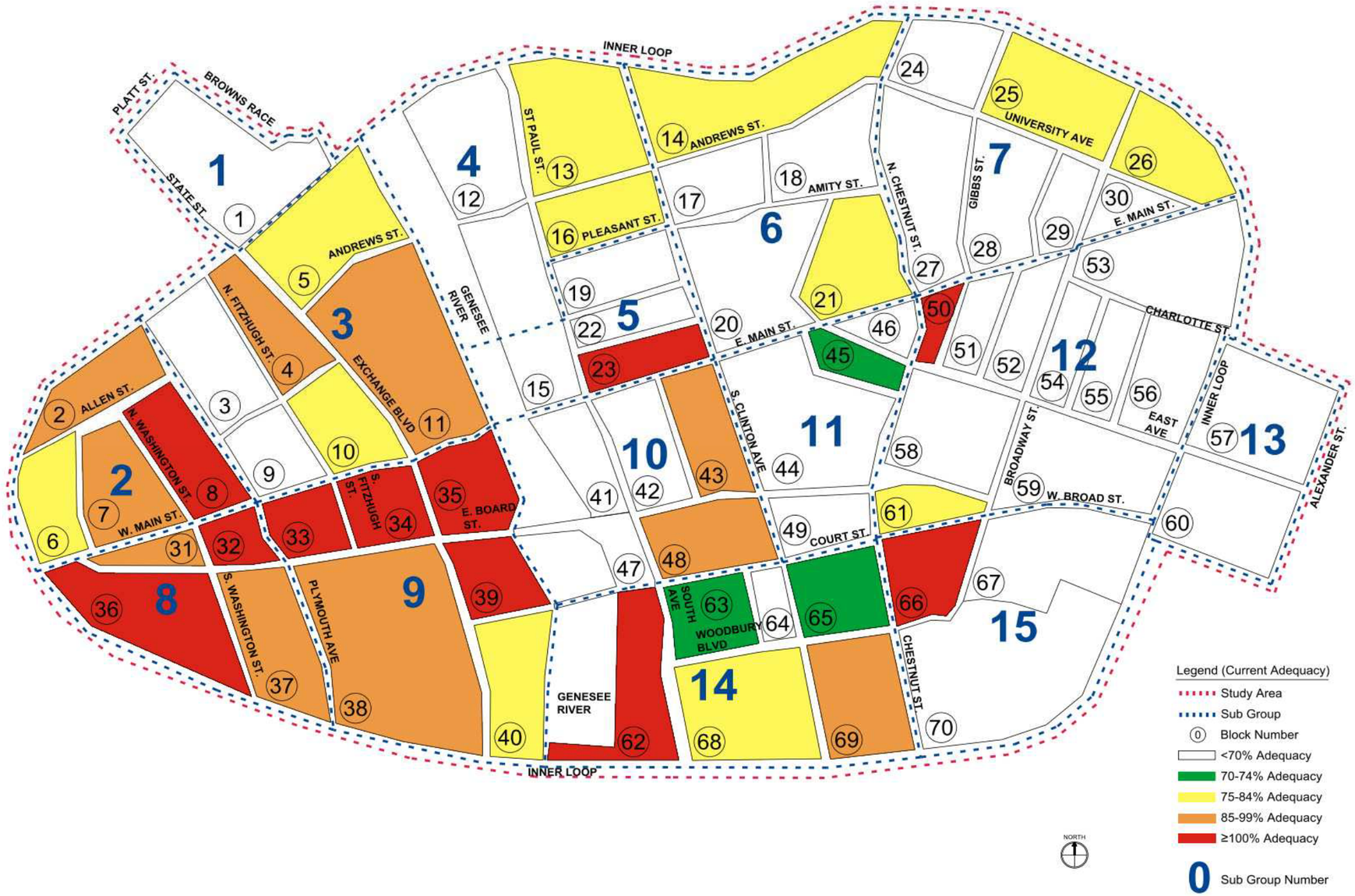
Walker Parking Consultants, 2007

The following figure illustrates the current weekday morning parking occupancy of the study area by color code. The figure should not be used alone for identifying parking conditions that may suggest a parking problem. Rather a combination of the adequacy tables and figures should be used collectively to identify significant parking inadequacies (ie. a block that has an inadequacy of two spaces is less of a concern than that of twenty spaces).

Current weekday inadequacy that should be addressed includes sub areas two, eight, nine and fourteen. The inadequacy in these areas stems from off-street parking. Sub area ten has inadequate on-street parking; however, current street configurations do not allow significant additional spaces to be added. Inadequacy in other sub groups are not significant and can be absorbed by remaining unused parking supply in that block (ie. on-street inadequacy can be absorbed by off-street parking).

Sub areas 2, 8, 9 and 14 have current weekday inadequacy.

Figure 26: Current Weekday Peak Occupancy



WEEKEND EVENING PARKING ADEQUACY

As a whole, the current weekend evening entertainment districts parking system has a surplus of 4,450± spaces during peak occupancy as shown in the following table. On-street adequacy has a deficit of 30 spaces.

Table 11: Current Weekend Evening Parking Adequacy

Off-Street Public Effective Supply	Peak Occupancy	Adequacy	Off-Street Private Effective Supply	Peak Occupancy	Adequacy	On-Street Effective Supply	Peak Occupancy	Adequacy	Total Adequacy
3,016	279	2,737	2,658	816	1,842	477	507	(30)	4,549

Walker Parking Consultants, 2007

Several blocks experienced parking levels at or over capacity. The following table provides a summary of the combined current weekend evening parking adequacy by block. Blocks with negative adequacy and those with parking occupancy of 85% higher are shown in red, and blocks shown in black have adequate parking.

The block by block parking adequacy analysis for the weekend evening entertainment districts indicates that four blocks have a negative parking adequacy (shown in red). The blocks experiencing either shortages of parking or tight parking conditions are located within the St. Paul Quarter, East End and Upper East End and stem from on-street parking shortages. The off-street parking supply can adequately absorb the demand in these areas during the weekend evenings. Alternatives to encourage the on-street parkers to use off-street areas are discussed later in this report.

The off-street parking supply can absorb the demand during the weekend evenings.

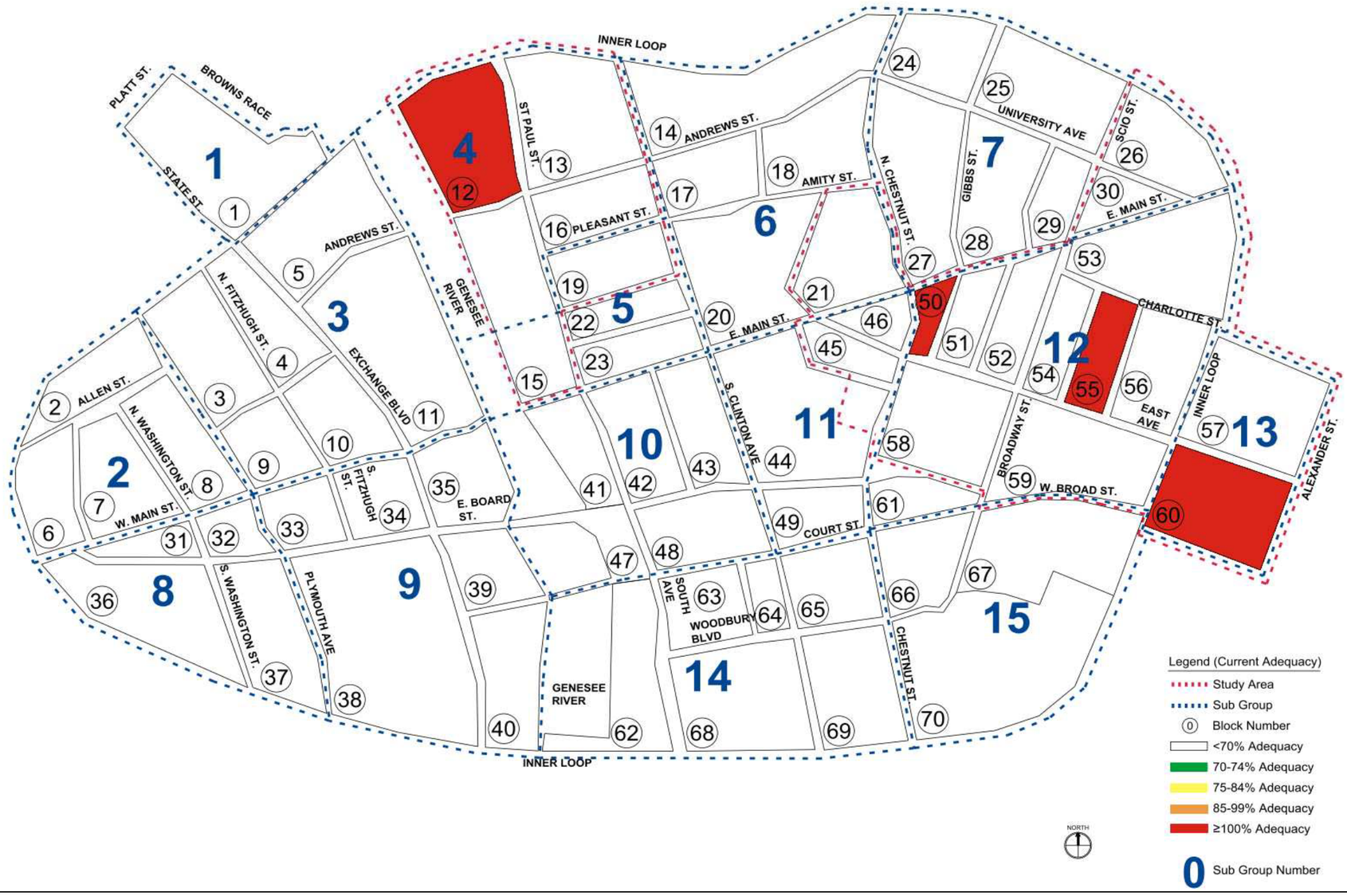
Table 12: Current Weekend Evening Parking Adequacy

Block #	Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
12	0	(5)	(11)	(16)	115%
13	0	157	13	170	41%
15	338	22	11	371	26%
16	65	127	(4)	188	25%
19	317	0	16	333	4%
21	42	16	6	64	38%
26	0	108	0	108	3%
30	0	123	3	126	30%
45	0	60	9	69	19%
46	0	76	0	76	8%
50	0	0	(17)	(17)	255%
51	0	26	(10)	16	64%
52	1,154	9	3	1,166	1%
53	0	77	(12)	65	63%
54	50	9	(1)	58	44%
55	0	0	(10)	(10)	124%
56	112	47	(11)	148	23%
57	14	208	2	224	53%
58	0	307	(12)	295	26%
59	585	248	7	840	5%
60	0	(4)	(12)	(16)	106%
61	60	231	0	291	7%

Walker Parking Consultants, 2007

The following figure graphically illustrates the current weekend evening parking adequacy of the weekend evening (entertainment district) study area.

Figure 27: Current Weekend Peak Occupancy



FUTURE PARKING CONDITIONS

There are two different methods for projecting the future parking volumes. One method involves the use of historical growth rates. The other method involves the collection of information regarding the proposed development that is likely to occur in terms of land use and square footage changes. This information regarding future developments allows the forecasting of vehicular volumes and parking demands for these new uses. However, as the planning horizon goes further and further into the future, the ability to predict these changes becomes more and more difficult. The applicability of historical growth rates and identified future developments were used for this study.

The study area in general is expected to experience a steady growth rate, due in part to the continued redevelopment of existing buildings in the study area. Walker Parking Consultants has projected future demand based on an overall growth rate factor. Three growth rate scenarios are analyzed: a 3% growth rate, a 5% growth rate, and a 7% growth rate. While it is difficult to define an exact growth rate, a conservative overall growth rate of approximately three percent per year, consistent with regional growth rates obtained from the U.S. Census Bureau, are used in this report.

FUTURE DEVELOPMENTS

Several important developments were identified during this study which affects the future supply, adequacy and demand in the study area.

MIDTOWN RE-DEVELOPMENT

Midtown has been identified for future re-development over the next several years. The development calls for the construction of 500,000 square feet of class "A" office space for the corporate headquarters of a technology company. The construction of this building will require that a portion of the 1,844 capacity Midtown underground parking garage will be demolished to make way for the new office tower. Significant additional redevelopment of the remainder of the site is likely; however, specific re-development plans heave not been identified. Actual parking plans will need to be developed for the Midtown area; however, will be completed as part of another project. Several assumptions were made for the purpose of this study as full details of the Midtown re-development have not been completed. Those assumptions include:

Construction of 500,000 square feet of class "A" corporate headquarters with 1,200 employees.

- Loss of 1,106 (assumed PAETEC will take up approximately 40% of site) underground parking spaces in the Midtown parking garage due to the construction of the new office tower.
- Construction of 1,200 private parking spaces for the use of new office tower. Actual number of parking garage spaces that should be constructed to support the new office tower should be further evaluated based on specific user groups for the building.
- The remaining 738 parking spaces in the Midtown parking garage have not been assumed to be demolished as no other specific developments in the Midtown area were identified during the time of this study.

RENAISSANCE SQUARE

Renaissance Square in the beginning stages of re-development. The re-development of Renaissance Square includes the loss of 360 off-street public parking spaces between two surface parking lots in block 19.

A majority of the Mortimer Street parking garage was demolished during 2007. The newer section at the corner of Mortimer and Clinton is still open for monthly parking pass holders. Although this garage was slated to be demolished as part of the Renaissance Square project, there is the possibility that this garage will remain open during the Midtown redevelopment to ensure that no significant parking crisis takes hold. It is undetermined whether the garage will be demolished subsequent to completion of the Midtown redevelopment.

A 2,800 seat theater has been identified to be constructed in block 19 as part of the Renaissance Square re-development. A demand of 1,120 spaces was provided to Walker Parking Consultants by the City and Steering Committee associated with demand generated by the construction of the theater.

OTHER IDENTIFIED DEVELOPMENTS

Other developments have been approved, planned and proposed. Actual analysis on the impact of these developments have not been completed for this project as specific information was not available for analysis at the time this study was performed. Those developments include:

- Mills at High Falls retail/residential development at Platt/State

- Charlotte Square condos on Charlotte Street
- "Block F" redevelopment at Gibbs/Main/Chestnut
- County Crime Lab construction in the vicinity of Broad/Plymouth
- Proposed development at Chestnut/Woodbury

FUTURE WEEKDAY PARKING ADEQUACY

The following tables provide the parking adequacy for the three growth rate scenarios over a five and ten year growth horizon. Adequacy is shown for the entire study area. Taken as a whole, even with a seven percent growth factor, parking is adequate over the next five year period for the combined on and off-street study area. Ten year adequacy numbers of deficiency of 1,055± spaces for the five percent growth rate, and deficits of 6,262± spaces for the seven percent growth rate.

Though the study area as a whole is adequate for parking over the next five years, adequacy by block is affected in a negative manner. A majority of the parking shortage stems from on-street parking; though off-street parking shortages were identified.

Off-street inadequacy continues in the future for sub-groups two, three, five, eight, nine, ten, eleven, and fourteen.

On-street demand beyond the total on-street supply is identified in the future for sub-groups two, three, nine, ten and twelve.

Detailed tables of these shortages are found in Appendix B. A visual representation of adequacy is shown in the following table. The figure should not be used alone for identifying parking conditions that may suggest a parking problem. Rather a combination of the adequacy tables and figures should be used collectively to identify significant parking inadequacies (ie. a block that has an inadequacy of two spaces is less of a concern than that of twenty spaces).

Table 13: Future Weekday Parking Adequacy – Five-Year Scenario

		Weekday Daytime Peak Demand			
	Effective Supply	Current	Conservative *3% growth*	Moderate *5% growth*	Aggressive 7% growth
Study Area	24,021	15,394	17,847	19,648	21,592
Adequacy		8,627	6,174	4,373	2,429

Walker Parking Consultants, 2007

The projected ten year parking adequacy identifies additional shortages in both on and off-street parking. The shortages assume that the ten year parking growth will be maintained by three percent per year. The ten year project should only be used as an indicator in planning for parking. Actual conditions may vary based on actual growth and development/redevelopment in the study area.

Table 14: Future Weekday Parking Adequacy – Ten-Year Scenario

		Weekday Daytime Peak Demand			
	Effective Supply	Current	Conservative 3% *growth*	Moderate 5% *growth*	Aggressive 7% growth
Study Area	24,021	15,394	20,689	25,076	30,283
Adequacy		8,627	3,332	(1,055)	(6,262)

Walker Parking Consultants, 2007

The following tables and figure shows the parking adequacy assuming a moderate growth rate of three percent by block.

Table 15: Future Weekday Parking Adequacy 3% for 5 Years
Blocks 1 – 35

Block #	Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Total Future Adequacy	Future Percentage Occupied
1	227	11	26	264	64%
2	0	(8)	0	(8)	110%
3	4	21	4	29	79%
4	14	(28)	(1)	(15)	108%
5	0	33	7	40	90%
6	20	(7)	0	13	88%
7	19	(27)	(5)	(13)	104%
8	(187)	0	(1)	(188)	140%
9	80	15	(19)	76	66%
10	16	12	(18)	10	99%
11	(156)	12	(1)	(145)	117%
12	0	33	(5)	28	73%
13	0	12	5	17	94%
14	(5)	22	2	19	87%
15	247	6	30	283	44%
16	38	125	(7)	156	38%
17	16	(7)	7	16	86%
18	22	(2)	15	35	66%
19	(117)	0	14	(103)	351%
20	282	360	9	651	42%
21	(1)	3	11	13	87%
22	129	0	8	137	75%
23	0	0	0	0	100%
24	0	18	22	40	53%
25	0	(10)	6	(4)	102%
26	0	8	0	8	93%
27	(15)	67	49	101	65%
28	0	49	(2)	47	49%
29	0	52	2	54	14%
30	0	120	(1)	119	34%
31	0	(31)	2	(29)	125%
32	(6)	0	(4)	(10)	107%
33	(73)	(4)	(10)	(87)	135%
34	(17)	0	(11)	(28)	119%
35	(8)	(31)	(3)	(42)	138%

