Green Bay, Wisconsin
Downtown Parking Study

FINAL REPORT
November 2013

DESMAN
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Table of Contents

Page

City of Green Bay, Wisconsin
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List of Figures and Tables

Figures

Tables

Summary and Recommendations

Summary of Existing Parking Conditions

There are approximately 4,999 public parking spaces located in the study area as follows:

Category	Capacity (spaces)
On-Street Meters	482
Broadway On-Street	114
Leased On-Street	21
Off-Street	4,345
Total	4,999

Currently there is considerable available capacity in the City ramps, even during peak times. There are approximately 767 parking spaces available during peak weekdays in the three ramps. The City Hall Lot and the Adams Street Lot are more heavily used than the ramps, approaching practical capacity at peak times. There is also considerable on-street capacity in the downtown and on Broadway, although the spaces on the southern end are well occupied during noon time.

In summary, there is currently considerable capacity available in the three City Ramps to accommodate additional parking for new Downtown development.

Meetings with Stakeholders and Parking Division Staff

A series of meetings were conducted with stakeholders in the Downtown area and the Broadway Corridor at the beginning of the study.

A summary of some of the key ideas expressed at those meetings is presented below:

- There are proposed developments in the next 0-10 years that will increase parking demand and reduce capacity as new buildings are built on the sites of existing parking lots.
- On-street meters have recently been replaced with single space meters with a slot for the Green Bay debit card
- The City is in the process of updating the Downtown Master Plan. This process may have an impact on the parking study conclusions and recommendations.
- The Main Street ramp can be demolished if requested by Schreiber Foods within the next 20 years based on their agreement with the City.
- There is a concern with the overnight on-street parking ban as more downtown residences are built.
- Some groups or individuals would like the downtown parking meters to be able to accept credit cards.
- The Broadway area is a healthy, thriving area, and circulation in the current City Lot F is very circuitous and difficult, especially for transient parkers.

- The Green Bay Gold program has been marginally successful since its 2001 start and many would like to see what other types of parking programs could be implemented to encourage people to come downtown.
- The Adams Street Lot is a very heavily used lot, but the site may be considered for development of an urban plaza.
- Many would like the parking ticket system modernized to allow credit card payments for parking and for citation payments.

Summary of Parking Operations Recommendations

A series of meetings were also conducted with Parking Operations staff. Below is a summary of the recommendations regarding the City of Green Bay parking operations.

Organizational Structure

- The PW (Parking/Operations) Supervisor should assume full time responsibility and accountability for both the field operations and administrative functions of the Division.
- The two account clerks should fall under the purview of the Parking Manager.

Personnel Staffing Levels

- The 3-person custodial crew could be reduced by one and the 8-hour custodian work shift on Saturdays and Sundays could be eliminated or dealt with on an "as needed" basis since at least one MOA and one MEA have scheduled time on Saturdays and Sundays.
- An automated cashier system should be implemented to reduce the number of cashiers needed in the three City Ramps and the Adams Lot.

Off-Street Facility Operations

- The City should analyze the potential revenue to be earned by charging in the City Ramps and Adams Street Lot during the weekday evenings and weekends at modest parking rates.
- The City should consider using the 2 MOAs and/or 2 Custodians for weekday security between the hours of 8:30AM and 5:00PM, which would require renegotiating and reducing security coverage in the current security service contract.
- The City should install a new automated payment system in each of the ramps and the Adams Street Lot.
- The split responsibilities of the PW Supervisor between the Parking Division and the PW Operations Division should be eliminated.
- The PW (Parking/Operations) Supervisor should be made the Manager of the Parking Division and should be responsible for recommendations regarding facility maintenance and operations, business practices, planning, marketing, and financial oversight.

Meter System Collections & Maintenance

- To help prevent theft from the meters the Parking Systems Division should adopt an ongoing practice of conducting unannounced inspections.
- The Parking Systems Division plans to begin incorporating the Duncan handheld meter auditing units into their auditing process of the meters collections.

Off-Street Access Control Recommendations

The City should install a new automated payment system in each of the ramps and the Adams Street Lot. The payback period for the automated system is as follows:

Cherry Street Ramp	35 months
Pine Street Ramp	72 months
Main Street Ramp	50 months
Adams Lot	17 months

The longer payback period in the Pine Street Ramp occurs because there are more exit lanes and pedestrian access points requiring pay-in-lane machines and pay-stations.

Recommended Parking Rates

Hourly and Daily Rates

Following are the recommended hourly and daily maximum rates of the on-street meters, parking lots, and the parking ramps:

	Hourly Rate	Daily Maximum
Parking Meters	$0.75/hour	-
Adams Street & City Hall Lots	$1.00/hour	$8.00
Parking Ramp	$0.75/hour	$7.50

We also recommend that a flat fee be introduced in the City Ramps for evening and Saturday users.

Parking Ramp Monthly Parking Rates

It is recommended that the lower monthly parking rate be increased gradually over a three year period from the current rate of $14.90 per month to $30.00 per month in $5.00 increments.

Broadway Corridor

Desman recommends that parking meters, or pay stations, be installed on Broadway with a two hour time limit to promote turnover and use by transient/visitor parkers and to discourage all day use by area employees.

Future Parking Supply and Demand

0-5 Year Time Frame

There will be adequate parking in the existing public parking ramps to absorb the added parking demand for the next five years, unless the Main Street Ramp is eliminated within that time frame. If that is the case there would be a shortage of 460 parking spaces at peak times during a convention/conference, which would require consideration of a new parking facility to handle the unmet demand. However, when no convention/conference is happening at the K.I. Convention Center during the weekday peak periods there would be a nominal deficit of only 59 spaces, without the Main Street Ramp, which could realistically be accommodated with some garages operating at or near capacity.

5-10 Year Time Frame

Within the next 10 years an anticipated shortage of approximately 503 parking spaces (during a convention/conference) or 102 parking spaces (no convention/conference) would result if all the projects are realized.

The elimination of the Main Street Ramp would increase the shortage to 1,238 parking spaces (during a convention/conference) or 837 parking spaces (no convention/conference), which would require the construction of one, or possible two ramps, if all the demand and displacement/loss of parking is realized within the 10 year time frame. Given the unpredictable nature of downtown development, Desman recommends that the City revisit the list of developments in 3 to 5 years and make adjustments in the list of projects, or if the Main Street Ramp's elimination is imminent.

Public Transit Use Impact on Parking Demand

The number of parking spaces required can be reduced by increasing transit usage. It is reasonable to expect a 2% to 5% increase assuming a commensurate upgrading of the transit system. Such an increase could decrease the parking demand in the City public parking facilities by approximately 56 spaces in the current year, 72 spaces within 5 years, and a total of 86 spaces in 10 years.

Potential Future Parking Ramp

Four sites were considered for construction of a new parking ramp to serve the downtown area if needed in the future. Of those sites, the Schreiber Foods Site at Main and Madison is in a good location to replace the Main Street Ramp and continue to provide good proximal parking for convention visitors. It also does not result in any displacement of existing parking. Assuming the site could be obtained for a reasonable price, Desman recommends that it be considered for future parking when needed to meet the added demand or replace the Main Street Ramp. The estimated cost for a 900 space ramp on the Schreiber Foods Site would be approximately $20.3 million, excluding land costs (in 2013 dollars).

Parking Structure Repair/Replacement Transition Plan

Below is a summary of the recommended strategies regarding parking structure renovations or replacement of a parking structure:

- It is more cost effective to renovate a garage than replace it.
- Effectively stage repairs as not to displace more spaces than necessary.
- It is estimated that approximately 140 spaces would be displaced in the Main Street Ramp and 185 spaces in the Pine Street Ramp during a repair program.
- Do not perform renovations in the Pine Street Ramp and Main Street Ramp simultaneously.
- Perform repairs during evenings and weekends when parking demand is low.
- If the renovations are performed in the Main Street Ramp and Pine Street Ramp simultaneously after Schreiber Foods has expanded, implement temporary parking any overflow parking demand. Potential locations for weekend event overflow parking during parking ramp renovation are the Wisconsin Public Service Lots and the Associated Bank lot at Cherry and Monroe.
- Construct any new ramp on available site prior to demolition of existing parking ramp(s).

1. Background and Introduction

Background and Introduction

The City of Green Bay Public Works Department has commissioned DESMAN Associates to conduct a two part parking study. One part will focus on the parking needs and an operations assessment of Downtown on-street and off-street parking. The second part of the study focuses on the city's three parking ramps and a condition and structural evaluation to develop a cost effective staged program for maintenance and repairs.

Downtown Green Bay includes a healthy mix of commercial, office, retail, government, and residential space. The downtown has been undergoing significant redevelopment including the Bellin Building, Nicolet Bank Building, Children's Museum, Associated Bank Headquarters, and the Schreiber Foods headquarters. The City is currently responsible for three parking ramps, various parking lots located in and outside the downtown and on-street parking. The objective of this part of the study is to determine if there is a need to construct additional parking based on the growth in demand and potential loss of existing parking facilities. Along with understanding future parking needs, this study will also provide recommendations to improve overall parking operations.