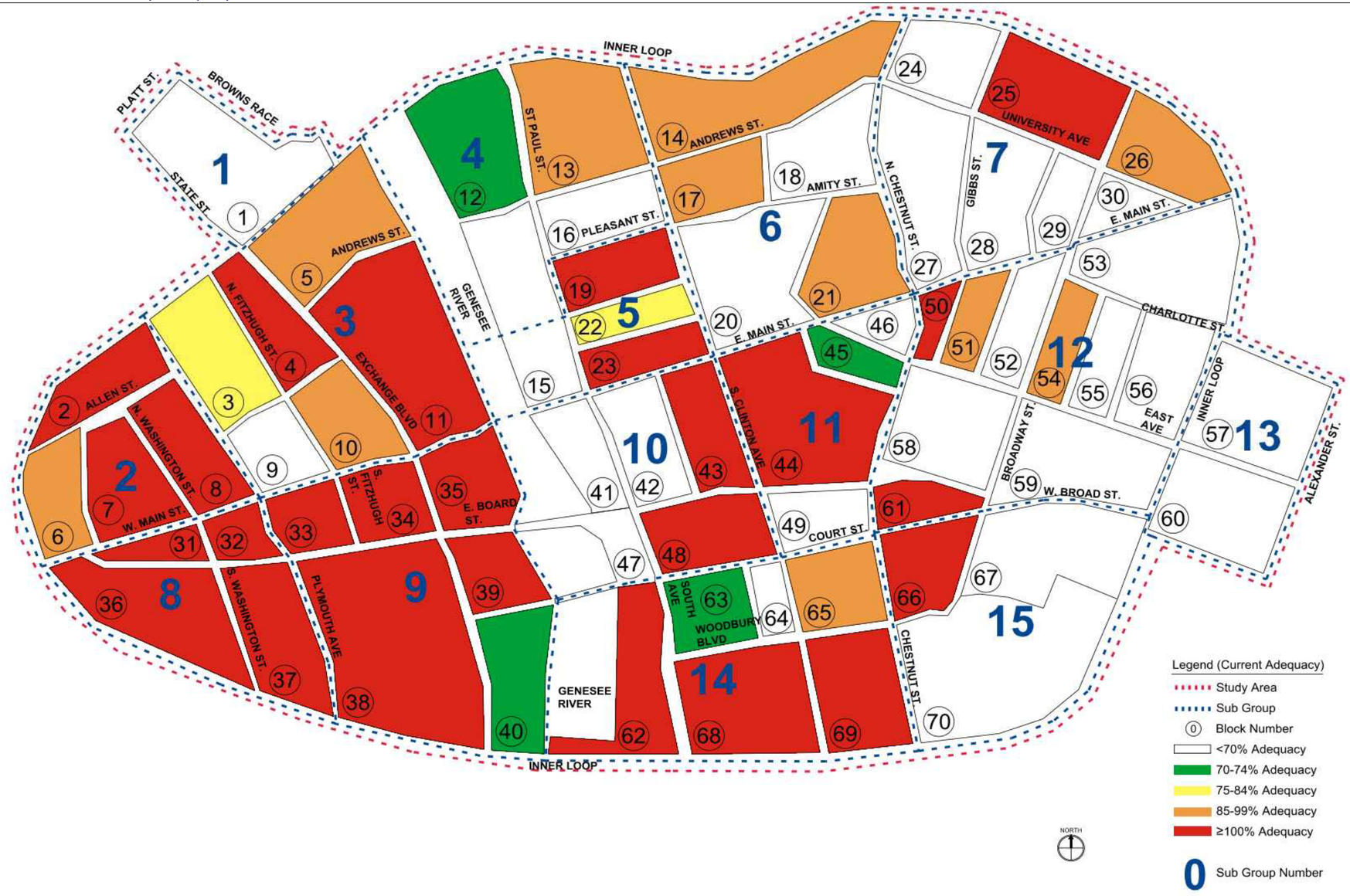
Walker Parking Consultants, 2007

Table 16: Future Weekday Parking Adequacy 3% for 5 Years
Blocks 36 - 70

Block #	Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Total Future Adequacy	Future Percentage Occupied
36	0	(46)	10	(36)	117%
37	0	(56)	(1)	(57)	127%
38	(91)	(5)	(20)	(116)	111%
39	0	0	(8)	(8)	150%
40	106	0	0	106	72%
41	0	(2)	27	25	46%
42	1,067	0	(1)	1,066	29%
43	0	(52)	19	(33)	108%
44	158	(895)	43	(694)	141%
45	0	16	9	25	71%
46	0	26	7	33	60%
47	0	1	48	49	13%
48	0	(196)	(12)	(208)	121%
49	0	0	5	5	29%
50	0	0	(10)	(10)	191%
51	0	10	(8)	2	96%
52	765	5	10	780	34%
53	0	77	11	88	51%
54	1	8	6	15	86%
55	0	0	24	24	43%
56	45	6	11	62	68%
57	45	159	12	216	54%
58	0	126	12	138	66%
59	585	49	5	639	28%
60	0	122	2	124	55%
61	(16)	(5)	(3)	(24)	108%
62	0	0	(7)	(7)	158%
63	0	1	3	4	73%
64	0	0	18	18	28%
65	0	9	(2)	7	91%
66	0	0	(7)	(7)	154%
67	(3)	177	6	180	52%
68	(26)	15	(4)	(15)	104%
69	(530)	94	0	(436)	123%
70	233	0	2	235	51%

Walker Parking Consultants, 2007

Figure 28: Future Weekday Adequacy



FUTURE WEEKEND EVENING PARKING ADEQUACY

The following tables provide the parking adequacy for the three growth rate scenarios over a five and ten year growth horizon for the weekend evening parking adequacy. Adequacy is shown for the weekend evening study area. Taken as a whole, even with a seven percent growth factor, parking is adequate over the next five and ten year period for the combined on and off-street study area.

Parking shortages were identified in five blocks for the weekend evening study area. Those shortages are associated mostly with on-street parking, through several off-street lots were identified as inadequate. Additional off-street parking should be considered as part of the Resistance Square re-development. These shortages were observed during concerts and theatrical events that were taking place the evening of the counts. Though a significant amount of on-street inadequacy was identified, off-street parking has the ability to absorb the demand. Parking alternatives should be considered in these areas to attract more off-street parking during the weekend evenings.

Table 17: Future Weekend Evening Parking Adequacy – Five Year Scenario

		Weekend Evening Peak Demand			
	Effective Supply	Current	Conservative *3% growth*	Moderate *5% growth*	Aggressive *7%* growth
Study Area	5,192	1,602	1,858	2,044	2,246
Adequacy		3,590	3,334	3,148	2,946

Walker Parking Consultants, 2007

Table 18: Future Weekend Evening Parking Adequacy – Ten Year Scenario

		Weekend Evening Peak Demand			
	Effective Supply	Current	Conservative *3% growth*	Moderate *5% growth*	Aggressive *7%* growth
Study Area	5,192	1,602	2,154	2,608	3,150
Adequacy		3,590	3,038	2,584	2,042

Walker Parking Consultants, 2007

The following tables show the parking adequacy assuming a moderate growth rate of three percent by block.

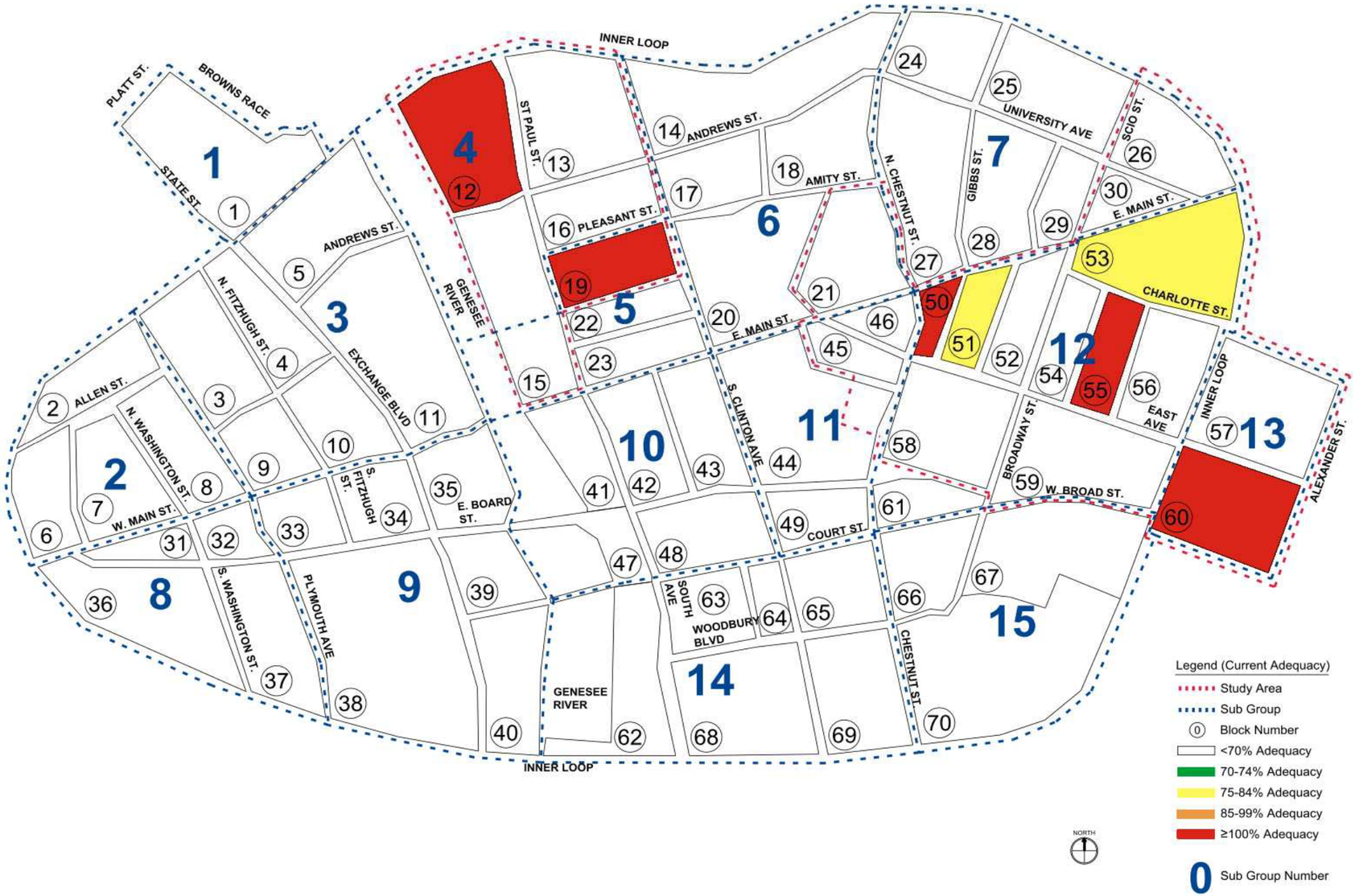
Table 19: Future Weekend Evening Parking Adequacy 3% for 5 Years

Block #	Future Off-Street Adequacy	Future Off-Street Private Adequacy	Future On-Street Public Adequacy	Total Future Adequacy	Future Percentage Occupied
12	0	(31)	(20)	(51)	149%
13	0	135	3	138	52%
15	306	22	6	334	34%
16	59	122	(9)	172	31%
19	(885)	(7)	16	(876)	2237%
21	36	16	1	53	49%
26	0	108	0	108	3%
30	0	108	3	111	39%
45	0	55	9	64	25%
46	0	76	0	76	8%
50	0	0	(25)	(25)	327%
51	0	26	(15)	11	76%
52	1,154	9	3	1,166	1%
53	0	57	(23)	34	81%
54	45	4	(1)	48	54%
55	0	0	(25)	(25)	160%
56	112	47	(21)	138	28%
57	(9)	176	(13)	154	67%
58	0	292	(26)	266	34%
59	585	243	1	829	7%
60	0	(76)	(21)	(97)	135%
61	60	231	(5)	286	9%

Walker Parking Consultants, 2007

The weekend evening entertainment study area as a whole has an adequate parking supply. However, five blocks are projected to face a combined parking supply deficit of 1,074± spaces of which are all on-street parking. These conditions are shown graphically in the following figure. A theater project is scheduled to be developed which will provide demand of approximately 876 spaces.

Figure 29: Future Weekend Adequacy



FUTURE PARKING ADEQUACY CONCLUSIONS

The future adequacy of the study area is an indication where shortages may occur. Actual conditions may vary based on future developments and other factors that affect the driving habits of parkers. Those conditions may include but are not limited to:

- Additional developments that were not identified at the time of the study
- Implementation of parking alternatives which may reduce demand in certain blocks or user groups

Though projected future adequacy indicates that a deficit may occur, actual deficit should be considered as to it's actual level impact on the parking system (IE. deficit of five spaces may not be a significant impact as compared to a deficit of 50 spaces).

Parking habits may also change if one or more parking alternatives are implemented. Though the parking habits will not likely change overnight, they may significantly impact how parkers use the existing systems based on implemented strategies. An update to this report should be considered several years after the study is completed to verify significant changes in parker's habits. Furthermore, more analysis should be considered if a new parking facility is desired to be constructed. Considerations should be taken in order to optimize size, location and other factors that affect the parking experience both as an operator and a parker.

SECTION 4
TASK #3 – STRATEGIES AND ALTERNATIVES FOR IMPROVEMENT

TASK #3 - STRATEGIES AND ALTERNATIVES FOR IMPROVEMENT

Future parking demand projections in the study area indicate that parking will likely be inadequate on at least thirty-six blocks during peak periods. This section of the report provides recommendations to improve the existing parking supply's adequacy without building additional parking supply in areas where inadequacy may be minimal or building additional parking supply is not feasible.

PARKING SUPPLY

There are 24,669 off-street spaces in the study area. Of these, 8,424 have user restrictions posted, limiting usage of the lot to a particular business. The remaining 17,882 spaces of on- and off-street spaces are available to the general public for parking. Regulating, organizing and improving the parking supply requires a collective effort of the property and business owners and the City.

Our observations and brief discussions with a few business owners uncovered the problem that the few available privately owned public spaces are both hard to find and not clearly defined as to who is allowed to park. Additionally, we found many small private lots separated by physical boundaries erected by individual property owners, making a less efficient layout for the space provided. Our experience has shown that little can be done to combine or open up small private lots for public parking. The changing market conditions, through using supply/demand economics may entice these owners to open their lots when the price to park becomes profitable for them.

RESTRIPING

Typically the quickest and least expensive way to increase parking supply is by maximizing the life of parking lots and possibly increasing the number of spaces through resealing and re-striping. Construction costs of a parking structure can run anywhere from $15,000 to $20,000 per space and upwards. Surface parking lot construction costs typically range from $2,000 to $3,500 per space.

By comparison, simple line restriping costs for an asphalt parking lot range from $21 to $35 per space depending on several variables including the number of coats of sealer used. Therefore, restriping a parking facility to increase capacity represents a substantial savings over building new parking facilities.

RECOMMENDATION: Most of the smaller parking lots in the study area limit the ability to effectively gain substantial quantities of parking supply by restriping. However, some isolated lots may in fact gain from a new striping plan. Some lots in the study area will benefit from, and are in need of, a fresh coat of paint on the striping lines. Before the lines are restriped, the layout of the lot should be studied to optimize the number of spaces in the lot.

SHARING PARKING

One option that may be considered in the area is sharing the smaller restricted private lots. In essence, all of the private lots would be used as public parking areas, allowing patrons to park in the lesser used lots. This option would greatly improve parking conditions during the previously identified peak parking demand period and evening off-peak times. The benefit to private lot owners would be the potential for additional revenue.

RECOMMENDATION: If market conditions warrant and it becomes profitable for each parking lot owner to open their lot, the city may see some of the lot owners open their lots to public paid parking. Utilizing this strategy during the evening and weekend hours may eliminate the need to build more parking in locations where minimal inadequacy is identified.

ON-STREET PARKING

Walker evaluated the parking configuration of the on-street parking spaces within the study area. Nearly all of the current parking spaces are striped as parallel spaces along the block face of the street. On-street parking is essentially shared parking, utilized by multiple user groups.

Angled parking is a highly effective way of maximizing the on-street capacity of the parking system, where appropriate. Angled parking works at safe levels of service in situations where adequate right-of-way exists to accommodate the additional depth of vehicles. However, angled parking is not without certain trade-offs. Angled parking can increase visual hazards for pedestrians and vehicular traffic, thus increasing accidents. Angled parking also competes for space within existing right-of-way limits, potentially limiting the ability of the roadway to accommodate travel lanes necessary to address traffic volumes.

RECOMMENDATION: Upon preliminary examination, Walker determined that modifications to the existing parking geometrics may be possible; however, further evaluation would be necessary before converting the parking configurations. Additional on-street parking spaces would only be minimal as most street locations have on-street parking. Moving the bus stops off Main Street and onto side streets or to a transfer facility will allow for more on-street parking spaces along that corridor. Though, any such modifications to existing parking geometrics or relocation of bus stops will require an evaluation of the City's overall transportation objectives, including but not limited to the development of proposed bicycle lanes and improvements to public transportation services. Further investigate the relocation of bus loading zones from Main Street to perimeter streets once Renaissance Square is operational should be conducted with RGRTA, as this could allow for additional on-street parking as well as improved visibility of street level businesses.

MANAGING PERCEPTIONS

As identified in the Supply/Demand section of this report, not all parking resources are maximized during a typical weekday or weekend. Rather, some localized areas experience higher levels of demand than do others during specific times of day and days of the week. To help redistribute the demand, a community map should be prepared that identifies land uses and available parking options within study area. The map could be distributed to property owners, business owners, employees, visitors, residents, the Chamber of Commerce, and real estate agents. In addition, the map could be placed in marketing material, newsletters, and local restaurant and shopping guides.

Currently, Rochester provides a map on its website of the all of the public lots and decks in the Downtown area. The map provides the

location, rates (hourly, monthly and event), hours of operation, and physical characteristics of each of these facilities. For frequent visitors of the downtown area, this map can serve as a useful tool in gaining a better understanding of all of the available parking opportunities. Rochester's parking map provides great information on the lots and decks in the Downtown area, but it does have room for improvement. For instance, privately owned parking lots are not included on this map. By adding information about these topics to the existing map, the city of Rochester could help mitigate much of the confusion and negative perceptions of the parking system by informing motorists of parking choices previously unknown to them. In addition to informing the public of all of their parking options, this map could also help direct individuals into these lots and decks by providing the location of the access points for each of these facilities.

In addition, we recommended that special attention be given to the lighting requirements in each lot and garage, security presence during peak hour conditions, frequent collection and removal of trash, and the elimination of physical pedestrian barriers. All of these mentioned factors have the ability to influence the perception that an individual may have on parking in the study area.

It is worth noting that during our evening observations lighting in general appeared to be somewhat limited in the off-street parking areas. The following table provides a level of service rating for surface parking lighting.

Table 20: Level of Service Luminance Ratings

LOS	Minimum Illuminance[1]	Average Illuminance[1]
A	4	10
B	3	8
C	2	6
D	1	4

[1] Measured in Foot Candles

Parking Structures, Third Edition, Walker Parking Consultants, 2001

Good lighting not only helps identify the off-street parking areas, it is more inviting to patrons, it reduces the risk of liability claims due to slip and fall type injuries, and increases the security level.

RECOMMENDATION: A community map should be prepared that identifies land uses and available parking options within study area. In addition, we recommended that special attention be given to the lighting requirements in each lot and garage, security presence during peak hour conditions, frequent collection and removal of trash, and the elimination of physical pedestrian barriers.

PARKING AMBASSADOR

The perception of on-street parking ordinance enforcement is often negative. The manner in which enforcement is presented to the public is often the reason. Enforcement is seen as punitive, which in many cases it is. For this reason, Walker recommends that the City of Rochester adopt the "Ambassador Program" model for the downtown CBD area as used successfully in Wichita, KS. In addition to the hospitality oriented nature of the program, Ambassadors are still required to enforce parking regulations. The City of Rochester currently has a program called the "red shirts" that acts in a similar manner to a "parking ambassador".

The mission of a Downtown Rochester Ambassador Program would be to provide hospitality, tourism and public safety services to local citizens, businesses and visitors, in addition to enforcing parking regulations. The Ambassadors would be required to complete a multi-faceted training in hospitality and customer service, emergency response and first aid, public transportation and City services. They should work directly with transportation and parking departments of the City, local businesses, and professional agencies.

The primary goals of an Ambassador program are to promote the area, resolve concerns and deter criminal activity, and help make the downtown area a better, safer and friendlier place to live, visit, shop and conduct business. Ambassadors should initiate personal contacts with the parking public, issue more warnings and slightly fewer citations, and interact with visitors and citizens in a positive manner. The vision of the program is to help promote a progressive, dynamic downtown experience. The Ambassadors may accomplish these goals while providing parking management by monitoring public safety, extending a helping hand in emergency situations, and calling on area businesses on a regular basis. Beyond enforcing parking regulations, examples of appropriate behaviors of Ambassadors are:

- To greet visitors and offer customer service.
- To give a friendly face to many people's initial interaction with the City.
- To give accurate directions to visitors and direct visitors to destinations.
- To provide information and explain local traffic and parking regulations to seek voluntary compliance.
- To distribute City brochures and maps.
- To deter criminal activity by their presence.

Ambassadors should be assigned to quadrants as defined within the district on a rotating basis. The Ambassador Program is envisioned to operate with 4 to 6 full-time Ambassadors working 6 days per week (10:00 am to 10:00 pm, Monday – Saturday) and as needed for special events in the evenings.

RECOMMENDATION: Walker recommends that the City of Rochester consider adopting methods of the "Ambassador Program" model that are not currently being implemented as part of the "red shirt" program. Coordination with the Rochester Police Department should also be considered as it relates to safety and security.

INFORMATION AVAILIBILITY

Another important aspect of public education efforts regarding parking options is the method used to disseminate the information. While posting the map on Rochester's website is an efficient way to reach most of the population, it should not be the only effort to distribute this tool. Other options include offering it to businesses and companies in the downtown area to link to their websites, distributing it at workplaces, and including it with any special event information whether it is in the newspaper, on a website or on a poster.

Many individuals have preconceived negative perceptions of the parking system that may or may not be justified. Overcoming these attitudes might require a more specific level of information. Depending on the individual circumstance, whether it is a general fear of parking decks, a perception that walking distances are too long or the desire for convenience that controls an individual's view of parking, more specialized educational efforts can be developed.