Parking Study Area

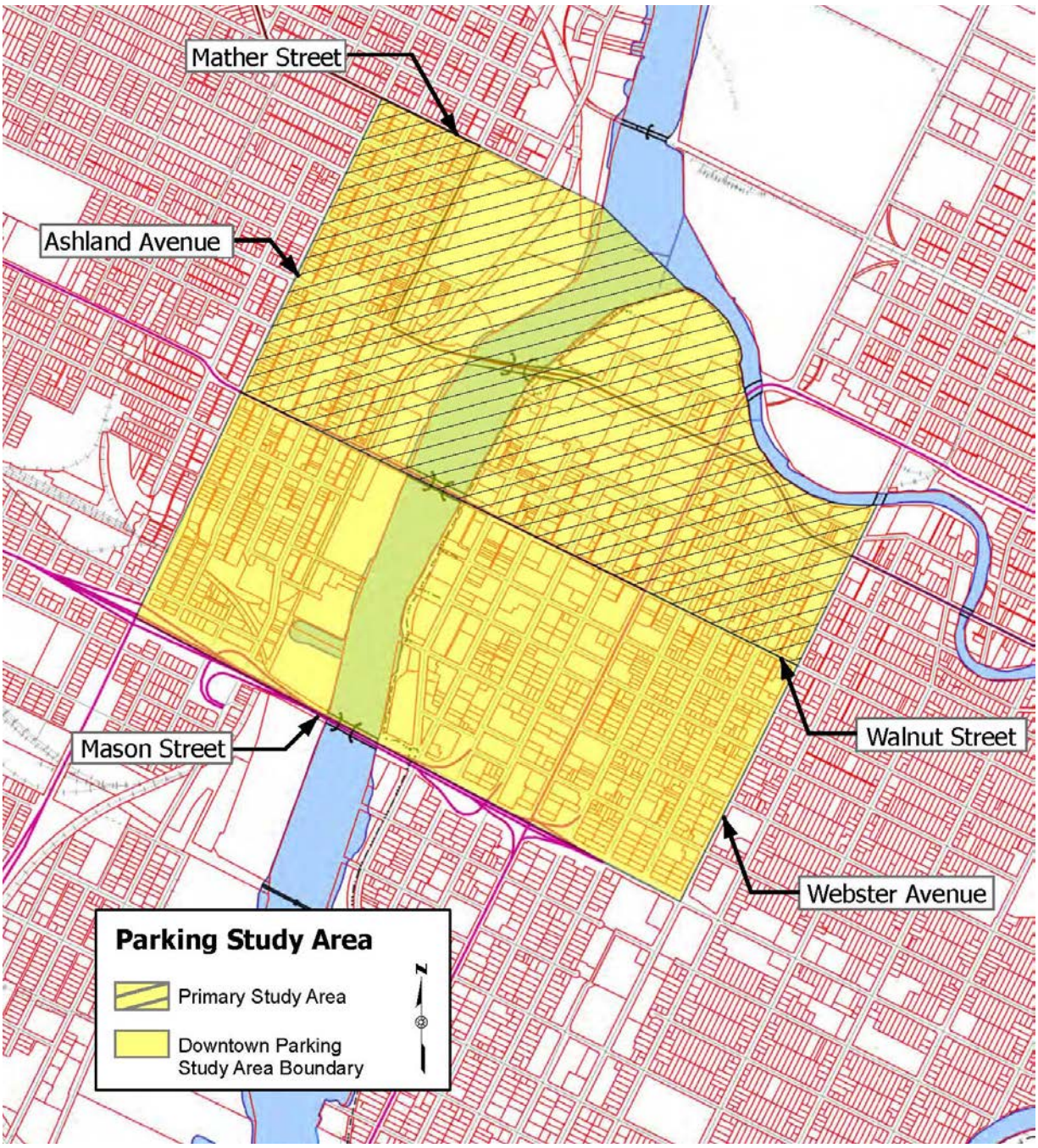
The study area boundaries extend from Mason Street on the south, Ashland Avenue on the west, Mather Street to the north, and Webster Avenue to the east. The primary study area includes the area north of Walnut Street. Both the downtown parking study area boundary and primary study area are depicted in **Figure 1**. The study focuses on the primary study area in the downtown, which has been divided by the areas west and east of the Fox River. The downtown area east of the Fox River includes the City parking facilities and on-street parking meters. West of the Fox River is the Broadway Corridor, which has regulated on-street parking and a City parking lot.

2. Existing Parking Conditions

The City of Green Bay controls on-street public parking, off-street public parking lots, and three parking structures. The off-street public parking facilities include a mix of monthly, leased and transient parking. This study concentrates on the City owned pay parking spaces within the study area and the public parking along the Broadway corridor. A total of 4,999 spaces are located in the study area, which includes 482 on-street meters, 114 on-street spaces along Broadway, 21 on-street leased spaces, and 4,345 off-street parking spaces. Private parking facilities and non-metered on-street parking, except along Broadway, were not included in the analysis.

The Fox River creates a natural barrier in the Downtown, and thus the parking analysis has been segmented into two areas, Downtown and the Broadway Corridor. The Downtown includes the portion of the study area located east of the Fox River. The Broadway Corridor includes the on-street parking along Broadway and the Old Fort Square Lot.

Figure 1: Downtown Green Bay Study Area



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Downtown Parking

The Downtown public parking includes the on-street metered parking and off-street parking lots and ramps operated by the City of Green Bay located within the study area. The land uses include a healthy mix of commercial, office, government and residential space. The primary businesses in the area are Schreiber Foods, APAC, Hyatt Hotel, Associated Bank, the KI Convention Center, and City, County and State of Wisconsin departments.

Metered On-Street Parking

There are a total of 492 on-street metered parking spaces which are shown in **Figure 2**. The City of Green Bay also leases 21 on-street, non-metered spaces to Johnson Bank which are located along Washington Street north of Crooks Street. These spaces were not included in the analysis. The on-street meters have time restrictions of 2 hours, 1 hour, 25 minutes and 15 minutes depending on their location. **Table 1** provides a breakdown of metered spaces by time limit for each street in the study area. Most of the meters have 2 hour or 1 hour time restrictions. Three parking occupancy counts of the on-street meters were performed by City of Green Bay staff on Wednesday, February 6, 2013, Monday October 14, 2013, and Tuesday October 15, 2013 between 10 AM and 2 PM. The results of these counts are shown in **Table 1**. Based on these counts, only 40% of the on-street metered spaces in the study area were occupied at 2 PM. Pine Street, Washington Street and Cherry Street had the highest occupancy at 65% and 55%, respectively.

Table 1: On-Street Meters Inventory and Occupancy

							Occupancy											
							Friday, 02/06/2013			Peak Occ	Monday, October 14, 2013			Peak Occ	Tuesday, 10/15/2013			Peak Occ
Street	Meters	4 Hr.	2 Hr.	1 Hr.	25 Min.	15 Min.	10AM	NOON	2PM		10AM	NOON	2PM		10AM	NOON	2PM	
Washington Street	83	22	59	0	2	0	30	35	46	55%	21	33	20	40%	32	38	32	46%
Adams Street	76	0	35	32	9	0	14	36	39	51%	16	12	16	21%	26	22	24	34%
Jefferson Street	74	0	66	8	0	0	25	27	38	51%	27	15	28	38%	30	20	41	55%
Madison Street	76	0	51	24	0	1	16	7	9	21%	10	8	10	13%	16	9	10	21%
Elm Street [(1)]	23	0	0	23	0	0	0	0	0	0%	1	2	4	17%	3	3	4	17%
Pine Street	17	0	0	17	0	0	8	11	5	65%	7	7	6	41%	11	6	6	65%
Cherry Street	40	0	0	40	0	0	22	17	18	55%	13	10	14	35%	13	12	13	33%
Doty Street	71	0	71	0	0	0	12	17	29	41%	15	17	20	28%	17	11	26	37%
Howe Street	13	0	13	0	0	0	1	0	0	8%		1	0	8%	0	0	0	0%
Stuart Street	6	0	6	0	0	0	3	2	1	50%	0	1	0	17%	0	0	0	0%
Moravian	13	0	13	0	0	0	Not Surveyed			0%	0	0	0	0%	0	0	0	0%
Total	**492**	**22**	**314**	**144**	**11**	**1**	**131**	**152**	**185**	38%	**110**	**106**	**118**	24%	**148**	**121**	**156**	32%

[1] *Meters closed due to construction*

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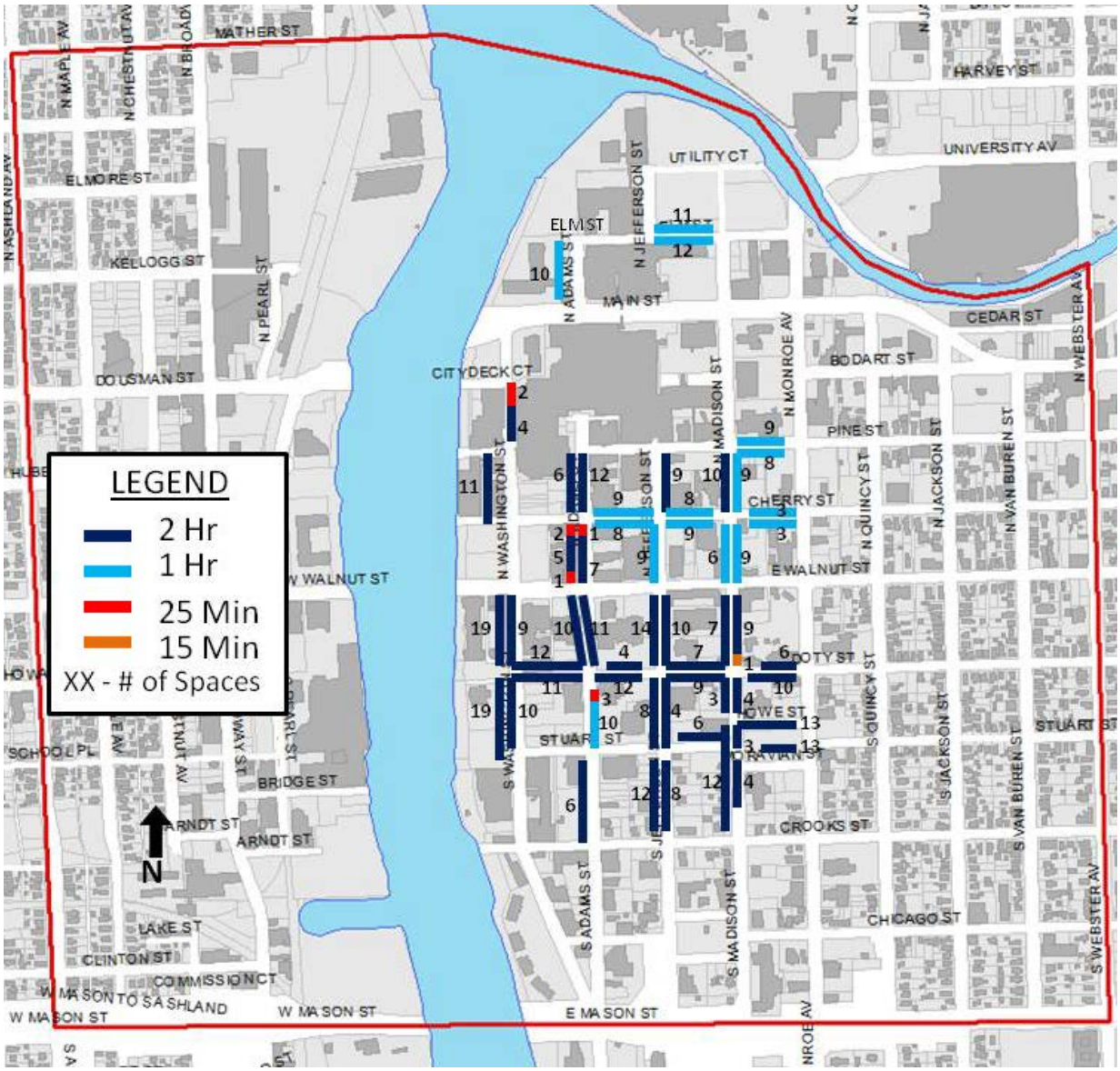
Figure 2: On-Street Parking Meter Inventory Map



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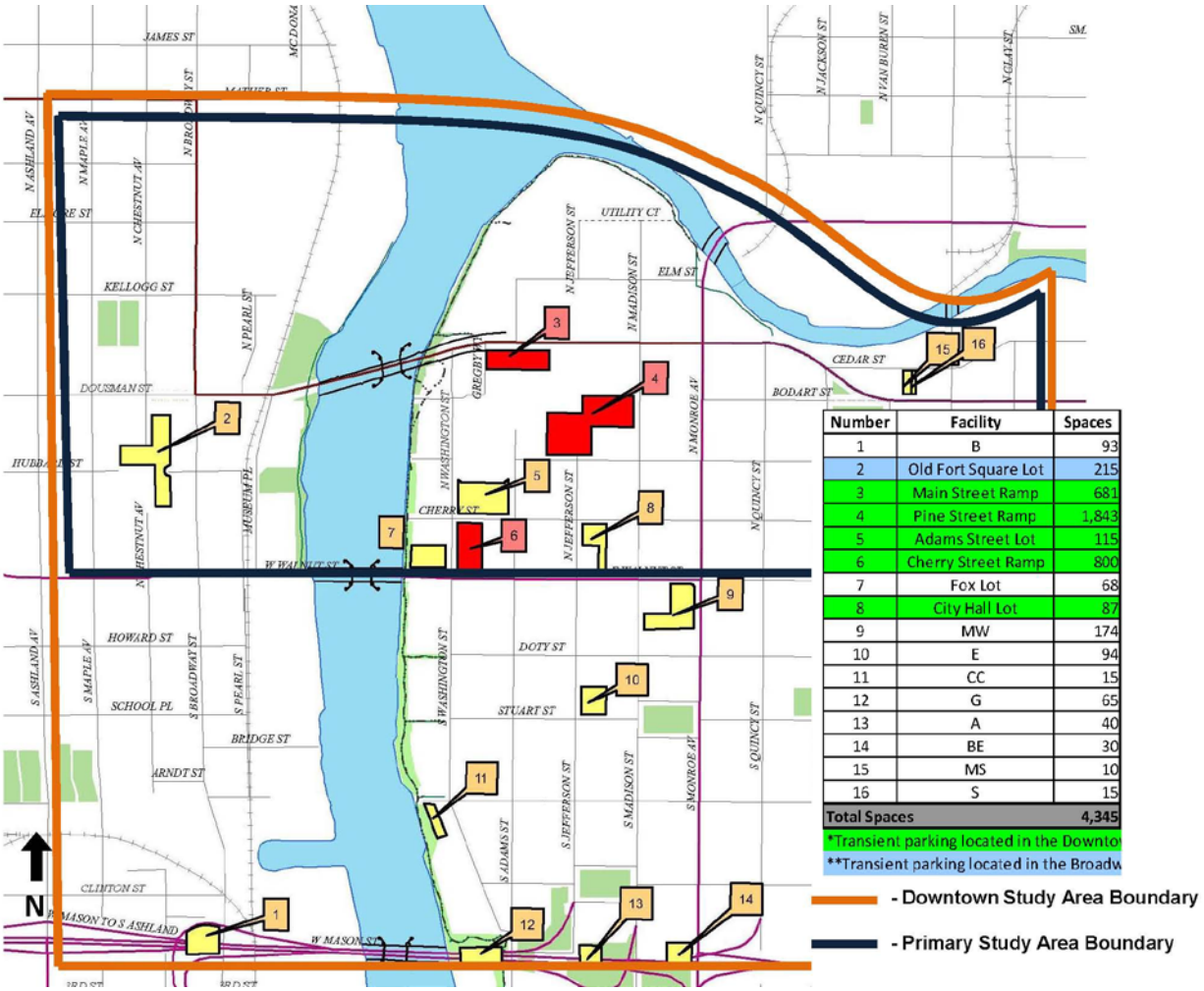
Public Off-Street Parking

The City of Green Bay owns 4,345 off-street parking spaces, which are located in three parking ramps and various parking lots. A total of 3,526 spaces are located in the five downtown ramps and lots. The location and inventory of spaces in each facility are shown in **Figure 3**. **Table 2** provides the number of spaces in each off-street parking facility and the type of spaces (i.e. leased, hourly, owned, etc.). As shown in **Table 2**, there are six transient parking facilities which provide public, hourly parking. Each of the three ramps provides hourly, public parking as well as the Adams Street Lot, City Hall Lot (CH), and Old Fort Square Lot (F).

Figure 3: Off-Street Parking Inventory Map



Number	Facility	Spaces
1	B	93
2	Old Fort Square Lot	215
3	Main Street Ramp	681
4	Pine Street Ramp	1,843
5	Adams Street Lot	115
6	Cherry Street Ramp	800
7	Fox Lot	68
8	City Hall Lot	87
9	MW	174
10	E	94
11	CC	15
12	G	65
13	A	40
14	BE	30
15	MS	10
16	S	15
Total Spaces		4,345

*Transient parking located in the Downto
**Transient parking located in the Broadw

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Table 2: Off-Street Parking Inventory

Number	Facility	Type	Spaces
1	B	Leased	93
2	Old Fort Square Lot	Rentals, Leases and Meters	215
3	Main Street Ramp	Hourly and Leased	681
4	Pine Street Ramp	Hourly and Leased	1,843
5	Adams Street Lot	Hourly and Leased	115
6	Cherry Street Ramp	Hourly and Leased	800
7	Fox Lot	Leased	68
8	City Hall Lot	Meters and City Vehicles	87
9	MW	Leased from Church	174
10	E	Rentals	94
11	CC	Leased	15
12	G	Leased	65
13	A	Leased	40
14	BE	Leased	30
15	MS	Vacant	10
16	S	Leased	15
Total Spaces			**4,345**
*Transient parking located in the Downtown area.			
**Transient parking located in the Broadway Corridor.			

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Parking occupancy count data was obtained from the City of Green Bay for the public ramps and lots. **Table 3** summarizes the parking inventory and occupancy counts for these parking facilities. The occupancy counts for the Pine Street Ramp, Main Street Ramp, Cherry Street Ramp, and Adams Street Lot are based on the weekday counts performed between 6 AM and 6 PM as provided in the Facility Space Utilization Report for the Year 2012. There are a total of 3,526 public off-street spaces in the Downtown area, which had average peak occupancy of 47% and a peak period occupancy of 68%. There are a total of 2,392 monthly permits with the majority located in the Pine Street and Cherry Street Ramps.

City Parking Lots

The City Hall Lot and the Adams Street Lot offer hourly parking in the Downtown area. The parking capacity and occupancy of these facilities was provided in **Table 3**.

The City Hall Lot is located adjacent to the City Hall building at 100 N Jefferson Street. The lot contains a mix of metered, handicap and City vehicle spaces. There are a total of 45 metered spaces, which includes eight 30 minute meters and thirty-seven 2 hour meters. There are also 32 City staff spaces, 2 handicap spaces and 8 transient spaces. As shown in **Table 3**, the metered and handicap spaces in the City Hall Lot are very well utilized at a peak parking occupancy of 89%.

Table 3: Downtown Area Transient Parking Inventory and Occupancy

		Weekday Utilization		Occupancy		Monthly	
Facitliy	Capacity	Average	Peak	Average	Peak	Permits	% Leased
Pine Street Ramp [1]	1,843	1,036	1,235	56%	67%	1,730	94%
Main Street Ramp [1]	681	69	470	10%	69%	9	1%
Cherry Street Ramp [1]	800	422	520	53%	65%	647	81%
City Hall Lot [2] [3]	47	32	42	68%	89%	0	0%
Adams Street Lot [1]	133	105	133	79%	100%	6	5%
Total	**3,504**	**1,664**	**2,400**	**47%**	**68%**	**2,392**	**68%**

[1] Source: City of Green Bay Facitly Utilization Report 2012

[2] Source: City of Green Bay Parking Count on Wednesday, February 6, 2013 at 10 AM, 12 PM and 2 PM.

[3] Inventory and cccupancy count only includes the 45 metered and 2 HC spaces.

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The Adams Street Lot is located north of Cherry Street between Adams Street and Washington Street. This lot is a gated facility that serves transient and monthly parkers. Due to its central location, the Adams Street lot is very well utilized and at times can be completely full.

An hourly parking turnover survey of the Adams Street Lot was conducted by City of Green Bay staff on Thursday, March 7, 2013 between the hours of 9 AM and 9 PM. This survey analyzed the average parking time per vehicle. The results of the survey are provided in **Table 4**. As shown in **Table 4**, most vehicles (approximately 72%) park 2 hours or less. On average, vehicles park 2.29 hours. This shows that the lot is primarily used by transient parkers. Assuming that anyone parked for 5 hours or more is an employee in the area, then approximately 13% of the vehicles parked in the Adams Street Lot are long-term parkers, presumably employees, who are using spaces that could be expected to turn over several times a day if they were available.

Table 4: Adams Street Lot Parking Turnover Survey

Duration (Hours)	# of Vehicles	Total Hours Parked
1	207	207
2	87	174
3	36	108
4	23	92
5	19	95
6	6	36
7	18	126
8	8	64
9	2	18
10	0	0
11	1	11
Total	**407**	**931**
Average Time Parked per Vehicle		**2.29**

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City Parking Ramps

The City of Green Bay owns three public parking ramps in the Downtown area. Each ramp offers monthly and transient parking. The hourly parking rate is $0.55 per hour with the first hour free. Free parking is offered on weekdays between 6 PM and 8 AM and all day on weekends and holidays. The ramps are gated and have cashier booths for pay-on-exit. Usually cashiers exit the booths at 7 PM on weekdays and the ramps operate as an open system so that a driver who arrived at any time in the day can leave without paying the fee, if they leave after the cashiers have left.

The Main Street Ramp has 681 spaces, which on average are only 10% occupied. However, due to its convenient location across from the KI Convention Center on the north end of the Downtown, the ramp experiences peak demand during large conferences or conventions. Based on the 2012 Facility Usage Report from the City, on average, only 9 monthly spaces are leased in the ramp at the current time, with Associated Bank leasing 200 spaces as of August 2013, with the potential of another additional 50 spaces in the near future.

The Cherry Street Ramp is centrally located at the northeast corner of Walnut Street and Washington Street. The ramp has 800 spaces, which are on average 53% occupied and 81% leased. The ramp experiences a peak occupancy of only 65%, which shows there is available capacity.

The Pine Street Ramp is the largest of the three ramps with 1,843 spaces. On average, the ramp is 56% occupied and 94% leased. It has a peak occupancy of 67%, which shows there are a substantial number of spaces available and the opportunity to sell more monthly parking permits if requested by local businesses.