PARKING GARAGE SAFETY

From the public involvement process that was performed for this study, results show that a portion of the individuals in Rochester avoid parking decks because they believe them to be dangerous. Even though, in reality, the crime in these facilities does not typically exceed the overall crime rate, the public will continue avoiding these structures until their fears are calmed. In order to do this, Rochester can develop a marketing strategy to dispel any rumors while publicizing their security efforts. Some methods to encourage cynics to use the decks include offering free or reduced parking days, handing out free parking tokens to businesses to distribute to their customers

AREAS OF RESPONSIBILITY

Parking Services is primarily responsible for marketing the City-owned parking structures and lots, and controls such items as hours of operation, parking rates, signage, discounted parking, free parking, and special event parking rates are determined and approved by the City. Parking Services manages most public and customer relations and most complaint resolutions regarding structured parking and also manages on-street parking enforcement.

Parking Services distributes general downtown parking information via its web site and parking-related brochures. Parking Services also promotes parking availability as part of its economic development promotion efforts.

Management considerations for the facilities should include and address:

1. Negotiating blocks of keycards for companies
2. Long-term capital investment planning and recommendations
3. Development of competitive and strategic pricing for short-term and monthly parking
4. Development of new inventory and expansion proposals

ON-STREET PARKING

Significant numbers of on-street parking spaces are utilized during normal business hours. The occupancy of selected on-street parking spaces is regulated by signage. On–street parking in Downtown Rochester is free for up to a maximum of two hours (or as otherwise marked).

Municipal parking signs along curbs in the downtown define parking zones, occupancy durations allowed, and specific hours of enforcement. Individual on-street parking spaces are designated as one of the following zones:

- No Parking
- 15-Minute Loading Zones
- ½-Hour Parking
- 1-Hour Parking
- 2-Hour Parking
- 2-Hour H-C Accessible Parking (Disabled Permit Required)
- Some on-street parking spaces are reserved for specific special uses or for police use, only.

SIGNAGE AND LIGHTING

Interior signage and lighting impact the marketability of the municipal parking facilities. The City has aesthetic control over these elements. Parking access and revenue control equipment appears to be in adequate to good condition and functioning correctly.

Most informational signage in the garages is adequate. Signs at each garage entrance provide the basic "free" parking guidelines and limits.

Lighting is adequate at most public parking and pedestrian areas within the facilities, but inadequate lighting is a liability concern. Lighting levels, especially transitional lighting levels at entrances and in staircases, may be inadequate. Some lighting conditions create dark drive aisles. Some of the interior walls and ceilings within the facilities appear to have recently been coated with white paint or a light concrete stain. This treatment appears to enhance the perception of security and the marketability of those facilities.

WAYFINDING/SIGNAGE

At present, there appears to be no consistent parking signage for off-street parking areas or along the primary thoroughfares, particularly with respect to enforcement signs. While many business owners have private parking signs posted on the sides of buildings, sign posts, and fences, they all vary in content and visual appearance.

Each parking area has its own set of wayfinding/signage requirements. These requirements present specific questions concerning the needs and concerns of the users to be answered during the design of the signs, including:

- What are the points at which information is needed?
- What information is needed?
- How should this information be presented?
- Will there be a high percentage of first time visitors to the district, or is the parking supply used by the same people every day?
- Are there special sign requirements for accessible parking or bilingual patrons?
- Are there choices in traffic patterns that must be presented to drivers such as directions to parking near the entrance to an anchor tenant or exits to different streets?

It is also important that general rules for sign design and placement should be followed when planning the streetscape improvements.

- All signage should have a general organizing principle consistently evident in the system.
- Direction signage for both pedestrians and vehicles must be continuous (i.e., repeated at each point of choice) until the destination is reached. Very minimal signage exists at the point of parking that directs patrons back to the businesses.
- Signs should be placed in consistent and therefore predictable locations.

RECOMMENDATION: Rochester is currently implementing a new City Center Wayfinding signage program to maximize visitor awareness to public parking locations. Rochester is also securing funds for a study to determine the needs for a pedestrian wayfinding. The signage improvements should be prepared in conjunction with any enhancements to the parking resources, in addition to any streetscape improvements along the corridor roadways. As is true with any good

communications medium, signs should be brief, precise, and appropriate, such as "Public Parking" or "Two Hour Parking." Further, the signage should guide the driver from the main thoroughfares into the parking lots.

WALKING DISTANCE

Another view of the downtown parking system that Rochester can improve with simple marketing and educational efforts is the misconception that individuals have to park great distances from their destinations. One solution to this problem would be to develop individualized parking maps, detailing parking options and their associated costs and walking distances, to different businesses, event locations, restaurants and other downtown attractions. This strategy would illustrate to visitors, both frequent and occasional, that many opportunities exist for parking within a short distance of any downtown destination. By offering a comparison between these downtown walking distances and typical distances walked by patrons of suburban malls and grocery stores simply to reach the front door of these expansive buildings, these maps can further combat the misconception that parking downtown requires more walking. For those who view convenience as their highest priority, several steps can be taken to improve their opinion of the downtown parking system. One aspect of parking that can frustrate motorists is the search for a spot. By marketing underutilized decks, the city of Rochester can help satisfy those who may not care about finding the closest spot to their destination, simply the most convenient. These decks can provide a "guaranteed" spot to those who just want to avoid circuitous trips made in the effort to find somewhere to park within a short walking distance of their destination.

Signage can also help inform parkers about and direct them to convenient parking locations. By providing accurate, informative signage pointing motorists to available parking, the city of Rochester can help visitors find parking quickly. In order for these signs to improve parking perceptions, they must display accurate information. Several stakeholders complained about existing signs, displayed at all times, which directed motorists to lots and decks that were not always open to the public.

Walking distance varies based on the patron user group as well as the environment of the surrounding area in which the patron must walk. To aid in estimating the appropriate walking distance, a Level of Service

(LOS) rating system is used for evaluating appropriate walking distances based on specific criteria. Several factors impact the walking distance that a typical person will consider reasonable. These include climate, perceived security, lighting, and whether it is through a surface lot or inside a parking structure. LOS "A" is considered the best or ideal, LOS "B" is good, LOS "C" is average and LOS "D" is below average but minimally acceptable.

A break down of the LOS conditions is provided in the following table.

Table 21: Level of Service Conditions

Level of Service Conditions	A	B	C	D
Climate Controlled	1,000 ft.	2,400 ft.	3,800 ft.	5,200 ft.
Outdoor/Covered	500	1,000	1,500	2,000
Outdoor/Uncovered	400	800	1,200	1,600
Through Surface Lot	350	700	1,050	1,400
Inside Parking Facility	300	600	900	1,200

Source: "How Far Should Parkers Have to Walker?", by Mary S. Smith and Thomas A. Butcher, Parking September 1994

VISITORS

Because visitors are most likely unfamiliar with the area and/or are short-term parkers, we recommend providing walking distance LOS A to all visitors.

EMPLOYEES

We recommend striving to provide LOS C and/or D to employees, which park for longer periods and may not require the use of their vehicle throughout the day.

ON-STREET PARKING REVENUE COLLECTION

There are many different types of parking meters for the City to consider as an upgrade for revenue collection to the existing coin operated meters.. They generally fall into one of two categories: single space meters and multi-space meters.

SINGLE-SPACE METERS

Single-space meters are the original on-street meter solution, and are currently in use in Rochester. On the plus side, they are simple to use and almost universally understood by the public. Innovations have brought electronic controls, vehicle sensing, double space, value cards, and pay-by-cell phone to the meters. Meters make it is clear how much time you have available before risking a ticket. On the negative side, many cities dislike the impact of rows of industrial looking of single-space meters on their landscape. In addition, the sheer volume of meters means more equipment to maintain and monitor. Revenue collection can also be a labor- and time-consuming affair.

Single Space Meter Benefits:

- Tried and true, most everyone understands the single space meter;
- Relatively low cost per meter;
- Can accept coins, smart cards, and payment by cell phone; and,
- Each machine covers one space, thus an out of service meter only impacts one space.

Single Space Meter Disadvantages:

- Unused time remains when vehicle leaves the space;
- Revenue collection can be time consuming and difficult, due to the weight and volume of the coin;
- High cost for on-going maintenance due to the high number of units;
- Limited rate options, and labor intensive to change the rates at all the meters;
- Less than aesthetically pleasing to see a "sea" of poles along the sidewalk;
- Besides meter head maintenance, the poles also require on-going maintenance to straighten;
- Meter may be out of service until it is reported to the parking department; and,
- Enforcement officer must visually check each meter head.

MULTI-SPACE METERS

A growing trend for municipalities is to move away from the use of traditional parking meters, and replace them with multi-space meters. As the name implies, multi-space meters cover multiple spaces for on-street metered parking.

There are two main types of multi-space meters: Pay and Display and Pay by Space. Pay-and-display meters issue the patron a receipt to be placed inside the vehicle. The receipt shows how long the vehicle can park. The pay-by-space meter allows the user to pay for a particular parking space. Numerous companies manufacture variations of multi-space meters; however most of the kiosks are solar powered, equipped with wireless software to allow for real-time monitoring and integration between several kiosks, and accept coins, dollars, credit cards and smart cards.

Considering the two types of multi-space meters, there are some common advantages and disadvantages over traditional single space meters. These are detailed as follows.

Common Advantages:

- Each machine covers multiple parking spaces;
- Increased revenue (between 10-40%) without increasing parking rates;
- When paying with a credit card, customers often pay for the maximum amount of time;
- Can easily accommodate a variable rate structure thereby improving turnaround by encouraging short stays and reducing the number of all-day parkers;
- Revenue can be collected and change replenished on an as-needed basis for each machine;
- Fewer machines to collect revenue and repair as compared to a single space meter installation;
- Improves aesthetics of city streets because there are far fewer pay stations compared to single space meters;
- Tamper alarms and out of service alarms can notify management in real time;

- Integrated software that allows for real-time monitoring, communication of data between kiosks and a central command station which allows for enhanced enforcement, collection, auditing and maintenance while greatly reducing operating costs;
- Increases ticketing accuracy, resulting in fewer traffic court challenges;
- Improves aesthetics of city streets because there are far fewer kiosks compared to single space meters;
- Repairs are typically done by component resulting in quicker on-site repairs;
- Online credit card authorization allows the operator to accept payment only from valid credit cards, drastically reducing fraud that results from bad, or expired credit cards;
- Manufactures can tailor kiosks to meet municipalities' individual needs;
- Easily upgradeable, eliminating the need to replace the kiosks when new technology becomes available; and,
- Various flexible financing options exist, and in some cases tax-exempt leases are available.

Common Disadvantages:

- Higher initial cost to purchase each pay station;
- On-going monthly costs for on-line access, receipt paper, and processing of credit card payments;
- Initial investment needed to promote, educate, and implement new method of payment collection;
- Some users find the pay stations difficult or confusing to use; and,
- Cities that have not properly educated and informed the public about the transition to multi-space meters have experienced a high rate of failure in terms of patrons accepting the systems. In some cities, the multi-space meters were actually removed in response to customer complaints.

PAY-AND-DISPLAY

Pay-and-display meters issue a paper receipt with each payment. The receipt states the date, time, and length of paid parking. The patron is required to return to the vehicle to place the receipt on the dashboard for the enforcement officer to check. Parking can be purchased at multiple machines for the multiple parking spaces. In addition, once the parking receipt is purchased, the patron can re-park without the need to purchase a new parking receipt, provided there is still time on the receipt.

Pay-and-Display Benefits:

- Unused time leaves with the vehicle, unlike traditional single space meters;
- Patrons can use valid receipt to re-park and use parking time at multiple locations;
- Can accept credit cards, bills, coins, and smart cards;
- Multiple machines can be used by patrons to make payment, thus an out of service meter does not necessarily result in lost revenue; and,
- Does not require individually marked spaces; therefore a standard city block can generally accommodate at least one extra car.

Pay-and-Display Disadvantages:

- Patron must walk back to vehicle after paying for parking;
- Enforcement officer must visually find and inspect paper receipt;
- Potential for litter from old receipts; and,
- Issues with motorcycles, multiple receipts, and "messy" vehicles.

PAY-BY-SPACE

Pay-by-space meters require marking each space with a unique identifier, typically a number. The patron parks in the space and pays the meter according to the specific space that is used. Typical accepted forms of payment include cash, coin, credit cards, and smart cards. The machine tracks the payments and keeps a running balance.

Pay-by-Space Benefits:

- Patron walks to the meter and is finished with the transaction, there is no need to return to the vehicle;
- Unused time stays at the meter, but can be hidden from the general public;
- In some cases additional time can be added at another machine; and,
- Enforcement is quicker and easier as the officer prints out who paid from the machine or receives the information electronically without looking for a ticket or time on individual meters.

Pay-by-Space Disadvantages:

- Added expense of maintaining the marked spaces over time, as well as during snow conditions;
- Defined number of parking spaces, thus no benefit of added parking of smaller vehicles;
- Marking system may include poles at every space, which may be viewed as clutter on the sidewalk; and,
- Additional signage needed to mark and educate patrons.

MARKETING

MISSION STATEMENT

In support of Parking Services, it is recommend that a mission statement be created.

The objectives of Parking Services and this marketing plan should be developed specifically to the City of Rochester and might include:

- To simplify and coordinate public communications and public relations regarding the availability and pricing of public parking.
- Maintain safe, adequate and affordable parking while planning for, and to the extent that it is not satisfied by private enterprises, build additional facilities in a cost-effective manner.

- Maximize the use of municipal parking assets in order to enhance revenue in the long-term pursuit of a self-supporting and self-financing municipal parking system.

To accomplish the objectives of this marketing plan, it is necessary to develop a number of marketing plan elements. The appropriate tools or components of this marketing plan include:

1. An identity program.
2. A market pricing plan for each facility.
3. A communications plan, including a city parking web site and improved signage.
4. The implementation of the "Ambassador" program similar to programs such as Downtown Special Services program or former Downtown Guides.
5. The implementation of promotional parking programs.

IDENTITY PROGRAM

Why is product identity important? When similar, competing products or services are offered in a market, a brand helps customers make decisions. Customers tend to choose a brand they feel comfortable with, know, and trust. Some decisions are based on prior experience with a particular product or service, advertisement, or simply word of mouth. Some people make purchases based solely on the brand name. A common identity extends this experience across the entire asset base. Identity, or branding, is an important asset. Some companies even put a price tag on their brand. For example, a brand like Coke (Coca-Cola) values this asset at $40 billion.

The three recognition elements of a well defined identity are:

1. Verbal
2. Visual
3. Audio

Verbal elements include the name, style and taglines. Visual elements include fonts, colors, shapes, and graphic elements (including logo). Auditory elements include a recognizable voice, sounds or music.

Indianapolis Int'l. Airport Parking program logos and characters.

Ed

Fred

Cedar Rapids, Iowa Transportation and Parking program logo.

Downtown Kalamazoo, MI parking program logo.

Best practices for building a brand identity are:

1. Consistency
2. Ubiquity
3. Frequency
4. Partnering

Consistency requires using the elements and standards of the program in a consistent manner is achieved by using a full range of appropriate media is necessary to enhance the effectiveness of marketing, advertising and promotions creates opportunities for synergy.

With these elements in mind, Walker recommends that Rochester create a single public identity for the municipal parking marketing plan.

Examples include the "Five Seasons" Transportation and Parking Department Cedar Rapids, Iowa, and the "Central City Parking" program of Downtown Kalamazoo, Michigan.

As part of the effort to train customers to use a new pay-on-foot pre-cashiering system, the Indianapolis International Airport parking system uses the name "Easy Exit" with a logo and two characters, "Ed" the Turtle and "Fred" the Rabbit, for short term parking. The Indianapolis Airport parking has also branded the name "Corporate Connection" for its premium parking, "Economy Parking" for its less expensive remote parking system, and "Tiger Parking" for its shuttle service.

An initial launch program to kick off the marketing plan would be a downtown area or city-wide "Name the Parking System" and/or "Name the Parking System Character" contest.

Sparkie *

* Placeholder character for illustrative purposes, only. Not recommended.

MARKET PRICING STRATEGY

Current parking rates are based on approved maximum parking rates as established by City ordinance. These rates are posted near the maximum in most facilities. Walker recommends that the City review these rates and make adjustments based on rates charged and occupancies of competing facilities located within the central business district.

The balance of supply and demand is achieved through market rent. Excess vacancy indicates those situations where parking rates are too high. Conversely, high occupancy rates may indicate that parking rates are too low in a give location. Evaluation of the parking rates in the CBD should improve the competitive position of the City owned off-street parking facilities and result in higher utilization and higher overall revenue.

PUBLIC RELATIONS & COMMUNICATION

The public relations and communications plan would provide information on key events impacting downtown parking access issues, and should be responsible for increasing public awareness of downtown parking through events, activities, publications, press releases, maps and other literature.

The Public Relations and Communications program should:

- Include a comprehensive "Downtown Parking" city web site.
- Respond to questions and requests from the general public for locations of parking facilities, pricing and availability.
- Maintain the integrity of downtown parking promotional materials, and provide parking maps, business development packets, and fact sheets.
- Provide day-to-day media relations, and generate press releases as needed.
- Provide public relations assistance to other downtown events as needed.

This information should be disseminated by means of

(1) A more comprehensive "Downtown Parking" city web site.

(2) A quarterly newsletter for the downtown parking community with news of economic developments in parking, development and construction projects, upcoming downtown events, and profiles of downtown newsmakers.

(3) Newspaper items or articles and media releases.

(4) Brochures and maps, both distributed and posted.

(5) Direct mailings when needed.

(6) Downtown meetings and presentations by the city parking manager about downtown parking to city business and civic groups upon request.

EXAMPLES OF OTHER'S MARKETING INITIATIVES

A reasonable use of specific parking marketing initiatives may be productively applied toward supporting the downtown as a whole. A representative list of such initiatives, including a short analysis of each, is presented as follows:

1. Establishment of a parking website and parking information program. A parking website should be linked with City government and local websites, such as:

   www.ci.south-bend.in.us/
   www.southbendtribune.com/
   www.livethelegends.org/
   www.digitalcity.com/southbend/ -
   www.discoverourtown.com/TownPage.php?Town=641

   as well as other local and national city guides.

   The City parking website should provide accurate and timely data of parking availability, rates and maps. A website may also be used to conduct an online interactive survey of the perceptions and concerns of citizens and stakeholders. The cost of such a web site may be shared with private parking operators, or provided as a service to the entire market. Set-up cost is estimated at $10,000 to $20,000, or more, depending on the complexity of the site and number of pages. Some examples of parking web pages are shown in the list on this page.

2. Parking Guide: Design, publish and distribute a downtown parking guide, including a downtown parking map and brochure describing the locations and availability of parking, simplicity of access, rules and fees for parking for errand, short-term, and employee parking patrons. The cost to establish this program is estimated at $20,000 to $50,000.

3. Use of "Free Spin" Meters: Kalamazoo and Cincinnati use meters that allow a programmable amount of free time at parking meters in key locations throughout the CBD. They have installed "free spin meters" that allow a person to park and activate the meter (button or spin) for a set amount of free time. Free-time meters allow those errand parkers that are picking up a package, paying a bill, or dropping off something at a store (like a shoe store, for example) to obtain a limited amount of free parking. This requires the installation of programmable electronic parking meters. Such meters are available from several meter manufacturers for approximately $500 to $600 each, installed). One use per customer is allowed by ordinance. Enforcement is required to issue citations to repeat abusers.

Examples of Municipal Parking Web Pages

www.downtownlincoln.org
Lincoln, NE

www.okc.gov
Oklahoma City, OK

www1.umn.edu/pts/
Univ. of Minnesota

www.city.pittsburgh.pa.us/pghparkingauthority/
Pittsburgh, PA

www.miamiparking.com
Miami, FL

www.parkspa.com
Springfield, MA

www.ci.baltimore.md.us/government/parking
Baltimore, MD

www.hartfordparking.com
Hartford, CT

www.norfolk.va.us/parking
Norfolk, VA

www.crbus-parking.org/
Cedar Rapids, IO

www.cityofboise.org/customer_and_support_services/parking_control/default.asp
Boise, ID

www.central-city.net/parking.php
Kalamazoo, MI

www.downtownstreets.com
Houston, TX

4. Sticker Programs: Sticker programs offer effective techniques to add flexibility to the off-street parking system for particular users. These users include those who park for less than five days a week or for less than 4 hours a day, convenience parkers visiting CBD retailers who compete with free suburban parking, and students. For example, the City Parking Office of Lincoln, Nebraska administers the following four sticker parking programs, which can provide parking solutions to customers, employers, employees, and students – Park Smart, Park & Shop, Park & Learn, and Star Park.

5. Token Programs: As an alternative to a stamp, the City can create a parking validation program with tokens that are accepted at public and private garages. One-dollar tokens may be sold to merchants for 50 cents and the City can subsidize the price difference. Hamilton AutoCashier machines can be configured to accept tokens.

   The Cedar Rapids Easy Park/Easy Ride token program allows businesses to offer customers an incentive to shop downtown by giving them tokens useable for either parking meters or City bus fare boxes.

Kalamazoo, Cincinnati, and other cities have recently installed "***free time meters***" at selected spaces. This meter upgrade allows errand parkers to obtain a preprogrammed amount of free parking (usually 10 to 15 minutes). This meter upgrade may be a reasonable alternative to the existing time-restricted on-street parking spaces.

Park Smart - The Park Smart program is designed to serve downtown Lincoln, Nebraska visitors, customers and employees who need parking for less than five days a week or for less than 4 hours a day. Booklets of ten stickers or tokens can be purchased for $22.00. Each can be used to cover up to 4 hours of parking and two stickers will cover the cost of parking for any 24 hour time period. They have no expiration date and are valid during the regular business hours at all City-owned garages.

Park & Shop - The Park & Shop program is designed to serve downtown businesses and their customers. Booklets of fifty stickers or tokens can be purchased by downtown businesses for $15.00. Each covers the cost of 1 hour of parking with a maximum use of three stickers per ticket. Park & Shop stickers or tokens are commonly offered by businesses to their visiting customers for parking in any Lincoln parking garage and are valid during regular business hours.

Park & Learn - Park & Learn is available to those students attending the downtown campus of Southeast Community College (Lincoln, Neb.). Booklets of stickers can be purchased for $20.00. Each covers the cost of 3 hours of parking with a maximum use of two stickers per ticket. The stickers are valid at Center Park Garage

from 4:00 p.m.-10:00 p.m. and at Carriage Park Garage from 8:00 a.m. to 12:00 a.m. Valid student identification and class schedule are required at time of purchase. Other validation programs are available for the Lincoln Public School Technology Focus Program and the College of Hair Design.

Star Park - Star Park allows businesses to validate their customer's parking for between 1-8 hours and receive a 50% discount off the first hour of parking. Each additional hour of parking is charged at the regular rate. The cost to a business to establish this validation program is $60.00. Merchants are invoiced for the total dollar amount of all redeemed tickets bearing their stamp, less a 50% discount on the first hour of parking on each ticket. Star Park stamps are valid at all City-owned garages during regular business hours.

6. Free & Easy Parking for the first two hours is offered in the Birmingham, AL Parking Authority decks. To take advantage of this service simply have the city center business or retail establishment you are visiting validate your parking stub. This two-hour service is provided as a free service from the Authority and there is no cost to the business or the driver.

Note: The City of Rochester will implement a "first hour fee" program for public parking garages beginning March 1, 2008.

7. The "Parking Angel." IDI, Indianapolis Downtown Inc., has offered a parking special at parking garages located in retail areas in past years during the holiday shopping season, called the "Parking Angel." In this program, as tickets were cashiered, the ticket register would spit out a "free parking" receipt about 10 times per day. At $5.00 per ticket, this program would cost about $300 per week, plus promotion and programming costs. In fact, the parking operator absorbed the parking cost in Indianapolis.

8. Drawings: Downtown employee public relations may be improved by conducting monthly drawings to pay for one year of employee parking at a public garage. At $50 per parking pass per month, the cost of this program would be approximately $600 per parker. If this drawing were conducted each month, the cost for 12 winners would be $7,200 per year, plus promotional costs.

9. Economic Development Parking Incentives: In conjunction with other CBD economic development incentives, the City could assist the relocation of a business to the downtown by paying for one

month of parking for a number of parking spaces. At $50 per parking pass per month, the cost to subsidize 100 new employee parkers for one year would be $50,000.

10. Internal Advertising. The Bethlehem Parking Authority rents wall space to merchants in two Bethlehem, Pennsylvania parking garages to advertise their goods, services and events. Eight frames, measuring 8 ½ inches by 11 inches, are hung in each elevator in the garages, and selected local businesses can display their store hours, special sales or menus. One frame is reserved for the Authority to promote events. The Authority could eventually put a sign as big as 4' by 8' along a wall, or smaller frames in the stairwells. Some space could be used for downtown maps, the sort of "you are here" displays commonly found in shopping malls. The Bethlehem Parking Authority estimates this program can bring in an extra $7,200 per year.

FINANCING STRATEGIES FOR CONSTRUCTION OF PARKING GARAGES

The purpose of these recommendations is to provide an overview of the most commonly used strategies for financing parking facilities. The following strategies are addressed:

- Federal Grants
- Tax-Increment Financing
- Business Improvement Districts
- Development and Lease Agreements
- Creation of an Auxiliary Enterprise Fund
- Creation of a Parking Authority

FEDERAL GRANTS

At least two potential funding sources are available at the federal level. Location, intended use of the facility and availability of grant money are the variables that typically govern whether a project receives federal grant money. The U.S. Department of Transportation offers two types of grants that may be applicable to a parking project: Federal Transit Capital Investment Grants and Federal Transit Formula Grants.

Administered under the Federal Transit Administration (Department of Transportation) under authorization of the 49 USC 5309, Federal Transit Capital Investment Grants exist "to assist in financing the acquisition, construction, reconstruction and improvement of facilities, rolling stock and equipment for use, by operation, lease, or otherwise,

in mass public transportation service and in coordinating service with highways and other transportation in such areas."

FTA Formula Grants, also administered under the Federal Transit Administration (Department of Transportation) under authorization of the 49 USC 5307, exist "to assist in financing the acquisition, construction, cost-effective leasing, maintenance, planning, and improvement of facilities and equipment for use by operation, lease, contract, or otherwise in mass transportation service, and for urbanized areas with populations under 200,000, to assist with the payment of operating expenses to improve or to continue such service by operation, lease, contract or otherwise."

BUSINESS IMPROVEMENT DISTRICTS

Some municipalities and county governments use business improvement districts ("BIDs") and parking tax districts as a means to generate income to fund parking facility capital improvements and operating expenses. Both business improvement districts and parking tax districts can be used to finance the acquisition of land; the construction, operation, and maintenance of surface parking lots and parking structures; as well as the costs of engineers, attorneys and other professionals needed to complete the project.

BIDs number over 1,200 in the U.S. and are much more common than parking tax districts. BIDs, which are most often formed at the request of their member businesses, typically address a wide variety of issues not all related to parking. Common issues addressed include marketing, transit, beautification, signage, lighting, parking, street and public space maintenance, unarmed security patrols, "customer service representatives" or "ambassadors" to provide information and assistance to tourists and shoppers, etc. The collection of assessments tend to be applied uniformly on a square foot, gross receipts, or assessed value basis because benefits are universally recognized by all property owners. Typically, no exemptions or tax credits are provided to property owners who provide all or a portion of their required parking.

The Bayside District, located in Santa Monica, California, is an example of a BID. This BID was established in 1986 and has allowed the BID to secure the bonded indebtedness associated with various improvements in 1989. Improvements included a transformation of the old Santa Monica Mall into the Third Street Promenade and

surrounding Bayside District. Specifically, this provided for additional parking and certain alley, signage, and circulation improvements.

The Santa Monica BID has three zones, each with its own tax rate: Zone 1 - $0.8096 per building square foot; Zone 2 - $0.3346 per building square foot; and Zone 3 - $0.2342 per building square foot.[1] Tax bills appear on property owner's tax bills and are collected through the County Assessor's Office. The Treasurer of the City of Santa Monica administers the BID fund.

At the same time this BID was created, an ordinance was passed requiring a parking developer fee; this fee creates a fund for additional parking improvements as new square footage is added (if the developer does not provide parking to meet the demand of the new development). The formula for this parking developer fee is equal to $1.50 per square foot per year for each new square foot of building space added since 1986 for which parking is not provided.

DEVELOPMENT AND LEASE AGREEMENTS

Municipal and corporate leaders are increasingly faced with the issue of whether or not they should enter into the parking business by constructing, financing, and operating their own parking facilities. In most cases, the capital required to develop and operate a parking facility is the prevailing barrier to entry. The financial paradox faced by decision-makers is the need to allocate funds for core operation improvements to sustain and grow demand, while at the same time, fund parking expansion projects that are needed to operate. More often than not, funding a parking expansion project is determined to be subordinate to core operation improvements.

Faced with parking issues, many industry leaders are recognizing the advantages of eliminating parking from their balance sheets and focusing on their core business. This is accomplished through a development leaseback agreement that provides an alternative method of ownership, investment, financing and risk allocation to organizations that need parking, but face financial limitations. It is a financial tool that can allow a business or agency to expand parking operations, reduce long-term risk, and redirect capital funds from parking to core operations.

When a local agency enters into a development leaseback arrangement (thereby becoming the leasee), it may lease a facility from

[1] Rates shown are for the 1999 Property Tax Year

another public agency, a nonprofit corporation set up for that purpose, a bank or private leasing company or a joint powers authority. This lessor assigns all its rights in the leased parking facility to the lessee or trustee and acts as an intermediary between the local agency and the investors. The trick to leasing is finding someone who is willing to invest in the return from the agency's lease payments. This may be a single investor or, more frequently, a group of investors who have purchased undivided shares of the lease obligation (these shares are called "certificates of participation"). The lessee is given use of the property as though he owned it, without having capital invested in it.

The lease is typically a long-term "net" lease[2], with the leasee having the option of repurchasing the parking facility at a later time. The tenant, who previously owned the property, normally has the right at any time during the lease to buy back the parking facility, based upon a predetermined value or method of valuation. However, it is most advantageous to do so at the end of the lease, when the purchase price could be a nominal amount. Terms usually are for 15 to 20 years with options to include up to four five-year renewal periods.

Development leaseback agreements offer several advantages over other financing methods. First, an agency can obtain a parking facility without a large initial investment. Second, a lease can be used to spread the cost of a parking facility over a long period of time. Third, lease agreements do not add to agency debt. Fourth, in many cases voter approval is not a requirement as it would be with special taxes and some types of bonds. Fifth, leaseback deals can also provide the leasee with additional tax deductions, if applicable. The leasor benefits in that they will receive stable payments for a specified period of time.

Using lease financing is not without its drawbacks. The agreements necessary to finance public and private parking facilities are complicated, and involve numerous players such as bond counsel, underwriter, and trustee. Leasing, because of the uncertainties of the market and annual allocation of payments, may require higher debt payment than bonds to attract investors. Additionally, because leases are designed to be tax-exempt investments, their popularity and marketability is susceptible to changes in federal or state tax law. Also, it may be difficult to find creditworthy investors for some leases. Unlike

[2] A property lease in which the lessee agrees to pay all expenses which are normally associated with ownership, such as utilities, repairs, insurance and taxes. Also called a closed-end lease.

special assessments or taxes, a lease by itself does not generate funds on its own and requires another source of income, such as user fees, to retire any debt.

CREATION OF AN AUXILIARY ENTERPRISE FUND

Municipalities often create auxiliary enterprise funds. These resources are then used to fund parking project capital improvements. By definition, an auxiliary enterprise fund is self-sustaining. This means that the auxiliary enterprise fund generates a revenue stream that is sufficient to cover ongoing operating expenses and outstanding debt service obligations.

Auxiliary enterprise funds have their own operating budgets. This operating budget is separate from the municipality's general fund. These operating budgets include a stream of revenues collected from a variety of sources, including the following:

Municipalities

- Monthly leases
- Parking meter revenues
- Parking violation revenues
- Transient revenues

Although revenues generated by a new structured parking facility may not be sufficient to fund both the operating expenses and debt service of that particular improvement, revenues from other facilities and sources are pooled together. This revenue pool is often sufficient to generate an income stream that permits the solvency of the auxiliary enterprise.

Budgeted expenses include the operating costs associated with ongoing parking operations. This may include the labor costs associated with maintenance, security, parking enforcement, revenue collection, management and administration. Other operating costs may include utilities, supplies and equipment.

The lifespan of a parking structure can often range from 40-50 years or more. However, because the development costs for such a structure are capitalized over a 20-30-year period, there is significant useful life remaining after all debt is retired. This remaining life means that revenues may still be generated by this debt-free facility and that these revenues may be available to offset any new debt service payments that are required to fund new parking projects.

There are many parking system auxiliary enterprise funds in operation throughout the U.S. Following are some of these funds:

Municipalities

- City of Cedar Rapids, Iowa
- City of Lincoln, Nebraska
- City of Detroit, Michigan
- City of Tampa, Florida
- City of Denver, Colorado

CREATION OF A PARKING AUTHORITY

Parking authorities offer similar advantages gained through the creation of an auxiliary enterprise funds. One similarity is that parking authorities are self-supporting, meaning they generate operating revenues sufficient to cover both operating expenses and the debt service associated with any capital improvements. Parking authorities have many of the same responsibilities similar to a municipal or a university parking and transportation department. Following are some of the responsibilities of a parking authority:

- To hire and compensate staff and manage authority-owned facilities.
- To set parking rates and collect revenues from authority-owned facilities.
- To establish and manage a budget.
- To acquire property through negotiations and if necessary, through eminent domain.
- To acquire existing parking facilities.
- To contract with third parties for services and the sale of real property.
- To sue and be sued.
- To fund parking facility capital improvements.
- To design, construct and renovate parking facilities.
- To demolish and rebuild parking facilities.
- To develop and implement master plans for municipal parking.
- To define and implement parking management strategies aimed at improving traffic flow and parking conditions.
- To issue and retire debt.

Many states have enabling legislation that provides for the creation of a parking authority. Some states have legalized the formation of a parking authority in any city, regardless of size. Other states permit the establishment of a parking authority only in specific classes of cities. Following are some states that have parking authorities: Alabama, Alaska, California, Connecticut, Delaware, Florida, Maine, Maryland, Massachusetts, New Jersey, New York, Oklahoma, Pennsylvania, Tennessee, Virginia, Washington and West Virginia. New York and Pennsylvania are the states with the greatest number of parking authorities.

To create a parking authority, first, enabling legislation must be in place legalizing the formation. In most cases, this enabling legislation allows a city to create a parking authority. Once the parking authority is created, most laws provide for the municipality's mayor to appoint board members. The board of directors then governs a parking authority.

Parking authorities have several distinguishing characteristics that make them different from municipal and university parking departments, including the following:

- Parking authorities are empowered to issue their own debt.
- Parking authority debt does not count toward the debt capacity of the municipality or university.
- Parking authorities can take action without approval from city government; they can be completely independent and autonomous of city government.

Following are some of the most significant advantages and disadvantages of a parking authority:

Advantages

- Can issue own debt and not count against bonding capacity of city.
- Provides a structure with a sole focus on parking-related issues.
- Significantly reduced political pressures compared to city parking department.
- Not subject to annual budget considerations of city government or politics.
- Self-sustaining.

Disadvantages

- Redundant costs of management and administration.
- Higher rates of borrowing than a city issuing general obligation bonds.
- Authority has power that is beyond the immediate control of the citizens.

SECTION 5
TASK #4 – RECOMMENDATIONS

TASK #4 - RECOMMENDATIONS

As the Central Business District grows and adds developments to its core, it must grow and improve its parking system as well. Currently most of the study area has generous quantities of off-street parking. On-street parking is nearing capacity. To ensure that future developments do not negatively affect parking conditions, we recommend the City analyze each potential development to ensure adequate parking will be available upon its completion. This analysis includes taking into account any displaced or added parking, as well as new parking demand to the area.

It should be understood that a combination of the previously mentioned alternatives should be implemented. A combination of these strategies will positively improve parking shortages, perceptions and user friendliness of the system.

Transportation Demand Management tactics may also be considered as an alternative to parking problems. Though some of the tactics used to "calm" parking problems may not show immediate results, they should be considered into the City's Master Plan as growth and the re-vitalization of downtown continues. A discussion of Transportation Demand Management options is included in the Appendix and is intended more as an educational source about the options that would be considered in the future. Specific recommendations are not included in this appendix.

As population growth continues to place greater demand on transportation systems, strategies that focus on operations rather than increased capacity will become more and more a part of the solution to future problems. With this realization, many cities have begun to employ Transportation Demand Management (TDM) Programs to improve operations. The general idea of these programs is to reduce the number of automobile trips in a given area by offering incentives and by providing alternatives to driving alone.

In order to develop and market successful TDM Programs, defined areas, such as central business districts, create Transportation Management Associations (TMA). These public-private partnerships provide the institutional structure to develop and employ the strategies best suited for a particular area. Several opportunities exist for the funding of these organizations. Any project or program, such as this, that shows the potential to reduce congestion and, thereby, improve air quality is eligible for federal funding from the Congestion Mitigation Air Quality program. Another funding strategy, utilized by a majority of TMA's is the collection of membership dues.

These annual dues, based on the number of individuals a participating member employs, typically account for an average of one third of a TMA's revenue.[1]

Many of the various TDM strategies implemented by TMA's, focus on reducing work-related trips. These strategies provide incentives for individuals to choose different modes of transportation such as transit, carpooling, bicycles or walking when traveling to work. According to the FHWA and FTA National Transportation Library[2] with the right mix of TDM alternatives and strategies, an individual employment site can reduce vehicle trips by as much as 30 to 40 percent in relation to background conditions.

The goal of these recommendations is to improve the current system to increase the level of satisfaction the public receives as well as to begin the process of adding capacity to the parking supply. To improve the overall parking operations of the city, Walker makes the following recommendations:

[1] "Opportunities for Sustainable TMA Funding" December 2004

[2] Overview of Transportation Demand Management Measures" is one of several planning reports on Transportation Demand Management (TDM) provided by the Federal Highway Administration and the Federal Transit Administration. Other reports include "Implementing Effective Transportation Demand Management Measures: Inventory of Measures and Synthesis of Experience," and "A Guidance Manual for Implementing Effective Employer-based Transportation Demand Management Programs."

LOCALIZED PARKING DEFICITS

Parking conditions will change as development occurs in the future for the study area. Our analysis reviewed three growth scenarios and several future developments in the area and the impact they will have on added parking demand and changes to the parking supply. The study area as a whole continues to have an adequate parking supply, when the sum of all the blocks is totaled. However, some blocks may experience parking deficits or be at near-capacity situations depending on the type of special event that may be occurring.

Though parking as a whole in Rochester is adequate "hot spots" or parking shortages are identified in specific districts, sub groups and blocks. Those "hot spots" are identified below as well as their associated recommend improvements. Areas in the study area not identified as hot spot are recommended to be improved using other parking alternatives described later in the report. Those parking alternatives generally don't require that additional parking supply be created.

WEEKDAY

Four Corners (sub group 8 and 9) is identified as an area where current parking shortages are present. The parking deficit shows that the current supply shortages are from on-street and off-street public parking. The future parking adequacy for this district continues to show a parking deficit as private off-street parking also becomes inadequate. The construction of additional on-street spaces is recommended if street geometrics are appropriate in locations where short term parking is used regularly. An example of these locations would be the County Office Building or City Hall where visitors generally have short visits. The construction of additional surface or structured parking is recommended for private and public parking. The largest private parking inadequacy is located around the Civic Center and the City School Central Office.

Future inadequacy has also been identified due to the Midtown Development. The demolition and re-building of that block will impact the parking in this area. Due to the tight development density in this area, additional structured parking should be constructed to account for the re-development of this area.

The re-development of Renaissance Square (sub group 4) will also create an impact on parking. A shortage of off-street parking is

identified due to changes in the current land use. Additional surface or structured parking should be considered to meet the new demand generated by the development .

WEEKEND EVENING

Current and future on-street parking deficiencies in the entertainment districts are identified. Street geometrics do not suggest additional on-street parking is available to be built as a majority of the street system already allows for on-street parking. Furthermore, additional off-street parking is not recommended to be constructed. Parking patrons should be encouraged to use existing off-street parking rather than on-street parking to account for the high demand during the weekend evening. Alternatively, valet parking may be considered for venues such as the Little Theater and restaurants. A valet service would allow users to drop off and pick up their car directly in front of their destination and not have to park them selves off-street during evening event times.