Broadway Corridor

A high activity restaurant and entertainment area in Green Bay is located along Broadway, which is west of the Fox River. A separate analysis of the on-street and off-street parking was performed for the Broadway Corridor.

The organization *On Broadway* has persuaded the City to implement free 2-hour on-street parking along Broadway, in lieu of metered paid parking, to help the local businesses. However, we understand that the two hour time restriction is not aggressively enforced in deference to the business interests. **Table 5** provides the inventory and occupancy counts performed by City of Green Bay staff of on-street spaces along Broadway on Wednesday March 6, 2013, Monday October 14, 2013, and Tuesday, October 15, 2013. As shown in **Table 5**, the spaces along Broadway are 47% occupied during the peak parking period (noon). However, where the highest density of businesses is located, between the 200 South and 200 North blocks, the parking is well utilized. This portion of Broadway is approximately 78% to 100% occupied during the noon period. This occupancy level at noon is not surprising since Broadway offers free parking and there are a number of restaurants on Broadway that attract a substantial lunch crowd.

Table 5: On-Street Parking Inventory and Occupancy on Broadway Street

			Occupancy Counts			Wednesday	Occupancy Counts			Monday	Occupancy Counts			Tuesday
			Wednesday, 3/6/2013			Peak	Monday, 10/14/2013			Peak	Tuesday, 10/15/2013			Peak
Street	Side	Spaces	10AM	NOON	2PM	Occupancy	10AM	NOON	2PM	Occupancy	10AM	NOON	2PM	Occupancy
Broadway, 300 South	East	3	0	0	0	0%	0	1	0	33%	2	0	0	67%
	West	6	2	0	0	33%	0	1	0	17%	1	0	1	17%
Broadway, 200 South	East	6	0	5	3	83%	1	4	2	67%	6	2	5	100%
	West	9	5	8	5	89%	4	7	5	78%	9	8	7	100%
Broadway, 100 South	East	6	1	5	0	83%	0	0	1	17%	2	0	0	33%
	West	9	0	5	4	56%	2	5	1	56%	3	3	2	33%
Broadway, 100 North	East	8	6	7	6	88%	4	7	5	88%	5	7	5	88%
	West	11	8	8	6	73%	7	10	8	91%	6	8	5	73%
Broadway, 200 North	East	2	0	0	0	0%	0	2	0	100%	0	0	0	0%
	West	9	0	7	3	78%	4	4	3	44%	2	4	6	67%
Broadway, 300 North	East	13	0	0	0	0%	0	1	0	8%	0	1	2	15%
	West	10	2	3	3	30%	3	3	3	30%	0	4	4	40%
Broadway, 400 North	East	11	0	0	0	0%	0	0	0	0%	0	0	0	0%
	West	8	0	0	0	0%	0	0	0	0%	0	0	0	0%
Totals		**103**	**24**	**48**	**30**	47%	**25**	**45**	**28**	44%	**36**	**37**	**37**	36%

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Minimal off-street parking is provided near Broadway. The City of Green Bay owns the Old Fort Square Lot (Lot F), which is located off Hubbard Street behind the commercial building along Broadway. The lot includes a mix of reserved, metered and time-restricted spaces (2 hour parking). The majority of the reserved spaces are leased by the Old Fort Square building occupants. This lot has a very circuitous layout, poor circulation, and a complex assignment of spaces, which makes it difficult for transient/short-term parkers to locate a parking space. Also, the Old Fort Square Lot is located behind a building along Broadway making it poorly visible and difficult to find for drivers.

Parking occupancy counts of the Old Fort Square Lot were performed by City of Green Bay staff on Wednesday, February 6, 2013. **Table 6** shows the inventory and occupancy by type of space. During the peak period (noon) the lot was found to be only 42% occupied and the metered and 2-hour time restricted spaces were only 21% and 47% occupied, respectively. These counts show there was available capacity in the Old Fort Square Lot at the time of the survey.

Table 6: Old Fort Square Lot Parking Inventory and Occupancy

Facitliy	Type of Space	Capacity	Weekday Utilization			Peak
			10:00 AM	12:00 PM	2:00 PM	Occupancy
Old Fort Square Lot F [(1)]	Metered	83	6	17	13	**20%**
	Time Restricted	30	4	14	14	**47%**
	Reserved	102	57	58	60	**57%**
	Totals	**215**	**67**	**89**	**87**	**41%**

[1] Source: City of Green Bay Parking Count on Wednesday, February 6, 2013 at 10 AM, 12 PM and 2 PM.

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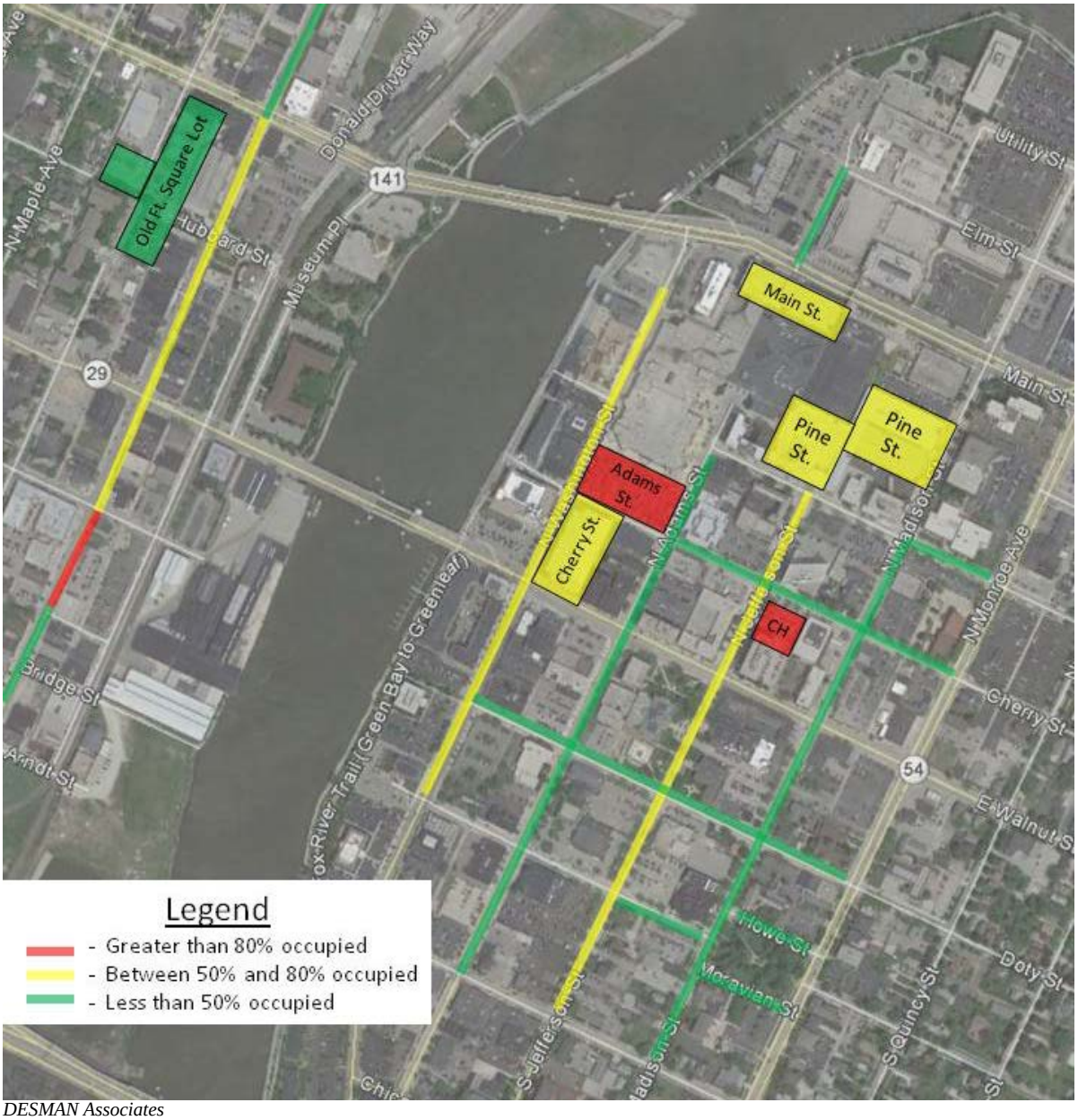
Summary of Existing Parking Conditions

Figure 4 illustrates the peak parking occupancy of on-street and off-street transient parking in the Downtown area. The City Hall Lot, Adams Street Lot and a portion of Broadway were found to be greater than 80% occupied during the peak weekday period. Most of the on-street areas were less than 50% occupied. The three parking ramps were all between 50% and 80% occupied during the peak period, which shows they each have available parking capacity during the peak weekday parking period.

Figure 4: On-Street and Off-Street Weekday Peak Parking Occupancy



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Overall, there is sufficient parking available in Downtown Green Bay. **Table 7** and **Table 8** shows the available parking capacity in the Downtown area east of the Fox River for the average weekday period and peak weekday period, respectively. Since only one day of occupancy counts were performed for the on-street parking, no average available parking capacity was considered for on-street parking in the Downtown area.

A 90% practical capacity factor was applied for the analysis in Tables 7 and 8. Practical capacity refers to the operational efficiency of a parking area or facility. A parking facility is perceived by its users to be at full operational (practical) capacity when occupancy levels reach 85% to 90% depending on the type of user. Once this level is exceeded, potential parkers, particularly transient parkers, find it difficult to locate an available space. As a result, those individuals must continue to search for an available space, creating traffic flow problems, and increasing the potential for conflicts. The operation of a parking system or facility is most successful when the supply of spaces exceeds the peak demand for those spaces by 10% to 15%, meaning 10% to 15% of spaces are not occupied at any given time and are available for parking or for occasional surges in use.

This analysis has considered all City of Green Bay parking facilities located in the Downtown area that have transient parking spaces, which includes the three parking ramps, the City Hall Lot and Adams Street Lot. As shown in **Table 7**, there are 1,465 available spaces in the three City Ramps and 25 available spaces in the two City Lots during an average weekday parking period. As shown in **Table 8**, there are a total of 767 spaces available in the three City Ramps, a deficit of 13 spaces in the two City Lots and 258 available metered spaces on-street during the peak parking period. Overall, there are a net of 1,011 spaces available in the Downtown during the peak weekday parking period.