PARKING GARAGE LOCATION RECOMMENDATIONS

The study area was evaluated to determine the locations for parking structures based on the current localized parking surplus and future parking deficits. As the city grows and parking demand increases, it is important to plan to grow parking with the expansion in order to continue to meet the growing parking demands. The existing parking supply will not satisfy demand in specific areas, as projected. Increases in demand may cause some blocks to experience additional shortages. Walking distance between 400' to 1,200' from the parking structure to the surrounding developments should be used when considering actual placement of a parking structure.

The City requested Walker Parking Consultants select sub groups where parking deficits are expected to occur. Actual parking garage locations were not selected as specific future developments were not identified. Optimal parking structure location on the block should be further evaluated at the time of consideration either by the City or private developer based on actual location and generation of development. Sub Groups where parking deficits are expected to occur include:

- Federal Business District (Sub Group 3)
- Four Corners (Sub Group 8)
- Four Corners (Sub Group 9)
- St. Paul Quarter (Sub Group 4)

ON-STREET RECOMMENDATIONS

1. Due to the high percentage of users utilizing on-street parking, increased and improved wayfinding (signage) is recommended to direct patrons to other parking options (parking lots and garages). Signage may even be targeted to specific end users (long-term parkers) to utilize off-street parking. Signage/wayfinding should be expanded to include pedestrian signs from the point of parking (garages and lots) to merchant/business locations.

2. No wholesale changes are recommended to the existing time limits for on-street parking. The goal of the on-street supply is to make short-term parking readily available. Patrons should be encouraged to utilize off-street parking for longer duration stays.

3. Upgrading parking meters in the downtown core area to keep parking revenue generated in the downtown area, to be used for parking improvement/marketing projects downtown only.

4. Implementation of a Parking Ambassador program, emphasizing a hospitality approach to enforcement of parking regulations. (ticketing and enforcement will still occur) (Refer to Alternatives analysis for details)

5. Re-evaluate location of bus loading zones on Main Street, consider placement of bus loading zones on perimeter streets that are less traveled or a consolidated transfer facility. Consolidation or relocation of the bus line allows for additional on-street parking as well as the improved visibility of street level businesses. If busses are re-located off main street additional on-street parking should be considered.

6. Further investigate the relocation of bus loading zones from Main Street to perimeter streets once Renaissance Square is operational should be conducted with RGRTA, as this could allow for additional on-street parking as well as improved visibility of street level businesses.

7. Detailed engineering/traffic studies should be conducted on streets to determine if additional on-street parking can be gained where not already present as deemed appropriate.

OFF-STREET RECOMMENDATIONS

1. Develop a long term repair and maintenance plan for each structured parking garage. The plans should address issues such as planning and budgeting for repairs and maintenance for each specific garage based on its current condition. Planning, budgeting and implementing for a repair and maintenance plan will lead to reduced overall capital investment for repairs if implemented properly.

2. As the City grows and continues to develop its parking assets, an important step is to continue to seek means of efficiency. On way to identify sources of improved efficiently of through an audit. Third party audits can identify areas of improvement financially and operationally.

3. Explore shared parking between different land uses for existing parking facilities. Private and public parking facilities should consider sharing existing supply in order to maximize use of available parking spaces. Educate planning officials and developers as the potential for shared parking and procedures for implementing it become available. Private parking operators may be able to collect additional revenue if parking is opened to the public during non peak private times (IE office building parking could be used for public parking during the evening hours).

4. Explore shuttle program downtown to include regular routes between parking locations and business generators. This will help offset any parking deficit in isolated block areas.

5. Wherever possible, paint walls and ceilings in parking garages white to increase feel of passive safety and comfort for patrons.

6. Signage/wayfinding should be expanded to include pedestrian signs from the point of parking (garages and lots) to merchant/business locations.

7. Evaluate current lighting resources, and update to new fixtures that are more energy efficient. Cost of update is usually paid for by energy savings over a short period of time.

8. Allow vending machines and advertisements in parking structures to capture alternative revenue, that may be used to off-set some capital improvements in the structures (such as painting or lighting).

PARKING PERCEPTION RECOMENDATIONS

1. Implement an overall public relations and marketing campaign for Parking Services. Coordination of this effort with existing city departments is encouraged. Parking should be promoted in various media outlets, coordinated with known special events.

2. Establish dedicated funds for Parking Services marketing efforts. Promote parking operations by disseminating facts about parking downtown (number of spaces available, low crime rates, etc.).

3. Develop a mission statement for Parking Services.

4. Evaluate parking rates, based on demand and location. Adjust rates to meet current market conditions.

5. Current parking operations office has inadequate waiting facilities for patrons. Expansion of waiting area or relocation of offices is recommended.

6. Improve current web site by incorporating intuitive commands. Incorporate the ability to search the web site by address, which will then give the user the closest parking available. Utilize mapping technology to have interactive maps, with clickable links to parking locations.

7. Incorporate more pictures on the web site that will help patrons orient themselves from parking destinations. Pictures would show what is currently visible from each direction of the parking facility. This will aid the patron in determining where they should turn to reach their destination.

8. Implementation of a Parking Ambassador program, emphasizing a hospitality approach to enforcement of parking regulations (ticketing and enforcement will still occur). This program could be incorporated with the current Downtown Special Services program.

9. Incorporate advertising in parking decks on walls, in elevators and on tickets and gate arms, as a means of raising funds to pay for improvements to decks (i.e. painting).

10. Allow businesses to "sponsor" levels in the parking decks. This will aid the parking patron in remembering where they park in the structure, and give businesses much needed exposure.

11. Consider a "first hour free" parking program in the parking structures as a way to entice parking patrons to utilize the parking structures.

APPENDIX A
FOCUS GROUPS

FOCUS GROUP NOTES

Group 1 – Large Institutions and Employers

Affiliation

MCC – Damon City Campus
Xerox Corporation
SUNY Brockport Metro Center
Eastman School of Music
Rochester Public Library
Catholic Family Center
Crowne Plaza Hotel
Hyatt Regency
Justice Office
Ex. Dir., Monroe Cty. Bar Assoc.
JPMorgan Case
Strong National Museum of Play
Excellus Blue Cross & Blue Shield
Convention Center

Comments:

- There may be a flaw in the scope, is it possible to expand the study area to outside of just the inner loop
- Civic Center is landlocked
- Private sector having control of running parking is a problem
- Parking for jurors is a big issue; jurors are currently on their own for parking
- Economic Development Opportunity is not favorable because of ambiguous parking rules
- Cost and location are key issues
- Potential employees are turning down job offers due to lack of parking
- People are not willing to walk any distance from parking space to destination
- Seems there is excess capacity in inner city garages
- No free transportation available
- Regulatory restrictions for private institutions shuttle
- Attorney's make up a huge population of the inner city businesses – if they leave due to parking no one will replace them
- City continues to ignore four corners
- City Hall and Hall of Justice have large amount of visitors and employees
- Crossroads garage is closed at 10 pm and on weekends
- Limited night/weekend parking
- Condition of existing parking is terrible
- Safety is a huge concern
- Handicap access is impossible
- Not enough turnover on parking meters
- Limited amount of short term parking

- What about the free parking Ft. Worth is doing – is that a possibility for Rochester
- Central Library
    - 700,000 visitors/year and increasing
    - Losing visitors due to parking
    - Cost for staff to park
    - Currently have 130 fte
    - Cleanliness
    - Snow removal
    - Safety
- Eastman school
    - Issues are lighting
    - Walking distance from space to destination
    - Lack of response from lot operators
    - Cost
    - Safety
    - Panhandling
    - Breaking and entering in cars
    - Mostly female students
- No redirection for other parking options if lots or spaces are full
- Statistics/number data – needs to be taken into consideration
- Safety is a big concern
- Signage is outdated (wayfinding is difficult)
- Private lot operators do not have to use ADA guidelines
- Waitlist for spaces isn't reliable and is inconsistent
- Tunnel
- Skyway/skywalk
- Special event demand
- A garage has been closed for over a year
- Visitors are not willing to pay for parking
- No free shuttle is a definite barrier
- Traffic flow and direction
- Sidewalk maintenance
- JP MorganChase
    - Incentives for tenants
    - Retention of employees/tenants

FLIP CHART NOTES

- Way finding needed especially for pedestrians
- Parking Opportunities Outside Study Area*
  (High Falls/South-West)
- Not Economic Development Opportunity
- Availability – Loss of Jobs
- Shared Parking – Religious Institutions
- No Transit / Shuttle (Regulatory Restrictions) – Remote Pkg. Access

- Perceptions – Fear/Safety; Congestion
- Location – Four Corners
- Sidewalk Maintenance
- Traffic Control/Enforcement
- Night Parking (Crossroads Closed)
- Management – Efficiency/Maintenance Closures
- Physical Condition – Safety Related Maintenance
- Landscaping
- Lighting
- Need For Short-Term Parking
- 10-15 Min
- 2 Hr
- Accessible Parking / On & Off Street
- Lack of Responsiveness – Operators
- Private Shared Parking Arrangements
- Conflicts with Events
- Break-Ins / Pan-Handling
- Loss Due to Construction – Ren. Square
- No Eyes on the Street @ Night
- Way Finding
- Parking
- Pedestrian Signs
- Friendly Signage
- Need for Systematic Data Collection
- Details – Employees / Visitors / Etc. / $ Analysis
- Special Event Demand
- Skywalk – Closed / B&L Tunnel
- Management – No Consistency
- Maintain Tenants / Jobs v. Creation
- Transit Fares
- Need to Look @ All Aspects
- Transit; Reserved Pkg; Safety
- Enforcement – Time / Location
- Pan-Handling
- Need for Security / Escort Service
- Security in Private Facilities
- Publicity Concerns – Perception v. Reality
- No Portability / Reciprocity
- Return Discount

Group 2 – Property Owners and Developers

Affiliation

Hahn Automotive, Crossroads,
Four Corners and Union Trust
Philippone Assoc.
Conifer Realty
Fitzhugh Associates
ReMax Realty Group
Norry
Buckingham Prop.
Ashley Group
Broadstone Real Estate
Christa
Blue Cross Arena / SMG

Comments:

- Study needs to look at traffic flow, policies, safety, etc
- Multiple surface lots but operators discourage long-term parking, short-term makes more revenue
- Building vacancy is currently high
- Pigeon hole parking used to exist
- Businesses have lost deals due to parking
- People do not want to walk at night for safety
- Seems to be availability for current spaces
- What about future growth
- What is reasonable walking distance? Depends on user
- Garages occupancy is higher, quicker in winter
- Daytime parking for office tenant/employees needs to be 8-6pm
- Businesses want to come downtown but they want cost effective parking
- Employee parking is important
- Not enough short-term parking (Main/Stone)
- Circulation is poor
- On-street parking that is enforced properly is necessary
- Developers are paying taxes so city employees can have free parking. They are paying 2-3x but do not get any parking for their own employees.
- City should consider more foot patrol for security
- More than adequate parking for High Falls but Kodak may take over some of it
- High Falls have informal agreement so that security will meet people and walk them to their cars
- Cost of parking compared to suburbia is high
- Short-term parking and on-street in East End is vital
- Validation program is too cumbersome
- Garages don't have a lot of incentive
- The city should not be in the 'parking lot business'
- Parking is hurting business
- City is not open to parking requests
- Physically not enough places to park, especially in Four Corners area
- What about mechanical parking

- 2 spaces per unit for residential should be standard
- What are requirements/prohibitions for residential on-street parking
- Public transportation is not a good mode here in Rochester, even poor families have one car
- People are commuting to suburbs for a lot of things
- Shared parking will not be popular in Rochester
- Would like to see parking ratios downtown in the study
- Demand/growth for residential and businesses needs to be considered
- Why not have city and city employees bussed in from more open lots (ex: Kodak lot)
- Perception of parking users is – you have to see your office from your space
- What about historical data? Public transportation used to be very popular
- Hours of operation for parking garage
- Event fees

1. Cost
    - Competition with suburban pkg.
    - #1 issue in attracting tenants
    - Consider tax overlay district to reduce out-of-pocket cash
2. Availability
    - Short term on & off-street
    - Day of week / time of year
    - Reserved parking → Subsidy city & cnty employees
    - Four Corner Area
    - Need for increased supply
    - Private development
    - Mechanical Pkg.
    - Residential
    - Pkg. ratios – compare to suburb / other cities
    - Hrs of Op.
3. Safety
    - Need for escort services
    - Need for active ground floor use / eyes on the street
    - Residential
    - Circulation/Traffic Flow

FLIP CHART NOTES

- Demand Short v. Long Term Parking
    - Lots serve short term – higher revenue
- Loss of Business-Availability of Pkg.
- Safety Concerns – Residential will Provide 24 hr Use
- Existing Vacancies
- Existing Supply / Future Supply
- Existing / Future Demand include Existing Vacancies
- Demand Fluctuation – Day of Week / Time of Year

- Weekday Peak – Employees / Clients / Visitors
- Competitive Advantage – Suburban Parking
- Availability – Short Term Parking
    - On-Street / Off-Street (1st Floor)
- Circulation – Needs Improvement
- Enforcement
- Pkg. Subsidy – City / County Employees
- Security Concern – Escort Services
- Most Vulnerable in Garage
- Cost – #1 Issue in Attracting Tenants
- Active Ground Floor Uses – Making Walk Attractive
- Validation Program Cumbersome
- Can Parking Be Used for Economic Development?
- No incentive to invest or maximize use of facility
- Tax Overlay Districts
- Should City be in Business of Parking?
- Need to Increase Supply
- Four Corners
- Private Development / Mechanical
- Residential Demand – 2 / Unit
- Visitor / Guest (0.5 / Unit)
- Limited Transit
- Shared Parking – Issues with Events / Demand Overlap
- Parking Ratios
- Downtown v. Suburb
- Satellite Parking – Lg. Users
- City / County
- Incentives to Encourage Walking
- Garage Operations – Hours
- Closed at Night
- Consistency in Operation
- Management Efficiency
- Event Fees

Group 3 – Entertainment

Affiliation

Eastman School of Music
Hochstein School of Music & Dance
Geva Theatre Center
The Little Theatre
Dinosaur BBQ
Tapas 177 Lounge
St. Paul Qtr. Bus. Assoc.

Temple Bar/East End BA

Comments:

- Eastman Theater parking, enforcement, safety. (Gibb St) Event parking, congestion in case of emergency. No tickets given during events. No Parking Zone. Weather issues.
- Lack of parking and developing more leads to less parking
- Garage security
- Lack of response for future demand/growth
- Businesses are losing out due to parking
- Maximize on-street parking – maybe angled parking?
- Lot built with public dollars, but somehow it's a private lot. Businesses are not allowed to use it. (Chestnut/Union)
- Peak times are weekends (Fri-Sun)
- Limited options for parking
- Zoning made to get rid of spaces
- Cost prohibitive at $5 – users would rather go to suburbs
- Broad and Pitkin – garage has approx 500 spaces, was supposed to let public use it but that has never occurred
- Enforcement isn't consistent – very selective
- Parking meters are open game after 6 p.m.
- Restrictions needs to be clearly marked
- 'No Parking' hoods confuse weekend patrons. (Water authority places hoods and they do not work on weekends)
- Parking trucks on bridge – staging for large events
- Patrons complain to businesses about hoods, fee increases, etc
- People don't want to walk – safety
- Can't consider expansion to business because parking is a big issue
- Towing in private lots
- Towing is $180 – unregulated (St. Paul Qtr is the worst)
- Uniform code sign – "Ok with fee" "Not Ok"
- Not enough capacity on West End – daytime is difficult
- Campaign for parking
- Perception of safety is not good in West End
- Security is an issue – panhandling
- Dishonest/illegal operation of lots
- Lack of regard to current problems
- Lack of response from parking authority, development group (Steve Golding)
- Short-tem parking on Court St near Dinosaur BBQ
- Demographic is changing a bit – becoming more empty nesters and higher income level
- Utilize empty lots/garages for $1-$2 then use a free shuttle service like Oregon
- The free shuttle service was great for homeless but route was too large and timing was too long to spend on shuttle
- No taxi's downtown because you're not supposed to hail taxi's

- Coming downtown for multiple things – i.e. dinner, theater, drinks, etc
- Talk to business associations to help resolve parking issues. – St. Paul, West End, etc
- A garage is closed, taxi cab lot isn't being utilized

1. Availability
   - Unused lots (need for shared pkg. – Nights/Weekends → St. Paul/East End
   - Loss to development
   - Daytime – mid-day Plymouth/Downtown
   - Zoning – loss of pkg.
   - Meter restrictions
   - Future demand – Ren. Square
   - Private parking in E. End – unavailable
2. Safety
   - Perception
   - Pan-handling – enforcement
   - Illegal lot use
   - Need for 24 hr activity
   - Break-in / staffing of lots
3. Enforcement
   - Towing
   - Inconsistent ticketing
4. Cost
   - Competition with suburbs
   - Inconsistent fee structures / policy

FLIP CHART NOTES

- Gibbs St. – Enforcement / Regulations / Evacuation Safety
- Illegal Pkg.
- Night – event
- Event Demand
- Overlap
- Traffic Management/Garage Security – Break-in / Theft
- Availability
- Loss to Development
- Lack of Response (City) to Pkg. Concerns
- Maximize On-Street Pkg.
- Shared Parking – Night / Weekend Use
- Behind M&T
- Peak-Fri / Sat / Sun Night
- Zoning – Loss of Parking
- Cost (Compare to Suburb)
- Enforcement
- Selective
- Inconsistent

- Towing (St. Paul)
- Temporary Meter Restrictions
- Weekend Impact
- Timing – Users Do meter bagging
- Staging Lg. Events – Broad/Court
- Loss of Pkg.
- Mentality – Proximity to Destination
- Safety – Perception
- Land Uses Need to Change-Mixed Use
- Daytime / Short-term
- Illegal Operation of Lots
- 10-15 Pkg. (Flasher Pkg.)
- Court Approach to South
- Inconsistent Fee Structure / Policy
- Reduced Rates
- Free Night Pkg.
- Future Demand Ren. Square
- Competition with suburbs
- Reduced Garage Rates
- Free Circulator Shuttle
- Multi-Purpose Trips – Trickle Effect with Loss of Patrons
- Need to Reach Out to Business Assoc.
- Unique Issues – Neighborhood

APPENDIX B
DATA COLLECTION

CURRENT PARKING SUPPLY

Current Parking Supply– Sub Group 1

Off-Street						
Public Lot	Public Garage	Private Lot	Private Garage	Subtotal	On-Street	Total Supply
0	764	21	0	785	30	815

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 2

Off-Street						
Public Lot	Public Garage	Private Lot	Private Garage	Subtotal	On-Street	Total Supply
651	0	396	0	1,047	69	1,116

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 3

Off-Street						
Public Lot	Public Garage	Private Lot	Private Garage	Subtotal	On-Street	Total Supply
470	1,595	839	0	2,904	111	3,015

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 4

Off-Street						
Public Lot	Public Garage	Private Lot	Private Garage	Subtotal	On-Street	Total Supply
101	0	492	0	593	101	694

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 5

Off-Street						
Public Lot	Public Garage	Private Lot	Private Garage	Subtotal	On-Street	Total Supply
360	1,100	25	0	1,485	85	1,570

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 6

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
452	376	157	624	1,609	112	1,721

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 7

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
81	0	864	0	945	177	1,122

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 8

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
147	0	499	0	646	89	735

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 9

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
866	1,000	108	2	1,976	160	2,136

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 10

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
0	1,659	1,042	390	3,091	152	3,243

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 11

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
0	1,844	80	80	2,004	76	2,080

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 12

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
206	1,999	1,191	0	3,396	271	3,667

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 13

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
110	0	608	0	718	81	799

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 14

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
109	1,850	622	0	2,581	71	2,652

Walker Parking Consultants, 2007

Current Parking Supply– Sub Group 15

Public Lot	Public Garage	Off-Street Private Lot	Private Garage	Subtotal	On-Street	Total Supply
505	0	203	181	889	52	941