Table 7: Average Weekday Available Parking Capacity

Downtown Parking Facility	Capacity (Spaces)	Effective Capacity (90% Occupancy)	Weekday Average Occupancy (Parked Cars)	Available Weekday Capacity
Main Street	681	613	69	544
Pine Street	1,843	1,659	1,036	623
Cherry Street	800	720	422	298
Off-Street Totals	**3,324**	**2,992**	**1,527**	**1,465**
City Hall Lot	47	42	32	10
Adams Street Lot	133	120	105	15
Off-Street Totals	**3,504**	**3,154**	**1,664**	**1,490**

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Table 8: Peak Weekday Period Available Parking Capacity

Downtown Parking Facility	Capacity (Spaces)	Effective Capacity (90% Occupancy)	Weekday Peak Occupancy (Parked Cars)	Available Weekday Capacity
Main Street	681	613	470	143
Pine Street	1,843	1,659	1,235	424
Cherry Street	800	720	520	200
Off-Street Totals	**3,324**	**2,992**	**2,225**	**767**
City Hall Lot	47	42	42	0
Adams Street Lot	133	120	133	-13
Off-Street Totals	**3,504**	**3,154**	**2,400**	**754**
On-Street Totals	**492**	**443**	**185**	**258**
TOTALS	**3,996**	**3,596**	**2,585**	**1,011**

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Table 9 shows the amount of available monthly parking capacity in the three Downtown parking ramps. This analysis applies a 90% practical capacity factor, which assumes that at least 10% of the spaces in the parking ramps should be made available for additional transient parking demand. Based on this analysis, a total of 774 additional spaces are available for monthly permit parkers or transient use. However, even more monthly permits could be sold in the Main Street Ramp, since this analysis applies the peak occupancy level that is only experienced during large conventions/conferences at the KI Center. If the average parking occupancy in the Main Street Ramp were considered, an additional 510 spaces could be leased in the Main Street Ramp, instead of only 109 spaces.

Table 9: Available Monthly Parking Capacity

Facitliy	Parking Capacity	Practical Capacity (90%)	Peak Occupancy	Available Capacity	Current Monthly Permits	Total Potential Monthly Permits
Pine Street Ramp	1,849	1,664	1,235	429	1,730	2,159
Main Street Ramp	681	613	470	143	9	152
Cherry Street Ramp	802	722	520	202	647	849
Total	**3,332**	**2,999**	**2,225**	**774**	**2,386**	**3,160**

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In Summary, these results suggest that there is currently considerable capacity available in the three City Ramps to accommodate additional parking for new Downtown development.

3. Stakeholder Meetings

Summary of Stakeholder Meetings

A series of meetings were conducted with stakeholders in the Downtown area and the Broadway Corridor at the beginning of the study to help understand the parking issues and details of how the system is currently operated. Meetings were held with the following 15 groups or individuals:

1. Initial Meeting with City of Green Bay Staff
2. Mike Daniels, Nicolet National Bank and Bob Weyers, Commercial Horizons
3. Jeff Mirkes, Director (Downtown Green Bay, Inc and Olde Main Street, Inc)
4. Christopher Naumann, Director (On Broadway, Inc)
5. Jim Schmitt, Mayor (City of Green Bay)
6. Jeff Tappen, Facilities Manager (Schreiber Foods)
7. Anthony Ferro, Property Manager (Associated Bank)
8. Tim Farel, General Manager, Tracy Hilles-Heim, Assistant Manager (Hyatt on Main/KI Center)
9. Paul Belschner, Property Manager (Smet Company/APAC Services-Baylake Bank building) Rob Cera, President (Baylake Bank)
10. Denis Feld, President (Feld Companies)
11. Doug March and Paul Donowski (Brown County)
12. Mark Winter, Building Services Supervisor and Bob Juidici (Integrys/Wisconsin Public Service Corp)
13. Steve Schneider, Owner (Bellin Building)
14. Laurie Radke(Green Bay Area Chamber of Commerce)

A complete summary of the stakeholder meetings is documented in **Appendix A**. A summary of some of the key ideas expressed at those meetings is presented below:

- There are many proposed developments in the next 0-10 years that will increase parking demand and reduce capacity as new buildings are built on the sites of existing parking lots.
- On-street meters have recently been replaced with single space meters with a slot for the Green Bay debit card
- The City is in the process of updating the Downtown Master Plan. This process may have an impact on the parking study conclusions and recommendations.
- The Main Street ramp can be demolished if requested by Schreiber Foods within the next 20 years based on their agreement with the City.
- There is a concern with the overnight on-street parking ban as more downtown residences are built.
- Some groups or individuals would like the downtown parking meters to be able to accept credit cards.
- The Broadway area is a healthy, thriving area, and circulation in the current City Lot F is very circuitous and difficult, especially for transient parkers.

- The Green Bay Gold program has been marginally successful since its 2001 start and many would like to see what other types of parking programs could be implemented to encourage people to come downtown.
- The Adams Street Lot is a very heavily used lot, but the site may be considered for development of an urban plaza.
- Many would like the parking ticket system modernized to allow credit card payments for parking and for citation payments.

Summary of Meetings with Parking Operations Staff

Interview meetings were held with selected operations and administrative staff involved with the City of Green Bay parking and operations management. These meetings provided us an opportunity to learn about the history and existing conditions regarding parking enforcement, revenue collections, maintenance, security, policies, organizational structure and a variety of operational issues. The following individuals were interviewed.

- Mary Scanlan, Parking Field Supervisor
- Sharon Gerrits & Eileen Clark, Maintenance & Operations Attendants (MOA)
- Shirley Tillman & Sharon Ruby, Enforcement Attendants (EA)
- Mindy Stacie & Sue Bdadeau, Parking Division Account Clerks II and III
- Mary Stutleen (Administration) & Jeanine Charlier (Finance), Public Works Supervisor
- Chris Pirlot, Parking Manager

The details from those meetings are documented in **Appendix B**.

These interviews provided a wide variety of information and real insight into the day-to-day management of the parking system. Everyone we interviewed was very open and helpful in answering our questions and providing honest input. Some of the major operations and management issues that we learned from these interviews are listed below.

1. There is substantial revenue lost from allowing free weekday parking after 6 PM and free weekend parking in the ramps and public lots.
2. There is an inconsistency regarding the parking discounts provided to certain businesses both for monthly parking passes and on-street parking along Broadway.
3. The third party credit card payment system is costly to the user and difficult to use. Lack of an online credit card payment system on City website for parking tickets and monthly parking passes is both detrimental to the level of service for customers and the amount of time required by staff to handle on-site cash and check payments.
4. The 2004 administrative consolidation program has reduced the Parking Field Supervisor's ability to maximize the efficiency and financial performance of the parking system. It has also placed the Public Works Administrative and Supervisor staff in the role of handling customer service parking issues related to parking operations. This

system can work, but efficient operation requires a continuously high degree of communication and coordination between office and field staff.

5. Green Bay Gold Token program has become outdated and seldom used.
6. No plan on how to implement debit card program for meters has been developed.
7. PARCS equipment is getting old and will need replacement.
8. Open system meter collections can allow theft by staff.
9. Staff needs more training on the current access and revenue control software.
10. Staff needs training on Duncan meter auditors (which are brand new technology).
11. Complex pricing discount schedule for monthly parking passes causes loss of revenue and creates inefficiencies with collection/tabulation.
12. Anti pass-back system has not been completely implemented on PARCS equipment due to mechanical issues after the Pine Street Ramp expansion.

4. Parking Rates and Fees in Comparable Midwestern Cities

As part of the study parking rates and fees were collected for 10 Midwestern cities to see how their parking rates and fees compare with those in Green Bay. The cities were selected based on population and their location in the upper Midwest, similar to Green Bay.

The comparative data for Green Bay and the 10 other cities are presented in **Table 10** and **Table 11**.

Table 10: Population Data for 10 Comparable Cities and Green Bay

State	City	2010 Population
Wisconsin	**Green Bay**	**104,000**
	Racine	82,000
	Kenosha	99,218
	Madison	233,000
	Appleton	70,000
Michigan	Kalamazoo	80,000
Minnesota	Duluth	86,000
Illinois	Springfield	116,250
	Rockford	152,222
Iowa	Cedar Rapids	127,000
	Davenport	100,000

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Table 11: Parking Data for 10 Comparable Cities and Green Bay

City			On-street		Off-Street					Overtime Meter Violation Fees	Late Payment Fee	Meter Types	Comments
State	City	Population	Min	Max	Lot		Ramp						
			Hourly	Hourly	Hourly	Daily Max	Hourly	Daily Max	Monthly Rates				
Wisconsin	Green Bay	104,000	$0.60	-	$0.75	Short Term Lot	$0.60	$4.80	$14.90-$67.70	$10.00	$0.00	Single Space	
	Racine	82,000	$0.25 per hour 10 hr limit	$0.50 per 4 hr limit	$0.25	-	-	$1.50	-	$20.00	$0.00	Single Space	
	Kenosha	99,218	NA-Free on-street parking	NA		$2.50 per day		$3.00	$50.00	NA	NA	Free on-street parking	On-line Citation Payments
	Madison	233,000	$1.00 per hour 10 hr limit	$1.75 per 3 hr limit	$1.00	-	$1.00	$5.00	$110-$190	$25.00	$10.00	Single & Multi-space	
	Appleton	70,000	$0.75	-	$0.75	-	-	$2.00	-	$20.00	$15.00	Single Space	On-line Citation Payments
Michigan	Kalamazoo	80,000	$1.50 per hour for 1, 2 and 3 hour meters		$1.00	$2.00	$1.25	$3.00	$59-$80 $119-Reserved	$10.00	$10.00	Single Space	Parking outsourced to DLC. 280 free on-street spaces. On-line citation payment
Minnesota	Duluth	86,000	$0.25 per 40 min limit								$0.00		Parking outsourced to Intrastate parking. No response received after numerous attempts
Illinois	Springfield	116,250	$0.50	$1.00	$1.25	-	$1.50	$7.95	$30-$70	$10.00	$20.00	Single Space	On-street meters free after 5 pm and all day Sat-Sun.
	Peoria	115,607	$0.25	$2.00/Day	-	-	$1.50	-	$47.67	$15.00	$5.00	Single space, multi-space trial	On-line Citation Payments
Iowa	Cedar Rapids	127,000	$1.00	-	$0.75	-	$0.75	-	$42-$65	$25.00	$0.00	Multi-Space	On-line Citation Payments
	Davenport	100,000	NA-Free on-street parking	NA	-	-	$0.75	$7.50	$75.00	NA	NA	Free on-street parking	On-line Citation Payments

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Summary of Results

1. On-street parking meter rates vary from $0.25 per hour for long term meters in Racine to $1.75 per hour in Madison for 3-hour meters. Green Bay is $0.60 per hour.
2. Parking lots--only Racine ($0.25 per hour) had a lower hourly rate than Green Bay. All the other cities have a rate varying from $0.75 to $1.25 per hour. Green Bay is $0.75 per hour.
3. Green Bay has the lowest monthly rate for high volume clients.
4. Kalamazoo offers a discounted rate for higher volume purchase of monthly permits similar to Green Bay.
5. Overtime meter violation rates vary from $10 to $25. The average for cities with meters is $16.88. Green Bay's violation fee is $10.
6. Late payment fees range from nothing to as high as $20 in Springfield, Illinois. Green Bay has a late payment fee of $5 after 5 days, an additional $10 late fee after 20 days, and then after 30 days the City Parking Division notifies the DMV to suspend the registration on the vehicle which includes a $10 fee.
7. Kalamazoo offers a flat fee parking rate of $3.00 after 5 PM and for all day Saturday.
8. Madison, Peoria and Cedar Rapids have multi-space meters; all the other cities that have on-street meters have single space meters.
9. Two of the cities—Davenport and Kenosha do not have parking meters and offer free on-street parking.
10. Most of the cities offer on-line payment of citations through the City website. Green Bay has online payment through a third-party website that charges a 3% additional fee.
11. Two cities—Kalamazoo and Duluth—outsource their parking operation to private operators.

Several conclusions or recommendations can be drawn from this data that are relevant to the City of Green Bay as follows:

- The City should consider increasing the rates for the parking lots, especially the City Hall Lot and the Adams Street lot, which are heavily used.
- The City should offer no-fee on-line payment of parking citations through the City website, which is done by most of the cities in the sample.
- Kalamazoo, which is similar to Green Bay in many respects, offers flat fee parking after hours and on Saturday. The City should consider implementing such a fee, in conjunction with any changes in parking revenue equipment enhancements.
- Green Bay has some of the lowest monthly parking fees, particularly for high volume users. The City should evaluate those fees to see if increases are warranted.

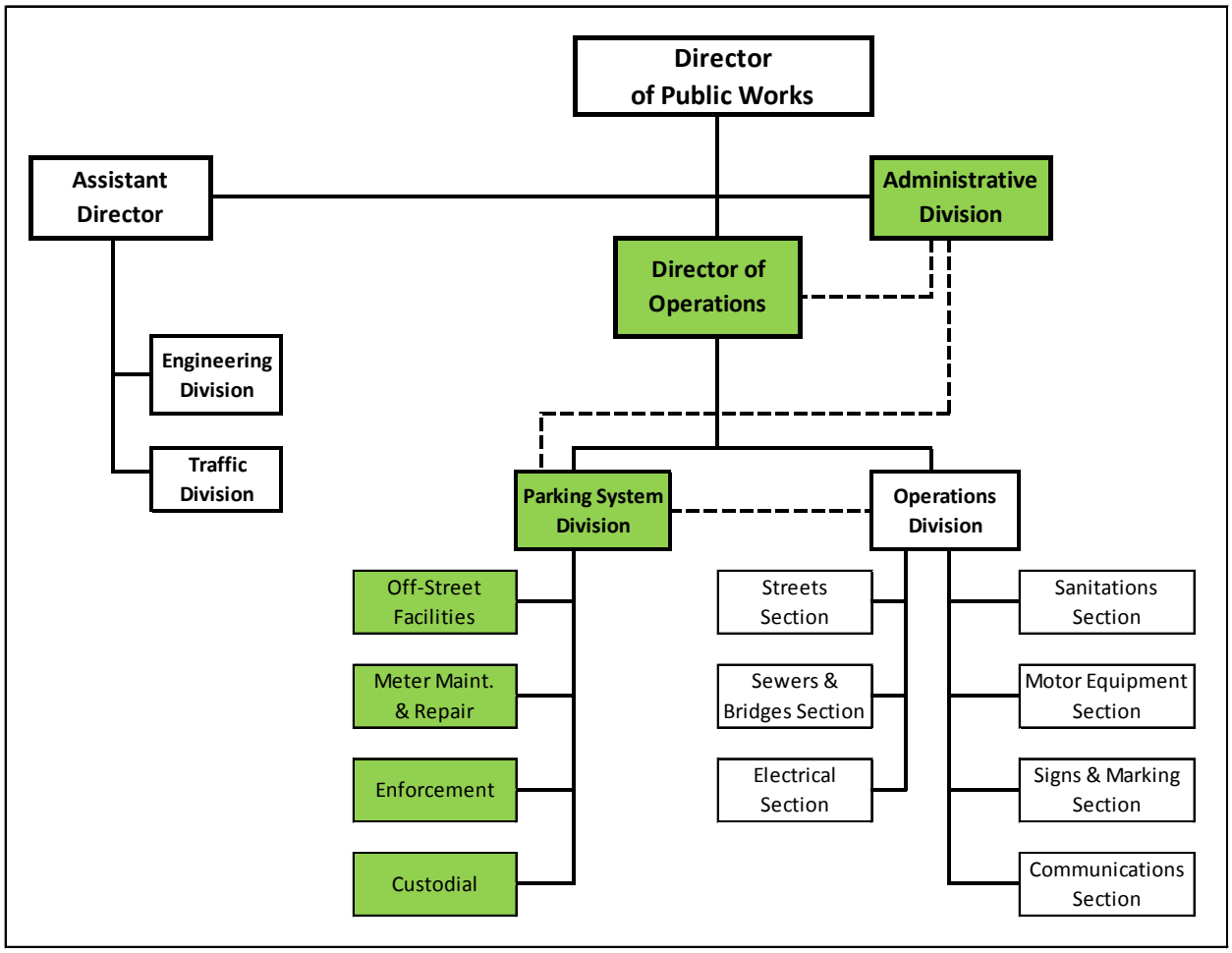
5. Assessment of Current Parking Operations

Organizational Structure

The operations and administration of the Green Bay Public Parking System are among several responsibilities of the City's Public Works Department (DPW). The field operations of the Parking System consisting of: off-street garage and lot operations, parking meter system

collections, repair and installation, parking enforcement and general custodial services – are assigned to the Parking System Division. The administrative aspects of the Parking System consisting of: sales, fee and fine collections, accounting, adjudication processing, client database maintenance, public assistance and budgeting – are assigned to the Administrative Division of the DPW, which performs some of the same services for all the sections of DPW. The current organizational structure of the City's Parking System with the DPW is depicted in **Figure 5**.

Figure 5: Existing Organizational Chart for the Parking System



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The DPW Director of Operations is in charge of the Operations Division, which has seven distinct subsections, as well as the Parking Division. The scope of the Director's responsibilities under the present organizational structure has resulted in the Director spending only 40% of his time on the management of the Parking System Division. Supporting the Director are two people that hold the title of Public Works (PW) Supervisor. One of these PW Supervisors manages the Administrative Division that serves the Parking Division as well as the rest of the PW Department. This Supervisor spends approximately a third of their time on the administrative needs of the Parking System. The other PW Supervisor presently has dual management responsibilities for clerical operations of the Parking Division and the Operations Division. As a

consequence, this PW (Parking/Operations) Supervisor spends half of their time managing the Parking System with the rest of their time being spent managing aspects of the Operations Division, depending on the weather conditions.

Personnel Performing Parking System Division Duties

In addition to the three positions previously discussed, Director of Operations, PW (Parking/Operations) Supervisor and the PW (Administrative) Supervisor, there are 25 other budgeted positions that presently perform duties directly tied to the operation, maintenance and management of the Municipal Parking System.

Parking Division Employees

- Cashier: *4 Full-Time & 3 Part-Time*
- Enforcement Attendant (EA): *4 Full-Time*
- Maintenance & Enforcement Attendant (MEA): *3 Full-time & 1 Part-Time*
- Maintenance & Operations Attendant (MOA): *4 Full-Time*
- Custodian: *3 Full-Time*
- Accounting Clerk II: *1 Full-Time*
- Accounting Clerk III: *1 Full-Time*

Parking System Division Operations Work Force

DESMAN was provided job duty descriptions and a typical week-long deployment schedule for the operations workforce of the Parking Division. One full-time MEA position was reported to be vacant. The cashiers process daily revenue collection at the four staffed off-street parking facilities, namely the Pine, Cherry and Main Ramps and the Adams Lot from Monday through Friday. The EAs primarily enforce on-street parking regulations and parking meter system usage during weekday business and school hours. The custodians handle the routine facility and grounds maintenance duties over a seven day schedule. The MOAs function as system technicians and have primary responsibility for meter system revenue collections and the maintenance/repair of the facility systems, equipment and meters over a seven day work schedule. The MEAs primarily function as the overnight parking enforcement unit that polices the City's *No Parking 3AM - 5AM* regulation over a seven day work schedule and to complete maintenance work that must be done with facilities are empty.

As shown in **Table 12**, these 21 full- and part-time employees spend 764 hours per week operating and maintaining the public parking system. All of these workers are based in the Parking Division maintenance office located inside the Pine Street Garage.

Table 12: Parking System Division Workforce/Weekly Schedule

Titles	Primary Responsibilities	Staus	Schedule Work Hours							Total
			Sun	Mon	Tue	Wed	Thu	Fri	Sat	Hours
Custodians	Property & Grounds Maintenance	3 FT	8	24	16	24	16	24	8	120
Enforcement Attendants (EA)	Enforcement	4 FT		32	32	32	32	32		160
Cashiers	Revenue Collection	4 FT		32	32	32	32	32		160
		3 PT		12	12	12	12	12		60
Maintenance Operations Attendants (MOA)	Meter Collections/Equipment & System Maintenance Technicians	4 FT	8	32	24	32	24	32	8	160
Maintenance Enforcement	Overnight Enforcement & Clerical	3 FT	16	16	16	8	8	8	8	80
		1 PT			8	8	8			24
Totals		**17 FT**	**32**	**148**	**140**	**148**	**132**	**140**	**24**	**764**
		4 PT								

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Parking Administration Work Force

The two Account Clerks assigned to the Parking Division office located in City Hall essentially perform the bulk of the accounting and clerical functions of the Parking System Division during regular weekday business hours. These account clerks upload and audit daily parking system revenue, reconcile bank deposits, process counter sales related to permit purchases, meter hood installations, and Green Bay Gold Voucher purchases. They also invoice, receive and record payments of parking fees and fines, manage data entry and research relating to daily issuance of parking citations, and create and mail a variety of official notices to persons with unpaid citations. They also respond to all incoming parking-related telephone calls. The daily parking-related functions performed by these two account clerks consume a full day of work for both clerks.

Organization Issues

Based on our review of the staffing and organization of the Parking System Division, DESMAN found several issues that need attention.