Walker Parking Consultants, 2007

Current Parking Supply– Blocks 1 - 35

Block #	Public Lot	Public Garage	Private Lot	Private Garage	Off-Street Supply	On-Street Supply	Total Supply
1	0	764	21	0	785	30	815
2	0	0	84	0	84	0	84
3	30	0	84	0	114	34	148
4	60	0	115	0	175	27	202
5	180	0	230	0	410	19	429
6	58	0	39	0	97	19	116
7	96	0	273	0	369	26	395
8	497	0	0	0	497	24	521
9	200	0	43	0	243	5	248
10	0	991	38	0	1,029	17	1,046
11	0	604	329	0	933	9	942
12	0	0	92	0	92	21	113
13	0	0	249	0	249	61	310
14	68	0	86	0	154	8	162
15	0	500	25	0	525	35	560
16	101	0	151	0	252	19	271
17	66	0	30	0	96	30	126
18	70	0	22	0	92	23	115
19	360	0	0	0	360	27	387
20	173	376	0	624	1,173	31	1,204
21	75	0	19	0	94	20	114
22	0	600	0	0	600	16	616
23	0	0	0	0	0	7	7
24	0	0	63	0	63	29	92
25	0	0	230	0	230	11	241
26	0	0	117	0	117	0	117
27	81	0	150	0	231	81	312
28	0	0	56	0	56	46	102
29	0	0	63	0	63	4	67
30	0	0	185	0	185	6	191
31	0	0	102	0	102	22	124
32	147	0	0	0	147	17	164
33	237	0	25	0	262	11	273
34	126	0	0	0	126	45	171
35	70	0	47	0	117	4	121

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Current Parking Supply– Blocks 36 - 70

Block #	Public Lot	Public Garage	Private Lot	Private Garage	Off-Street Supply	On-Street Supply	Total Supply
36	0	0	193	0	193	31	224
37	0	0	204	0	204	19	223
38	33	1000	36	2	1,071	53	1,124
39	0	0	0	0	0	19	19
40	400	0	0	0	400	28	428
41	0	0	20	0	20	32	52
42	0	1659	0	0	1,659	6	1,665
43	0	0	0	390	390	48	438
44	0	1844	0	0	1,844	50	1,894
45	0	0	80	0	80	10	90
46	0	0	0	80	80	8	88
47	0	0	8	0	8	57	65
48	0	0	1014	0	1,014	9	1,023
49	0	0	0	0	0	8	8
50	0	0	0	0	0	13	13
51	0	0	35	0	35	14	49
52	0	1282	10	0	1,292	12	1,304
53	0	0	156	0	156	35	191
54	77	0	31	0	108	7	115
55	0	0	0	0	0	49	49
56	129	0	49	0	178	33	211
57	110	0	338	0	448	61	509
58	0	0	383	0	383	43	426
59	0	650	284	0	934	39	973
60	0	0	270	0	270	20	290
61	0	67	243	0	310	26	336
62	0	0	0	0	0	14	14
63	0	0	5	0	5	12	17
64	0	0	0	0	0	29	29
65	0	0	79	0	79	0	79
66	0	0	0	0	0	15	15
67	0	0	184	181	365	33	398
68	109	0	277	0	386	16	402
69	0	1850	261	0	2,111	0	2,111
70	505	0	19	0	524	4	528

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EFFECTIVE SUPPLY

Effective Supply– Sub Group 1

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
764	0.90	688	21	0.95	20	30	0.85	26	734

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Effective Supply– Sub Group 2

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
651	0.90	585	396	0.95	376	69	0.85	58	1,019

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Effective Supply– Sub Group 3

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
2,065	0.90	1,859	839	0.95	798	111	0.85	94	2,751

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Effective Supply– Sub Group 4

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
101	0.90	91	492	0.95	467	101	0.85	86	644

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Effective Supply– Sub Group 5

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1,460	0.90	1,314	25	0.95	24	85	0.85	73	1,411

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Effective Supply– Sub Group 6

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
828	0.90	745	781	0.95	743	112	0.85	96	1,584

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Effective Supply– Sub Group 7

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
81	0.90	73	864	0.95	822	177	0.85	150	1,045

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Effective Supply– Sub Group 8

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
147	0.90	132	499	0.95	474	89	0.85	75	681

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Effective Supply– Sub Group 9

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1,796	0.90	1,616	63	0.95	60	156	0.85	132	1,808

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Effective Supply– Sub Group 10

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1,659	0.90	1,493	1,432	0.95	1,361	152	0.85	129	2,983

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Effective Supply– Sub Group 11

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1,844	0.90	1,660	160	0.95	152	76	0.85	66	1,878

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Effective Supply– Sub Group 12

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
2,205	0.90	1,984	1,191	0.95	1,132	271	0.85	231	3,347

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Effective Supply– Sub Group 13

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
110	0.90	99	608	0.95	578	81	0.85	69	746

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Effective Supply– Sub Group 14

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1,959	0.90	1,763	622	0.95	591	71	0.85	61	2,415

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Effective Supply– Sub Group 15

Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	Total On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
505	0.90	455	384	0.95	365	52	0.85	44	864

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Effective Supply– Blocks 1 - 35

Block #	Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1	764	0.90	688	21	0.95	20	30	0.85	26	734
2	0	0.90	0	84	0.95	80	0	0.85	0	80
3	30	0.90	27	84	0.95	80	34	0.85	29	136
4	60	0.90	54	115	0.95	109	27	0.85	23	186
5	180	0.90	162	230	0.95	219	19	0.85	16	397
6	58	0.90	52	39	0.95	37	19	0.85	16	105
7	96	0.90	86	273	0.95	259	26	0.85	22	367
8	497	0.90	447	0	0.95	0	24	0.85	20	467
9	200	0.90	180	43	0.95	41	5	0.85	4	225
10	991	0.90	892	38	0.95	36	17	0.85	14	942
11	604	0.90	544	329	0.95	313	9	0.85	8	865
12	0	0.90	0	92	0.95	87	21	0.85	18	105
13	0	0.90	0	249	0.95	237	61	0.85	52	289
14	68	0.90	61	86	0.95	82	8	0.85	7	150
15	500	0.90	450	25	0.95	24	35	0.85	30	504
16	101	0.90	91	151	0.95	143	19	0.85	16	250
17	66	0.90	59	30	0.95	29	30	0.85	26	114
18	70	0.90	63	22	0.95	21	23	0.85	20	104
19	360	0.90	324	0	0.95	0	27	0.85	23	347
20	549	0.90	494	624	0.95	593	31	0.85	26	1,113
21	75	0.90	68	19	0.95	18	20	0.85	17	103
22	600	0.90	540	0	0.95	0	16	0.85	14	554
23	0	0.90	0	0	0.95	0	7	0.85	6	6
24	0	0.90	0	63	0.95	60	29	0.85	25	85
25	0	0.90	0	230	0.95	219	11	0.85	9	228
26	0	0.90	0	117	0.95	111	0	0.85	0	111
27	81	0.90	73	150	0.95	143	81	0.85	69	285
28	0	0.90	0	56	0.95	53	46	0.85	39	92
29	0	0.90	0	63	0.95	60	4	0.85	3	63
30	0	0.90	0	185	0.95	176	6	0.85	5	181
31	0	0.90	0	102	0.95	97	22	0.85	19	116
32	147	0.90	132	0	0.95	0	17	0.85	14	146
33	237	0.90	213	25	0.95	24	11	0.85	9	246
34	126	0.90	113	0	0.95	0	45	0.85	38	151
35	70	0.90	63	47	0.95	45	4	0.85	3	111

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Effective Supply– Blocks 36 - 70

Block #	Off-Street Public Supply	Effective Supply Factor	Effective Supply	Off-Street Private Supply	Effective Supply Factor	Effective Supply	On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
36	0	0.90	0	193	0.95	183	31	0.85	26	209
37	0	0.90	0	204	0.95	194	19	0.85	16	210
38	1,033	0.90	930	38	0.95	36	53	0.85	45	1,011
39	0	0.90	0	0	0.95	0	19	0.85	16	16
40	400	0.90	360	0	0.95	0	28	0.85	24	384
41	0	0.90	0	20	0.95	19	32	0.85	27	46
42	1,659	0.90	1,493	0	0.95	0	6	0.85	5	1,498
43	0	0.90	0	390	0.95	371	48	0.85	41	412
44	1,844	0.90	1,660	0	0.95	0	50	0.85	43	1,703
45	0	0.90	0	80	0.95	76	10	0.85	9	85
46	0	0.90	0	80	0.95	76	8	0.85	7	83
47	0	0.90	0	8	0.95	8	57	0.85	48	56
48	0	0.90	0	1,014	0.95	963	9	0.85	8	971
49	0	0.90	0	0	0.95	0	8	0.85	7	7
50	0	0.90	0	0	0.95	0	13	0.85	11	11
51	0	0.90	0	35	0.95	33	14	0.85	12	45
52	1,282	0.90	1,154	10	0.95	10	12	0.85	10	1,174
53	0	0.90	0	156	0.95	148	35	0.85	30	178
54	77	0.90	69	31	0.95	29	7	0.85	6	104
55	0	0.90	0	0	0.95	0	49	0.85	42	42
56	129	0.90	116	49	0.95	47	33	0.85	28	191
57	110	0.90	99	338	0.95	321	61	0.85	52	472
58	0	0.90	0	383	0.95	364	43	0.85	37	401
59	650	0.90	585	284	0.95	270	39	0.85	33	888
60	0	0.90	0	270	0.95	257	20	0.85	17	274
61	67	0.90	60	243	0.95	231	26	0.85	22	313
62	0	0.90	0	0	0.95	0	14	0.85	12	12
63	0	0.90	0	5	0.95	5	12	0.85	10	15
64	0	0.90	0	0	0.95	0	29	0.85	25	25
65	0	0.90	0	79	0.95	75	0	0.85	0	75
66	0	0.90	0	0	0.95	0	15	0.85	13	13
67	0	0.90	0	365	0.95	347	33	0.85	28	375
68	109	0.90	98	277	0.95	263	16	0.85	14	375
69	1,850	0.90	1,665	261	0.95	248	0	0.85	0	1,913
70	505	0.90	455	19	0.95	18	4	0.85	3	476

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CURRENT PARKING OCCUPANCY

CURRENT ON-STREET OCCUPANCY

On-Street Weekday Occupancy- Blocks 1 - 35

Block #	Supply	10:00 AM	Percentage	2:00 PM	Percentage
1	30	0	0%	35	117%
2	0	0	0%	0	0%
3	34	20	59%	29	85%
4	27	19	70%	19	70%
5	19	9	47%	9	47%
6	19	11	58%	11	58%
7	26	22	85%	22	85%
8	24	16	67%	23	96%
9	5	18	360%	14	280%
10	17	26	153%	20	118%
11	9	9	100%	13	144%
12	21	18	86%	16	76%
13	61	37	61%	35	57%
14	8	5	63%	5	63%
15	35	0	0%	21	60%
16	19	18	95%	14	74%
17	30	14	47%	10	33%
18	23	5	22%	9	39%
19	27	9	33%	13	48%
20	31	12	39%	8	26%
21	20	6	30%	9	45%
22	16	6	38%	6	38%
23	7	6	86%	2	29%
24	29	3	10%	1	3%
25	11	3	27%	1	9%
26	0	0	0%	3	300%
27	81	15	19%	28	35%
28	46	31	67%	29	63%
29	4	1	25%	4	100%
30	6	6	100%	4	67%
31	22	12	55%	13	59%
32	17	13	76%	16	94%
33	11	14	127%	15	136%
34	45	39	87%	39	87%
35	4	6	150%	7	175%

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On-Street Weekday Occupancy- Blocks 36 - 70

Block #	Supply	10:00 AM	Percentage	2:00 PM	Percentage
36	31	11	35%	11	35%
37	19	12	63%	15	79%
38	53	50	94%	40	75%
39	19	19	100%	18	95%
40	28	19	68%	21	75%
41	32	0	0%	16	50%
42	6	6	100%	6	100%
43	48	17	35%	26	54%
44	50	0	0%	17	34%
45	10	0	0%	0	0%
46	8	0	0%	0	0%
47	57	0	0%	54	95%
48	9	15	167%	20	222%
49	8	2	25%	3	38%
50	13	16	123%	12	92%
51	14	15	107%	12	86%
52	12	0	0%	4	33%
53	35	14	40%	22	63%
54	7	0	0%	3	43%
55	49	13	27%	22	45%
56	33	12	36%	7	21%
57	61	30	49%	32	52%
58	43	20	47%	26	60%
59	39	23	59%	28	72%
60	20	10	50%	13	65%
61	26	20	77%	18	69%
62	14	14	100%	11	79%
63	12	7	58%	13	108%
64	29	7	24%	12	41%
65	0	2	200%	3	300%
66	15	15	100%	14	93%
67	33	17	52%	13	39%
68	16	13	81%	17	106%
69	0	0	0%	0	0%
70	4	1	25%	1	25%

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On-Street Weekend Evening Occupancy

Block #	Supply	8:00 PM	Percentage
12	21	29	138%
13	61	39	64%
15	35	19	54%
16	19	20	105%
19	27	7	26%
21	20	11	55%
26	0	0	0%
30	6	2	33%
45	10	0	0%
46	8	7	88%
50	13	28	215%
51	14	22	157%
52	12	7	58%
53	35	42	0%
54	7	7	100%
55	49	52	106%
56	33	39	118%
57	61	50	82%
58	43	49	114%
59	39	26	67%
60	20	29	145%
61	26	22	85%

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CURRENT OFF-STREET PRIVATE OCCUPANCY

Off-Street Private Weekday Occupancy- Blocks 1 - 35

Block #	Supply	10:00 AM	Percentage	2:00 PM	Percentage
1	21	0	0%	9	43%
2	84	69	82%	69	82%
3	84	13	15%	46	55%
4	115	110	96%	107	93%
5	230	150	65%	146	63%
6	39	40	103%	34	87%
7	273	193	71%	224	82%
8	0	0	0%	0	0%
9	43	30	70%	21	49%
10	38	20	53%	19	50%
11	329	255	78%	236	72%
12	92	46	50%	43	47%
13	249	197	79%	176	71%
14	86	58	67%	47	55%
15	25	0	0%	13	52%
16	151	129	85%	13	9%
17	30	25	83%	28	93%
18	22	18	82%	18	82%
19	0	0	0%	0	0%
20	624	206	33%	182	29%
21	19	11	58%	10	53%
22	0	0	0%	0	0%
23	0	0	0%	0	0%
24	63	37	59%	32	51%
25	230	180	78%	180	78%
26	117	85	73%	81	69%
27	150	70	47%	60	40%
28	56	6	11%	4	7%
29	63	10	16%	8	13%
30	185	51	28%	44	24%
31	102	88	86%	100	98%
32	0	0	0%	0	0%
33	25	23	92%	23	92%
34	0	0	0%	0	0%
35	47	60	128%	60	128%

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Off-Street Private Weekday Occupancy- Blocks 36 - 70

Block #	Supply	10:00 AM	Percentage	2:00 PM	Percentage
36	193	200	104%	180	93%
37	204	193	95%	196	96%
38	38	26	68%	31	82%
39	0	0	0%	0	0%
40	0	0	0%	0	0%
41	20	10	50%	16	80%
42	0	0	0%	0	0%
43	390	343	88%	332	85%
44	0	0	0%	0	0%
45	80	60	75%	47	59%
46	80	40	50%	40	50%
47	8	7	88%	7	88%
48	1,014	811	80%	908	90%
49	0	0	0%	0	0%
50	0	0	0%	0	0%
51	35	15	43%	18	51%
52	10	3	30%	5	50%
53	156	36	23%	56	36%
54	31	12	39%	16	52%
55	0	0	0%	0	0%
56	49	24	49%	31	63%
57	338	124	37%	127	38%
58	383	199	52%	187	49%
59	284	164	58%	172	61%
60	270	115	43%	106	39%
61	243	170	70%	185	76%
62	0	0	0%	0	0%
63	5	4	80%	4	80%
64	0	0	0%	0	0%
65	79	51	65%	51	65%
66	0	0	0%	0	0%
67	365	148	41%	133	36%
68	277	194	70%	194	70%
69	261	145	56%	121	46%
70	19	15	79%	13	68%

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Off-Street Private Weekend Evening Occupancy

Block #	Supply	8:00 PM	Percentage
12	92	92	100%
13	249	80	32%
15	25	2	8%
16	151	16	11%
19	0	0	0%
21	19	2	11%
26	117	3	3%
30	185	53	29%
45	80	16	20%
46	80	0	0%
50	0	0	0%
51	35	7	20%
52	10	1	10%
53	156	71	46%
54	31	20	65%
55	0	0	0%
56	49	0	0%
57	338	113	33%
58	383	57	15%
59	284	22	8%
60	270	261	97%
61	243	0	0%

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CURRENT OFF-STREET PUBLIC OCCUPANCY

Off-Street Public Weekday Occupancy- Blocks 1 - 35

Block #	Supply	10:00 AM	Percentage	2:00 PM	Percentage
1	764	329	43%	361	47%
2	0	0	0%	0	0%
3	30	30	100%	18	60%
4	60	53	88%	30	50%
5	180	141	78%	127	71%
6	58	32	55%	26	45%
7	96	96	100%	52	54%
8	497	475	96%	497	100%
9	200	101	51%	78	39%
10	991	708	71%	686	69%
11	604	530	88%	549	91%
12	0	0	0%	0	0%
13	0	0	0%	0	0%
14	68	59	87%	51	75%
15	500	160	32%	159	32%
16	101	51	50%	42	42%
17	66	27	41%	33	50%
18	70	32	46%	31	44%
19	360	123	34%	106	29%
20	549	192	35%	166	30%
21	75	61	81%	54	72%
22	600	377	63%	321	54%
23	0	0	0%	0	0%
24	0	0	0%	0	0%
25	0	0	0%	0	0%
26	0	0	0%	0	0%
27	81	45	56%	69	85%
28	0	0	0%	0	0%
29	0	0	0%	0	0%
30	0	0	0%	0	0%
31	0	0	0%	0	0%
32	147	147	100%	108	73%
33	237	235	99%	224	95%
34	126	126	100%	102	81%
35	70	66	94%	56	80%

Walker Parking Consultants, 2007

Off-Street Public Weekday Occupancy- Blocks 36 - 70

Block #	Supply	10:00 AM	Percentage	2:00 PM	Percentage
36	0	0	0%	0	0%
37	0	0	0%	0	0%
38	1,033	807	78%	800	77%
39	0	0	0%	0	0%
40	400	273	68%	199	50%
41	0	0	0%	0	0%
42	1,659	355	21%	334	20%
43	0	0	0%	0	0%
44	1,844	1183	64%	1176	64%
45	0	0	0%	0	0%
46	0	0	0%	0	0%
47	0	0	0%	0	0%
48	0	0	0%	0	0%
49	0	0	0%	0	0%
50	0	0	0%	0	0%
51	0	0	0%	0	0%
52	1,282	283	22%	304	24%
53	0	0	0%	0	0%
54	77	60	78%	53	69%
55	0	0	0%	0	0%
56	129	51	40%	56	43%
57	110	46	42%	43	39%
58	0	0	0%	0	0%
59	650	0	0%	0	0%
60	0	0	0%	0	0%
61	67	64	96%	60	90%
62	0	0	0%	0	0%
63	0	0	0%	0	0%
64	0	0	0%	0	0%
65	0	0	0%	0	0%
66	0	0	0%	0	0%
67	0	3	300%	3	300%
68	109	98	90%	97	89%
69	1,850	1719	93%	1719	93%
70	505	138	27%	173	34%

Walker Parking Consultants, 2007

Off-Street Public Weekend Evening Occupancy

Block #	Supply	8:00 PM	Percentage
12	0	0	0%
13	0	0	0%
15	500	112	22%
16	101	26	26%
19	360	7	2%
21	75	26	35%
26	0	0	0%
30	0	0	0%
45	0	0	0%
46	0	0	0%
50	0	0	0%
51	0	0	0%
52	1,282	0	0%
53	0	0	0%
54	77	19	25%
55	0	0	0%
56	129	4	3%
57	110	85	77%
58	0	0	0%
59	650	0	0%
60	0	0	0%

Walker Parking Consultants, 2007

CURRENT OCCUPANCY BY SUB GROUP

Current Parking Occupancy– Sub Group 1

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	30	0	0%	35	117%
Off-Street Public	764	329	43%	361	47%
Off-Street Private	21	0	0%	9	43%
Total	815	329	40%	405	50%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 2

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	69	49	71%	56	81%
Off-Street Public	651	603	93%	575	88%
Off-Street Private	396	302	76%	327	83%
Total	1,116	954	85%	958	86%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 3

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	111	101	91%	104	94%
Off-Street Public	2,065	1,563	76%	1,488	72%
Off-Street Private	839	578	69%	575	69%
Total	3,015	2,242	74%	2,167	72%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 4

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	101	73	72%	65	64%
Off-Street Public	101	51	50%	42	42%
Off-Street Private	492	372	76%	232	47%
Total	694	496	71%	339	49%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 5

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	85	21	25%	42	49%
Off-Street Public	1,460	660	45%	586	40%
Off-Street Private	25	0	0%	13	52%
Total	1,570	681	43%	641	41%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 6

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	112	42	38%	41	37%
Off-Street Public	828	371	45%	335	40%
Off-Street Private	781	318	41%	285	36%
Total	1,721	731	42%	661	38%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 7

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	177	59	33%	70	40%
Off-Street Public	81	45	56%	69	85%
Off-Street Private	864	439	51%	409	47%
Total	1,122	543	48%	548	49%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 8

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	89	48	54%	55	62%
Off-Street Public	147	147	100%	108	73%
Off-Street Private	499	481	96%	476	95%
Total	735	676	92%	639	87%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 9

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	160	147	92%	140	88%
Off-Street Public	1,866	1,507	81%	1,381	74%
Off-Street Private	109	3	3%	3	3%
Total	2,135	1,657	78%	1,524	71%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 10

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	152	38	25%	122	80%
Off-Street Public	1,659	355	21%	334	20%
Off-Street Private	1,042	828	79%	931	89%
Total	2,853	1,221	43%	1,387	49%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 11

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	76	2	3%	20	26%
Off-Street Public	1,844	1,183	0%	1,176	1
Off-Street Private	160	100	63%	87	54%
Total	2,080	1,285	62%	1,283	62%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 12

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	271	117	43%	142	52%
Off-Street Public	2,205	458	21%	473	21%
Off-Street Private	1,191	623	52%	670	56%
Total	3,667	1,198	33%	1,285	35%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 13

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	81	40	49%	45	56%
Off-Street Public	110	46	42%	43	39%
Off-Street Private	608	239	39%	233	38%
Total	799	325	41%	321	40%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 14

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	13	29	223%	32	246%
Off-Street Public	1,959	1,817	93%	1,816	93%
Off-Street Private	622	394	63%	370	59%
Total	2,594	2,240	86%	2,218	86%

Walker Parking Consultants, 2007

Current Parking Occupancy– Sub Group 15

Type	Supply	10:00 AM	Percentage	2:00 PM	Percentage
On-Street	52	33	63%	28	54%
Off-Street Public	505	141	28%	176	35%
Off-Street Private	384	163	42%	146	38%
Total	941	337	36%	350	37%

Walker Parking Consultants, 2007

CURRENT PARKING ADEQUACY

CURRENT PARKING ADEQUACY

Current Weekday Parking Adequacy - Blocks 1 - 35

Block #	Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
1	359	20	26	405	45%
2	0	11	0	11	86%
3	(3)	67	9	73	46%
4	1	(1)	4	4	98%
5	21	69	7	97	76%
6	20	(3)	5	22	79%
7	(10)	66	0	56	85%
8	(28)	0	4	(24)	105%
9	79	11	(14)	76	66%
10	184	16	(12)	188	80%
11	14	58	(1)	71	92%
12	0	41	0	41	61%
13	0	40	15	55	81%
14	2	24	2	28	81%
15	290	24	30	344	32%
16	40	14	(2)	52	79%
17	32	4	12	48	58%
18	31	3	15	49	53%
19	201	0	14	215	38%
20	302	387	14	703	37%
21	7	7	11	25	76%
22	163	0	8	171	69%
23	0	0	0	0	100%
24	0	23	22	45	47%
25	0	39	6	45	80%
26	0	26	0	26	77%
27	28	73	54	155	46%
28	0	47	8	55	40%
29	0	50	2	52	17%
30	0	125	(1)	124	31%
31	0	9	7	16	86%
32	(15)	0	1	(14)	110%
33	(22)	1	(5)	(26)	111%
34	(13)	0	(1)	(14)	109%
35	(3)	(15)	(3)	(21)	119%

Walker Parking Consultants, 2007

Current Weekday Parking Adequacy - Blocks 36 – 70

Block #	Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
36	0	(17)	15	(2)	101%
37	0	1	4	5	98%
38	123	10	(5)	128	87%
39	0	0	(3)	(3)	119%
40	87	0	5	92	76%
41	0	9	27	36	22%
42	1,138	0	(1)	1,137	24%
43	0	28	24	52	87%
44	477	0	43	520	69%
45	0	16	9	25	71%
46	0	36	7	43	48%
47	0	1	48	49	13%
48	0	152	(7)	145	85%
49	0	0	5	5	29%
50	0	0	(5)	(5)	145%
51	0	18	(3)	15	67%
52	871	7	10	888	24%
53	0	112	16	128	28%
54	9	17	6	32	69%
55	0	0	29	29	31%
56	65	23	16	104	46%
57	53	197	22	272	42%
58	0	165	17	182	55%
59	585	106	10	701	21%
60	0	142	7	149	46%
61	(4)	61	2	59	81%
62	0	0	(2)	(2)	117%
63	0	1	3	4	73%
64	0	0	18	18	28%
65	0	24	(2)	22	71%
66	0	0	(2)	(2)	115%
67	(3)	199	11	207	45%
68	0	69	1	70	81%
69	(54)	103	0	49	97%
70	317	3	2	322	32%

Walker Parking Consultants, 2007

Current Weekend Evening Adequacy

Block #	Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
12	0	(5)	(11)	(16)	115%
13	0	157	13	170	41%
15	338	22	11	371	26%
16	65	127	(4)	188	25%
19	317	0	16	333	4%
21	42	16	6	64	38%
26	0	108	0	108	3%
30	0	123	3	126	30%
45	0	60	9	69	19%
46	0	76	0	76	8%
50	0	0	(17)	(17)	255%
51	0	26	(10)	16	64%
52	1,154	9	3	1,166	1%
53	0	77	(12)	65	63%
54	50	9	(1)	58	44%
55	0	0	(10)	(10)	124%
56	112	47	(11)	148	23%
57	14	208	2	224	53%
58	0	307	(12)	295	26%
59	585	248	7	840	5%
60	0	(4)	(12)	(16)	106%
61	60	231	0	291	7%

Walker Parking Consultants, 2007

CURRENT PARKING ADEQUACY BY SUB GROUP

Current Weekday Adequacy – Sub Group 1

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
359	20	26	405	45%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 2

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
(18)	74	9	65	355%

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Current Weekday Adequacy – Sub Group 3

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
296	220	(7)	509	458%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 4

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
40	95	13	148	221%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 5

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
654	24	52	730	239%

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Current Weekday Adequacy – Sub Group 6

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
374	425	54	853	305%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 7

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
28	383	91	502	339%

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Current Weekday Adequacy – Sub Group 8

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
(15)	(7)	27	5	394%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 9

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
172	(4)	(12)	156	621%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 10

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
1,138	190	91	1,419	231%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 11

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
477	52	64	593	217%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 12

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
1,526	509	103	2,138	422%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 13

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
53	339	29	421	88%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 14

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
(54)	197	18	161	467%

Walker Parking Consultants, 2007

Current Weekday Adequacy – Sub Group 15

Off-Street Public Adequacy	Off-Street Private Adequacy	On-Street Adequacy	Total Adequacy	Percentage Occupied
314	202	11	527	193%

Walker Parking Consultants, 2007

FUTURE PARKING OCCUPANCY

FUTURE ON-STREET OCCUPANCY

Future On-Street Weekday Occupancy- 3% Growth for 5 Years- Blocks 1 - 35

		Current Peak		5-Year Projection (5% Growth Rate)	
Block #	Supply	10:00 AM	Percentage	Demand	Percentage
1	30	0	0%	0	0%
2	0	0	0%	0	0%
3	34	20	59%	25	74%
4	27	19	70%	24	89%
5	19	9	47%	9	47%
6	19	11	58%	16	84%
7	26	22	85%	27	104%
8	24	16	67%	21	88%
9	5	18	360%	23	460%
10	17	26	153%	32	188%
11	9	9	100%	9	100%
12	21	18	86%	23	110%
13	61	37	61%	47	77%
14	8	5	63%	5	63%
15	35	0	0%	0	0%
16	19	18	95%	23	121%
17	30	14	47%	19	63%
18	23	5	22%	5	22%
19	27	9	33%	9	33%
20	31	12	39%	17	55%
21	20	6	30%	6	30%
22	16	6	38%	6	38%
23	7	6	86%	6	86%
24	29	3	10%	3	10%
25	11	3	27%	3	27%
26	0	0	0%	0	0%
27	81	15	19%	20	25%
28	46	31	67%	41	89%
29	4	1	25%	1	25%
30	6	6	100%	6	100%
31	22	12	55%	17	77%
32	17	13	76%	18	106%
33	11	14	127%	19	173%
34	45	39	87%	49	109%
35	4	6	150%	6	150%

Walker Parking Consultants, 2007

Future On-Street Weekday Occupancy- 3% Growth for 5 Years- Blocks 36 - 70

		Current Peak		5-Year Projection (5% Growth Rate)	
Block #	Supply	10:00 AM	Percentage	Demand	Percentage
36	31	11	35%	16	52%
37	19	12	63%	17	89%
38	53	50	94%	65	123%
39	19	19	100%	24	126%
40	28	19	68%	24	86%
41	32	0	0%	0	0%
42	6	6	100%	6	100%
43	48	17	35%	22	46%
44	50	0	0%	0	0%
45	10	0	0%	0	0%
46	8	0	0%	0	0%
47	57	0	0%	0	0%
48	9	15	167%	20	222%
49	8	2	25%	2	25%
50	13	16	123%	21	162%
51	14	15	107%	20	143%
52	12	0	0%	0	0%
53	35	14	40%	19	54%
54	7	0	0%	0	0%
55	49	13	27%	18	37%
56	33	12	36%	17	52%
57	61	30	49%	40	66%
58	43	20	47%	25	58%
59	39	23	59%	28	72%
60	20	10	50%	15	75%
61	26	20	77%	25	96%
62	14	14	100%	19	136%
63	12	7	58%	7	58%
64	29	7	24%	7	24%
65	0	2	200%	2	200%
66	15	15	100%	20	133%
67	33	17	52%	22	67%
68	16	13	81%	18	113%
69	0	0	0%	0	0%
70	4	1	25%	1	25%

Walker Parking Consultants, 2007

Future On-Street Weekend Evening Occupancy, 3% Growth for 5 Years

		Current Peak		5-Year Projection (5% Growth Rate)	
Block #	Supply	8:00 PM	Percentage	Demand	Percentage
12	21	29	138%	38	181%
13	61	39	0%	49	0%
15	35	19	54%	24	69%
16	19	20	105%	25	132%
19	27	7	26%	7	26%
21	20	11	55%	16	80%
26	0	0	0%	0	0%
30	6	2	33%	2	33%
45	10	0	0%	0	0%
46	8	7	88%	7	88%
50	13	28	215%	36	277%
51	14	22	157%	27	193%
52	12	7	58%	7	58%
53	35	42	120%	53	151%
54	7	7	100%	7	100%
55	49	52	106%	67	137%
56	33	39	118%	49	148%
57	61	50	82%	65	107%
58	43	49	114%	63	147%
59	39	26	67%	32	82%
60	20	29	145%	38	190%
61	26	22	85%	27	104%

Walker Parking Consultants, 2007

FUTURE OFF-STREET PRIVATE OCCUPANCY

Future Off-Street Weekday Private Occupancy- 3% Growth for 5 Years- Blocks 1 - 35

				5-Year Projection (5% Growth Rate)	
Block #	Supply	2:00 PM	Percentage	Demand	Percentage
1	21	9	43%	9	43%
2	84	69	0%	88	105%
3	84	46	55%	59	70%
4	115	107	93%	137	119%
5	230	146	63%	186	81%
6	39	34	87%	44	113%
7	273	224	82%	286	105%
8	0	0	0%	0	0%
9	43	21	49%	26	60%
10	38	19	50%	24	63%
11	329	236	72%	301	91%
12	92	43	0%	54	59%
13	249	176	0%	225	90%
14	86	47	55%	60	70%
15	25	13	52%	18	72%
16	151	13	9%	18	12%
17	30	28	93%	36	120%
18	22	18	82%	23	105%
19	0	0	0%	0	0%
20	624	182	29%	233	37%
21	19	10	53%	15	79%
22	0	0	0%	0	0%
23	0	0	0%	0	0%
24	63	32	0%	42	67%
25	230	180	0%	229	100%
26	117	81	0%	103	88%
27	150	60	40%	76	51%
28	56	4	0%	4	7%
29	63	8	0%	8	13%
30	185	44	0%	56	30%
31	102	100	0%	128	125%
32	0	0	0%	0	0%
33	25	23	92%	28	112%
34	0	0	0%	0	0%
35	47	60	128%	76	162%

Walker Parking Consultants, 2007

Future Off-Street Weekday Private Occupancy- 3% Growth for 5 Years- Blocks 36 - 70

				5-Year Projection (5% Growth Rate)	
Block #	Supply	2:00 PM	Percentage	Demand	Percentage
36	193	180	0%	229	119%
37	204	196	0%	250	123%
38	38	31	82%	41	108%
39	0	0	0%	0	0%
40	0	0	0%	0	0%
41	20	16	0%	21	105%
42	0	0	0%	0	0%
43	390	332	0%	423	108%
44	1,200	700	58%	895	75%
45	80	47	0%	60	75%
46	80	40	0%	50	63%
47	8	7	0%	7	88%
48	1,014	908	0%	1159	114%
49	0	0	0%	0	0%
50	0	0	0%	0	0%
51	35	18	0%	23	66%
52	10	5	50%	5	50%
53	156	56	0%	71	46%
54	31	16	52%	21	68%
55	0	0	0%	0	0%
56	49	31	63%	41	84%
57	338	127	38%	162	48%
58	383	187	0%	238	62%
59	284	172	61%	221	78%
60	270	106	0%	135	50%
61	243	185	76%	236	97%
62	0	0	0%	0	0%
63	5	4	0%	4	80%
64	0	0	0%	0	0%
65	79	51	0%	66	84%
66	0	0	0%	0	0%
67	365	133	0%	170	47%
68	277	194	70%	248	90%
69	261	121	46%	154	59%
70	19	13	68%	18	95%

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Future Off-Street Weekend Private Occupancy- 3% Growth for 5 Years

				5-Year Projection (5% Growth Rate)	
Block #	Supply	8:00 PM	Percentage	Demand	Percentage
12	92	92	100%	118	128%
13	249	80	0%	102	0%
15	25	2	8%	2	8%
16	151	16	11%	21	14%
19	0	0	0%	0	0%
21	19	2	11%	2	11%
26	117	3	3%	3	3%
30	185	53	29%	68	37%
45	80	16	20%	21	26%
46	80	0	0%	0	0%
50	0	0	0%	0	0%
51	35	7	0%	7	0%
52	10	1	0%	1	0%
53	156	71	46%	91	58%
54	31	20	65%	25	81%
55	0	0	0%	0	0%
56	49	0	0%	0	0%
57	338	113	33%	145	43%
58	383	57	15%	72	19%
59	284	22	8%	27	10%
60	270	261	97%	333	123%

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FUTURE OFF-STREET PUBLIC OCCUPANCY

Future Off-Street Weekday Public Occupancy- 3% Growth for 5 Years- Blocks 1 - 35

				5-Year Projection (5% Growth Rate)	
Block #	Supply	10:00 AM	Percentage	Demand	Percentage
1	764	361	47%	461	60%
2	0	0	0%	0	0%
3	30	18	60%	23	77%
4	60	30	50%	40	67%
5	180	127	71%	162	90%
6	58	26	45%	32	55%
7	96	52	54%	67	70%
8	497	497	100%	634	128%
9	200	78	39%	100	50%
10	991	686	69%	876	88%
11	604	549	91%	700	116%
12	0	0	0%	0	0%
13	0	0	0%	0	0%
14	68	51	75%	66	97%
15	500	159	32%	203	41%
16	101	42	42%	53	52%
17	66	33	50%	43	65%
18	70	31	44%	41	59%
19	0	106	106%	135	135%
20	549	166	30%	212	39%
21	75	54	72%	69	92%
22	600	321	54%	411	69%
23	0	0	0%	0	0%
24	0	0	0%	0	0%
25	0	0	0%	0	0%
26	0	0	0%	0	0%
27	81	69	85%	88	109%
28	0	0	0%	0	0%
29	0	0	0%	0	0%
30	0	0	0%	0	0%
31	0	0	0%	0	0%
32	147	108	73%	138	94%
33	237	224	95%	286	121%
34	126	102	81%	130	103%
35	70	56	80%	71	101%

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Future Off-Street Weekday Public Occupancy- 3% Growth for 5 Years- Blocks 36 - 70

				5-Year Projection (5% Growth Rate)	
Block #	Supply	10:00 AM	Percentage	Demand	Percentage
36	0	0	0%	0	0%
37	0	0	0%	0	0%
38	1,033	800	77%	1021	99%
39	0	0	0%	0	0%
40	400	199	50%	254	64%
41	0	0	0%	0	0%
42	1,659	334	20%	426	26%
43	0	0	0%	0	0%
44	738	1176	159%	1502	204%
45	0	0	0%	0	0%
46	0	0	0%	0	0%
47	0	0	0%	0	0%
48	0	0	0%	0	0%
49	0	0	0%	0	0%
50	0	0	0%	0	0%
51	0	0	0%	0	0%
52	1,282	304	24%	389	30%
53	0	0	0%	0	0%
54	77	53	69%	68	88%
55	0	0	0%	0	0%
56	129	56	43%	71	55%
57	110	43	39%	54	49%
58	0	0	0%	0	0%
59	650	0	0%	0	0%
60	0	0	0%	0	0%
61	67	60	90%	76	113%
62	0	0	0%	0	0%
63	0	0	0%	0	0%
64	0	0	0%	0	0%
65	0	0	0%	0	0%
66	0	0	0%	0	0%
67	0	3	0%	3	0%
68	109	97	89%	124	114%
69	1,850	1719	93%	2195	119%
70	505	173	34%	222	44%

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Future Off-Street Weekend Public Occupancy- 3% Growth for 5 Years

				5-Year Projection (5% Growth Rate)	
Block #	Supply	8:00 PM	Percentage	Demand	Percentage
12	0	0	0%	0	0%
13	0	0	0%	0	0%
15	500	112	22%	144	29%
16	101	26	26%	32	32%
19	0	7	7%	903	7%
21	75	26	35%	32	43%
26	0	0	0%	0	0%
30	0	0	0%	0	0%
45	0	0	0%	0	0%
46	0	0	0%	0	0%
50	0	0	0%	0	0%
51	0	0	0%	0	0%
52	1,282	0	0%	0	0%
53	0	0	0%	0	0%
54	77	19	25%	24	31%
55	0	0	0%	0	0%
56	129	4	3%	4	3%
57	110	85	77%	108	98%
58	0	0	0%	0	0%
59	650	0	0%	0	0%
60	67	0	0%	0	0%

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FUTURE WEEKDAY PARKING OCUPANCY BY SUB GROUP

Future Weekday Parking Occupancy– Sub Group 1

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	30	0	0%	0	0%
Off-Street Public	764	361	47%	461	60%
Off-Street Private	21	9	43%	9	43%
Total	815	370	45%	470	58%

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Future Weekday Parking Occupancy– Sub Group 2

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	69	49	71%	64	93%
Off-Street Public	651	575	88%	733	113%
Off-Street Private	396	327	83%	418	106%
Total	1,116	951	85%	1,215	109%

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Future Weekday Parking Occupancy– Sub Group 3

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	111	101	91%	122	110%
Off-Street Public	2,065	1,488	72%	1,901	92%
Off-Street Private	839	575	69%	733	87%
Total	3,015	2,164	72%	2,756	91%

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Future Weekday Parking Occupancy– Sub Group 4

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	101	73	72%	93	92%
Off-Street Public	42	0	1%	1	1%
Off-Street Private	232	0	0%	2	1%
Total	375	74	20%	95	25%

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Future Weekday Parking Occupancy– Sub Group 5

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	85	21	25%	21	25%
Off-Street Public	1,100	586	53%	749	68%
Off-Street Private	25	13	52%	18	72%
Total	1,210	620	51%	788	65%

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Future Weekday Parking Occupancy– Sub Group 6