The present managerial structure was conceived to achieve greater efficiency and backup support within the Department of PW. However, based on information from interviews with the Director of Operations and the two PW Supervisors as well as on-site observations, this organizational structure has shortcomings as it applies to the management of the Parking System Division. For example, the PW (Parking/Operations) Supervisor functions almost exclusively as the day-to-day operations and maintenance manager of the Parking System facilities. The PW (Administrative) Supervisor monitors and processes the system's revenue, sales, and even public inquires about the system. This division of system responsibilities between the PW (Parking/Operations) Supervisor and the PW (Administrative) Supervisor is akin to one hand not knowing what the opposite hand is doing on a daily basis unless these individuals maintain exceptional communication. The present organizational structure does not place all responsibility and

accountability for the performance of the Parking System under a single individual. Such an arrangement would be considered unacceptable for an enterprise operation. It is our opinion that the PW (Parking/Operations) Supervisor should assume full time responsibility and accountability for both the field operations and administrative functions of the Division. Such a change will establish a single center of accountability for the performance of the day-to-day operations of the Parking Division.

The two accounting clerks that report to the PW (Administrative) Supervisor have limited contact with the PW (Parking/Operations) Supervisor. During DESMAN's interview with these individuals we found that, while they were well versed in handling the routine paperwork of the parking operation, they seem to lack useful knowledge about the Parking Division's field operating practices and policies. Regardless of whether or not the two account clerks are to remain stationed with the rest of the PW administrative staff based at City Hall, their work activities should fall under the purview of the Manager of the Parking System.

After reviewing the work duties and schedule of the Parking System Division workforce, we believe that the size of the field operations staff could be reduced. The 3-person custodial crew could be reduced by one and the 8-hour custodian work shift on Saturdays and Sundays could be eliminated or dealt with on an "as needed" basis since at least one MOA and one MEA have scheduled time on Saturdays and Sundays. Additionally, the group of cashiers could be dramatically reduced if the City were to install auto cashiering systems in the three parking garages and the Adams Lot. The benefits of installing auto cashiering technology will be discussed later in this report.

Parking System Division Revenue and Expenses

Table 13 provides a summary of Parking Division revenue and expenses since 2009. The Parking System Division revenue generation over the past three years has not kept pace with the annual expenses. Employee Salaries and Benefits have regularly accounted for more than 60% of the Division's annual expenses. The other large expense line items include Utilities, Internal Charges/Transfers, Equipment/System Maintenance, and Security, which have collectively accounted for approximately 30% of the Division's annual expenses each year.

Parking System Division revenue has been up and down over the past four years with the highest amount of gross revenue (i.e. $2.4 million) generated in 2010. Over half of the Division's gross revenue was generated by parking in the ramps and approximately 30% of the revenue comes from parking citation fines. The revenue from the 676-space parking meter system accounts for approximately 8% of the Division's gross earnings.

Since 2009, the Division has had annual operation profits ranging from $21,155 in 2009 to $376,514in 2012. There have been substantial year to year changes in the annual profit earned by the Parking System Division.

Table 13: Parking System Division Revenue and Expenses, 2009 - 2012

REVENUE	2009 Actual	2010 Actual	% Chg	2011 Actual	% Chg	2012 Actual	% Chg
Misc. Revenue	$27,945	$26,391	-6%	$24,920	-6%	$22,123	-11%
Parking Ramp Revenue	$1,195,187	$1,302,096	9%	$1,165,310	-11%	$1,154,916	-1%
Surface Lot Revenue	$180,184	$195,632	9%	$204,674	5%	$210,248	3%
Meter Revenue	$185,093	$180,639	-2%	$173,241	-4%	$182,110	5%
County Lot "L"	$9,329	$9,110	-2%	$11,006	21%	$9,781	-11%
PU Parking Tickets	$704,047	$732,983	4%	$640,469	-13%	$659,563	3%
TOTAL REVENUE	**$2,301,785**	**$2,446,850**	**6%**	**$2,219,620**	**-9%**	**$2,238,741**	**1%**

EXPENSES	2009 Actual	2010 Actual	% Chg	2011 Actual	% Chg	2012 Actual	% Chg
Employee Salaries	$890,541	$851,524	-4%	$853,671	0%	$846,158	-1%
Benefits	$520,542	$443,877	-15%	$428,066	-4%	$432,593	1%
Miscellaneous	$5,884	$2,724	-54%	$1,898	-30%	$990	-48%
Supplies/Services	$25,349	$26,099	3%	$37,854	45%	$26,107	-31%
Security	$78,804	$82,219	4%	$80,821	-2%	$75,879	-6%
Equipment/System Maint.	$94,918	$68,697	-28%	$78,469	14%	$81,867	4%
Maintenance Repair	$74,519	$85,323	14%	$87,546	3%	$69,735	-20%
Parking Enforcement	$12,179	$10,579	-13%	$16,750	58%	$19,238	15%
Utilities	$178,817	$175,057	-2%	$189,436	8%	$160,937	-15%
Internal Charges/Transfers	$320,203	$486,299	52%	$347,584	-29%	$106,306	-69%
Snowplowing Service	$48,040	$38,917	-19%	$24,552	-37%	$6,250	-75%
Property Rental/Taxes	$30,833	$41,224	34%	$33,183	-20%	$36,166	9%
TOTAL EXPENSES	**$2,280,630**	**$2,312,539**	**1%**	**$2,179,830**	**-6%**	**$1,862,226**	**-15%**
NET PROFIT	**$21,155.64**	**$134,310.91**	**535%**	**$39,789.66**	**-70%**	**$376,514.51**	**846%**

Off-Street Facility Operations

Facility Operating Hours

The three parking ramps and the Adams Street Lot are all open to the public 24 hours-per-day, 7–days-per-week. However, City policy currently dictates that customers are only required to pay for parking at these facilities Monday through Friday between the hours of 8:00AM and 6:00PM. At all other times the access control gates to the facilities are left open to allow for free entry and exit. Since the access gates to these facilities are raised once the cashier leaves, approximately between 6:00PM and 7:00PM, some parking customers are able to leave these facilities without paying the parking charge they owe for time spent in the facilities prior to 6:00 PM. Additionally, utility and security costs as well as maintenance and cleanup expenses are being incurred during these periods when the facilities are left open and free to the public.

The City should survey the evening and weekend usage of each of the ramps and the Adams Street Lot over an extended period of time in order to estimate the amount of revenue that might be captured if the current time period for pay parking were to be extended. Based on the 2012 Facility Usage Reports provided by the DPW, the parking City Ramps and Adams Street Lot are substantially less utilized during the 7:00PM to 6:00AM periods and on weekends. However, there is still some usage, especially in the Adams Street Lot during both weekdays and weekends, and in the Main Street Ramp during conventions or conferences at the K.I.

Convention Center. Also, based on field observations, the prevailing usage of the Cherry Ramp and the Adams Lot between the hours of 6:00PM and 1:00AM could yield a substantial gain in revenue for the system. A modest aim of such an initiative would be to establish an evening and weekend parking fee structure, possibly a flat fee, that would provide revenue to off-set at least some of the costs the Division incurs for security, utilities and maintenance, but that does not deter downtown business patronage.

Security

The Parking System Division has retained a private contractor to provide security at the ramps and at the Adams Lot. The 2013 budget contains $95,000 for the parking facility security. According to the Division deployment schedule the security service provider is required to provide 84 hours of security presence per week at the City ramps and Adams Street Lot. **Table 14** shows the Parking System Division security contractor's weekly schedule by shift.

Table 14: Parking System Division Security Contractor's Workforce/Weekly Schedule

Titles	Primary Responsibilities	Patrol Shifts	Schedule Work Hours							Total Hours
			Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Private Security	Ramp & Adams Lot Patrols	10AM-5PM		7	7	7	7	7		**35**
		3PM-6PM		3	3	3	3	3		**15**
		9PM-3AM	3					3	6	**12**
		10PM-3:30AM	3.5					2	5.5	**11**
		10PM-3:30AM	3.5					2	5.5	**11**
Totals			**10**	**10**	**10**	**10**	**10**	**17**	**17**	**84**

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While security is an important and often a critical service that has to be provided for a downtown parking operation, it is DESMAN's opinion that the City should reconsider the scope of its security presence particularly during daily downtown business hours. This position is based on the fact that between the hours of 8:30AM and 5:00PM the Parking System Division has at least 2 MOAs and 2 Custodians deployed at or nearby the ramps and the Adams Lot whom, by virtue of their presence, deter criminal and/or mischievous behavior. These individuals could be trained to be on-the-lookout for suspicious behavior and be armed with communications devices that would allow them to make calls to the City Police Department for support. Such an arrangement would allow for the scope of the current security service contract to be substantially reduced.

Access & Revenue Control Systems

The Federal APD parking access and revenue control equipment in the ramps and at the Adams Street Lot was installed in 2001. The industry benchmark is for this kind of equipment to be replaced every 7 to 10 years. During DESMAN's interviews with parking staff it was revealed that this existing equipment is over 10 years old and not fully functional. Parts are difficult to obtain and problems with wiring and counters often arise.

The City of Green Bay should take steps to acquire new parking access and revenue control equipment for the three ramps and the Adams Street Lot. It is DESMAN's opinion that City

should install a new automated payment system in each of the ramps and the Adams Street Lot. The new system will provide greater and more reliable access control, streamlined revenue processing, and real time transaction counting and monitoring capabilities without the need for cashier attendants. Depending on the particular features and functionality of the new parking access and revenue control system, the City may have to spend between $100,000 and $250,000 per ramp on the project.

General Facility & Equipment Maintenance

The Parking System Division, with the support of the broader PW Department, has established and maintained a strong in-house maintenance and repair program for its equipment and facilities. The parking ramps and lots were all found to be very clean and in good physical condition. As previously stated, the Division has 3 full-time custodians and 4 full-time MOAs that devote all, or a majority, of their time to the upkeep of the parking system assets. Additionally, the Motor Equipment, Street, Signs and Markings, Electrical and Communications Sections of the PW Department provide seamless technical and major project support to the Parking System Division on an "as needed" basis. The Division has the capacity to handle most of its snow and ice removal responsibilities.

However, this strong attention to maintenance is due in part to the fact that the PW (Parking/Operations) Supervisor spends 50% of their time working on non-parking related PW service and maintenance assignments. For example, the PW (Parking/Operations) Supervisor manages and coordinates an inmate work-release maintenance program for the Brown County Sheriff's Department. Under this program, inmates can reduce their sentence by participating in public service maintenance projects that have no relation to the daily operations of the Parking System Division. As previously stated, DESMAN believes that the split responsibilities of the PW Supervisor between the Parking Division and PW Operations has been counterproductive to the overall performance of the Parking Division.

Proper management of a municipal parking system requires an all-inclusive focus not only on facility maintenance and operations, but also on business practices, planning, marketing, and financial oversight, which are mostly outside the current purview of the PW (Parking/Operations) Supervisor.