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	112	42	38%	52	46%
Off-Street Public	828	335	40%	431	52%
Off-Street Private	781	285	36%	367	47%
Total	1,721	662	38%	850	49%

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Future Weekday Parking Occupancy– Sub Group 7

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	177	59	33%	74	42%
Off-Street Public	81	69	85%	88	109%
Off-Street Private	864	409	47%	518	60%
Total	1,122	537	48%	680	61%

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Future Weekday Parking Occupancy– Sub Group 8

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	89	48	54%	68	76%
Off-Street Public	147	108	73%	138	94%
Off-Street Private	499	476	95%	607	122%
Total	735	632	86%	813	111%

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Future Weekday Parking Occupancy– Sub Group 9

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	160	147	92%	187	117%
Off-Street Public	1,381	4	0%	5	0%
Off-Street Private	110	114	104%	145	132%
Total	1,651	265	16%	337	20%

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Future Weekday Parking Occupancy– Sub Group 10

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	152	38	25%	48	32%
Off-Street Public	1,659	334	20%	426	26%
Off-Street Private	1,042	931	89%	1,187	114%
Total	2,853	1,303	46%	1,661	58%

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Future Weekday Parking Occupancy– Sub Group 11

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	68	2	25%	2	25%
Off-Street Public	738	1,176	159%	1,502	204%
Off-Street Private	1,360	787	58%	1,005	212%
Total	2,166	1,965	91%	2,509	116%

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Future Weekday Parking Occupancy– Sub Group 12

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	271	133	49%	173	64%
Off-Street Public	2,205	473	21%	604	27%
Off-Street Private	1,191	670	56%	856	72%
Total	3,667	1,276	35%	1,633	45%

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Future Weekday Parking Occupancy– Sub Group 13

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	81	40	49%	55	68%
Off-Street Public	110	43	39%	54	49%
Off-Street Private	608	233	38%	297	49%
Total	799	316	40%	406	51%

Walker Parking Consultants, 2007

Future Weekday Parking Occupancy– Sub Group 14

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	71	43	61%	53	75%
Off-Street Public	1,959	1,816	93%	2,319	118%
Off-Street Private	622	370	59%	472	76%
Total	2,652	2,229	84%	2,844	107%

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Future Weekday Parking Occupancy– Sub Group 15

Type	Supply	10:00 AM	Percentage	Demand	Percentage
On-Street	52	33	63%	43	83%
Off-Street Public	505	176	35%	225	45%
Off-Street Private	384	146	38%	188	49%
Total	941	355	38%	456	48%

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FUTURE PARKING ADEQUACY

FUTURE PARKING ADEQUACY

Future Weekday Parking Adequacy - Blocks 1 - 35

Block #	Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Total Future Adequacy	Future Percentage Occupied
1	227	11	26	264	64%
2	0	(8)	0	(8)	110%
3	4	21	4	29	79%
4	14	(28)	(1)	(15)	108%
5	0	33	7	40	90%
6	20	(7)	0	13	88%
7	19	(27)	(5)	(13)	104%
8	(187)	0	(1)	(188)	140%
9	80	15	(19)	76	66%
10	16	12	(18)	10	99%
11	(156)	12	(1)	(145)	117%
12	0	33	(5)	28	73%
13	0	12	5	17	94%
14	(5)	22	2	19	87%
15	247	6	30	283	44%
16	38	125	(7)	156	38%
17	16	(7)	7	16	86%
18	22	(2)	15	35	66%
19	(117)	0	14	(103)	351%
20	282	360	9	651	42%
21	(1)	3	11	13	87%
22	129	0	8	137	75%
23	0	0	0	0	100%
24	0	18	22	40	53%
25	0	(10)	6	(4)	102%
26	0	8	0	8	93%
27	(15)	67	49	101	65%
28	0	49	(2)	47	49%
29	0	52	2	54	14%
30	0	120	(1)	119	34%
31	0	(31)	2	(29)	125%
32	(6)	0	(4)	(10)	107%
33	(73)	(4)	(10)	(87)	135%
34	(17)	0	(11)	(28)	119%
35	(8)	(31)	(3)	(42)	138%

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Future Weekday Parking Adequacy - Blocks 36 – 70

Block #	Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Total Future Adequacy	Future Percentage Occupied
36	0	(46)	10	(36)	117%
37	0	(56)	(1)	(57)	127%
38	(91)	(5)	(20)	(116)	111%
39	0	0	(8)	(8)	150%
40	106	0	0	106	72%
41	0	(2)	27	25	46%
42	1,067	0	(1)	1,066	29%
43	0	(52)	19	(33)	108%
44	158	(895)	43	(694)	141%
45	0	16	9	25	71%
46	0	26	7	33	60%
47	0	1	48	49	13%
48	0	(196)	(12)	(208)	121%
49	0	0	5	5	29%
50	0	0	(10)	(10)	191%
51	0	10	(8)	2	96%
52	765	5	10	780	34%
53	0	77	11	88	51%
54	1	8	6	15	86%
55	0	0	24	24	43%
56	45	6	11	62	68%
57	45	159	12	216	54%
58	0	126	12	138	66%
59	585	49	5	639	28%
60	0	122	2	124	55%
61	(16)	(5)	(3)	(24)	108%
62	0	0	(7)	(7)	158%
63	0	1	3	4	73%
64	0	0	18	18	28%
65	0	9	(2)	7	91%
66	0	0	(7)	(7)	154%
67	(3)	177	6	180	52%
68	(26)	15	(4)	(15)	104%
69	(530)	94	0	(436)	123%
70	233	0	2	235	51%

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Future Weekend Evening Adequacy

Block #	Future Off-Street Adequacy	Future Off-Street Private Adequacy	Future On-Street Public Adequacy	Total Future Adequacy	Future Percentage Occupied
12	0	(31)	(20)	(51)	149%
13	0	135	3	138	52%
15	306	22	6	334	34%
16	59	122	(9)	172	31%
19	(885)	(7)	16	(876)	2237%
21	36	16	1	53	49%
26	0	108	0	108	3%
30	0	108	3	111	39%
45	0	55	9	64	25%
46	0	76	0	76	8%
50	0	0	(25)	(25)	327%
51	0	26	(15)	11	76%
52	1,154	9	3	1,166	1%
53	0	57	(23)	34	81%
54	45	4	(1)	48	54%
55	0	0	(25)	(25)	160%
56	112	47	(21)	138	28%
57	(9)	176	(13)	154	67%
58	0	292	(26)	266	34%
59	585	243	1	829	7%
60	0	(76)	(21)	(97)	135%
61	60	231	(5)	286	9%

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FUTURE PARKING ADEQUACY BY SUB GROUP

Future Weekday Adequacy – Sub Group 1

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
227	11	26	264	1

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Future Weekday Adequacy – Sub Group 2

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
(148)	(42)	(6)	(196)	4

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Future Weekday Adequacy – Sub Group 3

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
(42)	65	(28)	(5)	6

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Future Weekday Adequacy – Sub Group 4

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
38	170	(7)	201	2

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Future Weekday Adequacy – Sub Group 5

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
259	6	52	317	6

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Future Weekday Adequacy – Sub Group 6

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
314	376	44	734	4

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Future Weekday Adequacy – Sub Group 7

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
(15)	304	76	365	4

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Future Weekday Adequacy – Sub Group 8

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
(6)	(133)	7	(132)	5

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Future Weekday Adequacy – Sub Group 9

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
(83)	(40)	(52)	(175)	7

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Future Weekday Adequacy – Sub Group 10

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
1,067	(249)	81	899	3

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Future Weekday Adequacy – Sub Group 11

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
158	(853)	64	(631)	3

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Future Weekday Adequacy – Sub Group 12

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
1,380	276	68	1,724	6

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Future Weekday Adequacy – Sub Group 13

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
45	281	14	340	1

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Future Weekday Adequacy – Sub Group 14

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
(556)	119	8	(429)	6

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Future Weekday Adequacy – Sub Group 15

Future Off-Street Public Adequacy	Future Off-Street Private Adequacy	Future On-Street Adequacy	Future Total Adequacy	Percentage Occupied
230	177	1	408	3

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APPENDIX C TRANSPORTATION DEMAND MANAGEMENT (TDM)

TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

As population growth continues to place greater demand on transportation systems, strategies that focus on operations rather than increased capacity will become more and more a part of the solution to future problems. With this realization, many cities have begun to employ Transportation Demand Management (TDM) Programs to improve operations. The general idea of these programs is to reduce the number of automobile trips in a given area by offering incentives and by providing alternatives to driving alone.

In order to develop and market successful TDM Programs, defined areas, such as central business districts, create Transportation Management Associations (TMA). These public-private partnerships provide the institutional structure to develop and employ the strategies best suited for a particular area. Several opportunities exist for the funding of these organizations. Any project or program, such as this, that shows the potential to reduce congestion and, thereby, improve air quality is eligible for federal funding from the Congestion Mitigation Air Quality program. Another funding strategy, utilized by a majority of TMA's is the collection of membership dues. These annual dues, based on the number of individuals a participating member employs, typically account for an average of one third of a TMA's revenue.[1]

Many of the various TDM strategies implemented by TMA's, focus on reducing work-related trips. These strategies provide incentives for individuals to choose different modes of transportation such as transit, carpooling, bicycles or walking when traveling to work. According to the FHWA and FTA National Transportation Library[2] with the right mix of TDM alternatives and strategies, an individual employment site can reduce vehicle trips by as much as 30 to 40 percent in relation to background conditions.

TRANSIT PROMOTIONS AND INCENTIVES

This category of TDM offers a broad range of opportunities to encourage individuals to ride transit to work. Various marketing techniques such as distributing free transit maps, offering "free transit days," and putting up promotional posters can help attract more riders. TMA's can also encourage ridership by offering monetary incentives to employees who ride transit to work such as:

- [3]The Parking Cash Out – Employers who subsidize parking also provide equivalent amount to those choosing alternative modes of transportation. This amount can either be added to the individual's taxable income or can be applied, tax-free, to other methods of transportation.
- Employer-Paid Benefits – Employers pay up to $100/month for transit or vanpool expenses of their employees. They receive in return a large tax deduction while employees receive a tax-free transportation benefit.

[1] "Opportunities for Sustainable TMA Funding" December 2004

[2] Overview of Transportation Demand Management Measures" is one of several planning reports on Transportation Demand Management (TDM) provided by the Federal Highway Administration and the Federal Transit Administration. Other reports include "Implementing Effective Transportation Demand Management Measures: Inventory of Measures and Synthesis of Experience," and "A Guidance Manual for Implementing Effective Employer-based Transportation Demand Management Programs."

[3] Information on monetary incentives came from CommuterChoice.com

- Employee-Paid Benefits – Employees can set aside up to $100/month of pre-tax income. Using this strategy, employees save by receiving a tax break on the set-aside amount and employers save on payroll taxes because that amount is not subject to payroll taxes.

GUARANTEED RIDE HOME PROGRAMS

This strategy provides the option for a quick ride home in the event of an emergency to those who do not drive to work. The ride is often provided by a taxi, but could also be supplied by a company fleet car, rental or some other alternative. This strategy has proven to work in many areas by reducing the feeling of anxiety surrounding the choice to ride transit, which stems from the fear of being stranded in the event of an emergency. Costs for implementing this strategy are relatively low and studies have found that this program is not typically abused.

SHARED VEHICLE PROGRAMS

Carsharing is a program that has been very successful in Europe and has begun to make its way into a great number of North American cities. The basic concept of this strategy is to provide an option for convenient vehicular travel without owning a car. It provides a medium between having no vehicle and personal vehicle ownership. These member-based programs offer access to a fleet of cars that can be used on an hourly basis. After signing up online and reserving a car, customers simply show up at the lot and drive off with a car.

SHARE-A-RIDE

This strategy provides interested employees with carpooling options by analyzing individuals' daily origins, destinations and time of day travel characteristics and matching those with similar trip patterns. In some cases, employees are matched up with their co-workers. Since downtown Rochester is home to many small and medium-sized businesses, the matches would need to be made on an area-wide basis, rather than by individual employers in order to present enough viable carpooling matches. Offering monetary incentives for ridesharing can also help increase its popularity.

TELECOMMUTING

With advances in technology, many employers are beginning to offer employees the opportunity to work from home. Though some employers are hesitant to initiate such programs due to productivity concerns, they provide many benefits. In addition to the transportation advantage of reducing the number of work-related trips on the roads, telecommuting often improves employee morale and reduces business costs.

Though Downtown Rochester's parking system currently provides a sufficient number of spaces for those who work in the area, these strategies, in conjunction with others that target other parking problems, will help improve the parking situation while providing transportation choices for commuters and visitors. As illustrated by the input from the stakeholders, present concerns in this area focus more on special event parking. Therefore, the downtown area would greatly benefit from the implementation of strategies that improve the operation of the parking system during such events.

One common TDM strategy used to mitigate the strain placed on parking systems by special events is to provide remote parking lots with shuttles to desired destinations. This would keep event parking from overflowing into "monthly" parking spaces as some noted to be a current problem. A shuttle system with remote parking could also provide a less expensive or even free parking option for those who work downtown.

Presently in the Downtown Rochester area there is little incentive to choose any other option besides driving alone. In order to successfully implement the discussed TDM strategies, viable alternatives to driving must exist. Therefore, changes to the current transit system may be needed. When transit is sufficient, it can be part of a successful strategy. The formation of a Transportation Management Association would also help to facilitate the implementation and marketing of various TDM strategies.

INTELLIGENT INFORMATION SIGNAGE

Public relations and customer communications may be enhanced by the use of automated parking availability displays (APED). Most parking facility management systems have occupancy counting capabilities. These capabilities can be used to inform patrons of the number of available parking spaces in a particular parking facility, and may even be used to direct patrons to those areas with the most vacant spaces. Rather than have a patron search through a large facility with only a few spaces available, dynamic sign(s) indicate the number of spaces available. Most systems rely on loop counting systems, which activate a "full" sign when there are only a set number of vacant parking spaces remaining.

Similar technology may be employed to provide automated parking guidance systems for the downtown. Strategically placed signs on the street with changeable messages automatically direct less-familiar users to the nearest parking facility with available spaces. Although more common in Europe, several U.S. cities either already have them or are in the process of installing them.

These systems promote parking space availability, reduce pollution and congestion, and give advance warning to parkers prior to arrival. Intelligent information parking signage has the potential to help maximize occupancy by facility, level, zone or individual parking space. Moving the access control equipment to the entry and exit portals of the existing Rochester parking structures would allow the equipment and vehicle detection loops to be used to monitor the entire garage and to transmit counting pulses to a facility counter and garage "full" sign or space count display (the nominal additional cost to relocate the PARCS equipment is estimated at about $10.00 to $15.00 per parking space).

APPENDIX D
SCOPE

SCOPE OF SERVICES

The following scope of services for this project was performed:

TASK #1 – SURVEY AND FOCUS GROUP MEETINGS

The businesses, institutions, social/cultural groups, and non-profit organizations located in downtown Rochester are diverse in their missions, land use, size, and location. Because of this, their philosophies, objectives, strategies, operations, and patrons' expectations about parking needs are different. Adding to this diversity are the needs and expectations of neighborhood residents, which are different from the institutions located in the downtown.

In order to make sure we have comprehensively identified the downtown's parking issues and concerns, we propose to meet separately with representative focus groups to elicit input on parking issues and concerns. This early input will help bring additional clarity and focus to the project. We propose to conduct up to three (3) focus group meetings that could be comprised of representatives of businesses, City staff/departments, non-profit organizations, social/cultural groups, institutions (e.g. SUNY, chamber of commerce, YMCA, etc.), office buildings, retail/entertainment businesses, residents, and parking operators.

We will work with the Municipal Parking Division, Rochester Downtown Development Corporation (RDDC), City of Rochester Economic Development, and City Planning and Engineering staff to finalize the focus group categories and to identify the focus group representatives. We anticipate that this effort will also provide the framework for developing a Parking Study Steering Committee. The formation of this committee will be vital for effective communication and data/information exchange between the City and consultant. Interest in this study will be high and many stakeholders will want to provide input. A steering committee with limited but appropriate membership will enable that to happen. To ensure project success, membership in the Parking Study Steering Committee will need to be finalized early in Task #1.

During Task #1, we will work with the City to develop an internet-based parking questionnaire that will be used to survey the parking habits of individuals that park in the downtown. Parking preferences and habits, walking distances, locations, and use of public transportation will be identified through this questionnaire for a cross-section of downtown parkers. Also during this task, we will determine what parking-related data already exists and if it is usable for this study. Previous parking studies, site maps, GIS maps, parking facility layouts, number of parking spaces, and parking occupancy counts are examples of the types of data and information that we will be seeking.

We will also seek additional related information such as land-use data, employment data, and patrons' statistics. We understand that the Municipal Parking Division will assist us in identifying and compiling land use data. During this task, we will also review the City's master plan relative to the study area including parking and roadway infrastructure.

This task will culminate with a Task #1 memorandum, which will include a summary of our meetings with the stakeholder groups, a finalized internet-based parking survey questionnaire, and listing of the existing data available for the study. This memorandum will be delivered and discussed at a meeting with the Parking Study Steering Committee.

TASK #2 – PARKING ANALYSIS

During this task, we will confirm through data collection and observation, the public and private parking space inventory (on and off-street) within the study area and the current usage of those parking spaces. This effort will enable us to construct a sharply focused "snapshot" of current parking conditions in the downtown and identify "problem spots" that require immediate attention.

While the snapshot of current parking conditions is being assembled, we will review the growth and expansion plans (identified in Task #1) within the study area to identify developments that are planned in the downtown during the next five (5) years. With this information, we will develop a parking demand model to assess the impact that those future planned developments may have on the downtown parking supply and to determine when and where additional parking should be added. Special attention will be paid to properties that are prime for development but have no adjacent or nearby parking. The inter-net parking survey questionnaire will be distributed and collected during this task.

This task will culminate with a Task #2 memorandum, which will include our findings and conclusions. This memorandum will be presented in a meeting with the Parking Study Steering Committee. The information gained during this task and Task #1 will enable our team to clearly understand current and future parking conditions in downtown Rochester. With this understanding, we will be able to develop solid recommendations and support information during Task #3 that will enable the City to make cost-effective and achievable decisions for sustaining economic growth in the downtown through sound parking strategies.

TASK #3 – STRATEGIES AND ALTERNATIVES FOR IMPROVEMENTS

After developing a clear understanding of current and future parking conditions in the downtown, we will analyze/evaluate alternative methods for adding more parking spaces when and where necessary and for offsetting parking demand through various parking demand management strategies. This will include, but not be limited to, evaluating opportunities to better utilize existing parking spaces through increased usage of public transit options and shared parking opportunities. Specific alternatives for adding spaces will be developed which could include structured and/or surface parking.

Working closely with the Parking Study Steering Committee, we will develop a matrix for ranking each alternative using criteria specifically developed by the Steering Committee. Examples of criteria included in this matrix are cost per added parking space, walking distance, convenience, security, aesthetics, number of added spaces, etc. Task #3 will culminate with a prioritized listing of the alternatives for adding and implementing parking strategies in downtown Rochester. These alternatives will be summarized in a Task #3 memorandum and presented to the Parking Study Steering Committee.

TASK #4 – RECOMMENDATIONS AND REPORT

During this task, a comprehensive draft report will be prepared and will include study data, findings, conclusions, and recommendations for parking improvements. The draft report will include discussions about key parking issues raised by the downtown stakeholders. Analyses of the gathered data, strategies for parking improvements, and preliminary conceptual cost estimates for parking additions and improvements will also be

included. After meeting with the Parking Study Steering Committee to discuss the draft report, a final report will be prepared and distributed to the Steering Committee.

The report that will be delivered to the City will enable it to:

- Clearly understand the current and future parking conditions in the downtown;
- Determine where parking "problem spots" currently exist and methods for minimizing them;
- Clearly understand the impact of planned future developments on downtown parking;
- Clearly understand how much additional parking in the downtown is needed now and over the next five (5) years; when it is needed; and where it is needed;
- Clearly understand alternative ways to better utilize existing parking systems in the downtown; and
- Make informed and cost-effective decisions about current and future parking needs in the downtown.

The City will have a comprehensive plan for effectively improving the downtown parking infrastructure immediately and over the next five years. This plan will serve as a cornerstone for planning sustained economic development in downtown Rochester.

WALKER
PARKING CONSULTANTS