Meter System Collections

The revenue deposited in the City's parking meter system is collected by the Parking System Division on a weekly basis by a two person MOA team. The collections regularly occur over three consecutive days. The current process for collecting the coinage is open and vulnerable to pilferage because the collectors have easy and unfettered access to the coins from the time they start the collection effort until the coins are brought to the counting room in the PW Administration Division. The current collection process provides no certainty that all the single-space meters are being collected, nor that all meter revenue is being returned to the counting room. While there has been no discovery of coin pilferage, it is definitely possible for the employees involved in the weekly collections to steal a share of the collected coins. Although the Parking Division routinely assigns a different MOA to the weekly collection task, this staff

rotation by itself will not necessarily prevent the possibility of organized collusion between and among the MOAs.

A viable deterrent to meter revenue theft by collectors would be to adopt an ongoing practice of conducting unannounced inspections (i.e. shadowing) of the meter collection process from start to finish. If at the end of the collection process an unexplained spike in coin revenue is realized, it is conceivable that the uptick in collections was only realized because a pattern of theft was interrupted. Another means of deterring coin theft would be to deposit salted (i.e. marked) coins throughout the system and check to see that all the salted coins are returned to the counting room. Such inspections should be unannounced and randomly targeted to different collection teams and individuals on each occasion. This process is most appropriate where electronic meters are not being used or where the audit information from electronic meters is not being downloaded from individual meter units during the collection process, which is presently the case in the City of Green Bay.

The City has now implemented meter auditing equipment that will prevent collectors from accessing the coinage or to acquire special handheld meter revenue auditing devices that are compatible with the Duncan-produced, single-unit electronic meters that maintain a tally of deposited coins between collection periods. It should be noted that the City's new meters have this system. It is our understanding that the Parking System Division has already purchased new Duncan handheld meter auditing units, but have yet to begin using them. These handheld devices will download the exact amount of revenue contained in each meter along with the serial number of the meter mechanism and identification/location of the meter unit. The data collected from the handheld units can then be uploaded into a companion software program capable of producing a host of different user-prescribed revenue reports.

Making this technology an integral part of the collection process will give the Parking System Division a computerized accounting of meter coin deposits that can be reconciled with the collected coin revenue. Once this system is operational, the Parking System Division will be able to know how many meters are collected, when the collections occurred and by whom, as well as the actual amount of revenue that has been deposited in each and every meter since the last collection.

Parking Enforcement

The Parking System Division enforcement program has been organized to deter illegal and non-complaint on-street and meter parking activity on a community-wide basis. The enforcement program is carried out Monday through Friday between the hours of 7:30AM and 6:30PM by four full-time Enforcement Attendants (EAs). Additionally, because the City of Green Bay has an ordinance which bans any on-street parking City-wide between the hours of 3:00AM and 5:00AM, the Parking Division has a special nightly enforcement unit that primarily focuses on deterring any infractions to the early morning "No On-Street Parking" ordinance.

When there is a full complement of 4 EAs available during the daytime enforcement period, the City is divided into the following four enforcement deployment beats:

- **Westside** – Ashland Avenue to the City's west boundary limits *(Mobile Beat)*
- **Downtown** – Ashland Avenue on the west to Monroe Avenue on the east; and Elm Street on the north to the Tilleman Bridge or Mason Street on the south *(Mobile Beat)*
- **Eastside** – Monroe Avenue to the City's east boundary limits *(Mobile Beat)*
- **Downtown Parking Meter Network** – Only parking meter enforcement throughout the downtown area east of the Fox River *(Walking Beat)*

When there is a full complement of 3.5 MEA's available during the weeknight enforcement period, the city is divided into quadrants; on weekends when staffing caries (typically 2 MEA's but a minimum of 1 MEA) this staff is responsible for the entire City in addition to strict enforcement of special zones in the downtown area.

Based on annual parking citation statistics provided by the PW Administrative Division, both the EAs and MEAs deployed tend to write between 15 and 20 parking citations per day. **Table 15** provides a breakdown of the annual parking citation issuance by the enforcement groups between 2010 and 2012. Nighttime or early morning on-street parking violations have consistently accounted for approximately 50% of the annual parking citation issuance value, while parking meter violations and all other parking violations have respectively accounted for approximately 20% and 30% of the annual value of parking citations issued.

Since there is a lack of field supervision over the activities and performance of both the EAs and the MEAs, it is impossible to know whether the daily ticket issuance production by the two enforcement units is the result of diligent work efforts or simply self-imposed daily ticket issuance quotas that have been adopted by enforcement units. To address this concern, DESMAN suggests that the PW (Parking/Operations) Supervisor arrange for the enforcement efforts by each member of this personnel group to be periodically monitored on an unannounced basis at least once a year.

Table 15: Annual Parking Citation Revenue, 2010-2012

CODE		VIOLATION DESCRIPTION	2010 Tickets	2010 Dollar Value	2011 Tickets	2011 Dollar Value	2012 Tickets	2012 Dollar Value
29.202(2)	*	**Expired meter**	**6,385**	**$63,850**	**5,790**	**$57,900**	**6,424**	**$64,240**
29.202(4)	*	**Failure to pay hourly parking fee**	**1,112**	**$11,120**	**733**	**$7,330**	**802**	**$8,020**
29.202(1)	*	**Exceeding time limit (1 hr; 2 hr zone)**	**3,231**	**$32,310**	**2,800**	**$28,000**	**2,849**	**$28,490**
29.203(1)		No parking anytime	776	$15,520	685	$13,700	654	$13,080
29.203(10)		Parking within 4 feet of a driveway	313	$6,260	372	$7,440	397	$7,940
29.203(11)		Parking on a sidewalk/terrace	622	$12,440	655	$13,100	584	$11,680
29.203(12)	**	**Night parking violation**	**15,243**	**$304,860**	**12,744**	**$254,880**	**11,630**	**$232,600**
29.203(13)		Residential parking district	301	$6,020	281	$5,620	250	$5,000
29.203(15)		Blocking egress	1	$20	0	$0	0	$0
29.203(16)		Setback violation	782	$15,640	565	$11,300	896	$17,920
29.203(17)		Contrary to posted sign	3,642	$72,840	2,839	$56,780	2,446	$48,920
29.203(18)		Outside designated space	201	$4,020	193	$3,860	153	$3,060
29.203(19)		Hooded meter violation	2	$40	9	$180	3	$60
29.203(2)		Bus stop	31	$620	53	$1,060	10	$200
29.203(3)		Narrow thoroughfare	93	$1,860	105	$2,100	258	$5,160
29.203(4)		Parked w/in 50 ft of railroad crossing	0	$0	1	$20	2	$40
29.203(5)		Improper parallel parking	115	$2,300	102	$2,040	112	$2,240
29.203(6)		Parking within 15 feet of a crosswalk	60	$1,200	71	$1,420	52	$1,040
29.203(7)		Parking within an intersection	0	$0	1	$20	2	$40
29.203(9)		School zone	27	$540	26	$520	24	$480
29.204(1)		Parking within 10 feet of a fire hydrant	194	$5,820	115	$3,450	117	$3,510
29.204(2)		No stopping/no standing zone	58	$1,740	70	$2,100	306	$9,180
29.204(3)		Obstructing curb ramp	2	$60	4	$120	1	$30
29.204(4)		Snow emergency	67	$2,010	81	$2,430	186	$5,580
29.204(5)		Trespass parking	0	$0	1	$30	0	$0
29.204(6)		Without consent	60	$1,800	107	$3,210	178	$5,340
29.204(7)		Parking in prohibited ramp stalls	2	$60	0	$0	0	$0
29.205(1)		Heavy vehicle (semi) night parking	22	$1,320	5	$300	6	$360
29.206(1)		Disabled space	322	$32,200	193	$19,300	195	$19,500
29.51		Abandoned vehicle	3	$90	0	$0	0	$0
			33,667	**$596,560**	**28,601**	**$498,210**	**28,537**	**$493,710**
	*	**Meter Violations**	**10,728**	**$107,280**	**9,323**	**$93,230**	**10,075**	**$100,750**
	**	**Night Parking Violation**	**15,243**	**$304,860**	**12,744**	**$254,880**	**11,630**	**$232,600**
		All Other Violations	**7,696**	**$184,420**	**6,534**	**$150,100**	**6,832**	**$160,360**

Summary of Parking Operations Recommendations

Below is a summary of the recommendations regarding the City of Green Bay parking operations.

Organizational Structure

- The PW (Parking/Operations) Supervisor should assume full time responsibility and accountability for both the field operations and administrative functions of the Division.
- The two account clerks should fall under the purview of the Parking Manager.

Personnel Staffing Levels

- The 3-person custodial crew could be reduced by one and the 8-hour custodian work shift on Saturdays and Sundays could be eliminated or dealt with on an "as needed" basis since at least one MOA and one MEA have scheduled time on Saturdays and Sundays.

- An automated cashier system should be implemented to reduce the number of cashiers needed in the three City Ramps and Adams Lot.

Off-Street Facility Operations

- The City should analyze the potential revenue to be earned by charging in the City Ramps and Adams Street Lot during the weekday evenings and weekends at modest parking rates.
- The City should consider using the 2 MOAs and/or 2 Custodians for weekday security between the hours of 8:30AM and 5:00PM, which would require renegotiating and reducing security coverage in the current security service contract.
- The City should install a new automated payment system in each of the ramps and the Adams Street Lot.
- The split responsibilities of the PW Supervisor between the Parking Division and the PW Operations Division should be eliminated.
- The PW (Parking/Operations) Supervisor should be made the Manager of the Parking Division and should be responsible for facility maintenance and operations, business practices, planning, marketing, and financial oversight.

Meter System Collections & Maintenance

- To help prevent theft from the meters the Parking Systems Division should adopt an ongoing practice of conducting unannounced inspections (i.e. shadowing) and/or depositing salted (i.e. marked) coins throughout the system and checking to see they return.
- The Parking Systems Division will, and already plans to begin incorporating the Duncan handheld meter auditing units into their auditing process of the meters collections.

Parking Enforcement

- Each member of the enforcement personnel group should be periodically monitored on an unannounced basis at least once a year.

6. Summary of Current Parking Technologies

On-Street Systems

Technology has allowed meters to become more reliable, offer more options and features, and above all, to be more user-friendly for the parking customer and operator alike. Modern parking meters have the ability to communicate remotely to management databases which can display real time revenue amounts, equipment problems and enforcement information. These databases can subsequently provide detailed reports and auditing information that were previously difficult to obtain.

On-street parking is generally the most desirable parking alternative in any municipality. Parking meters, when used in conjunction with proper parking rates and regulations, offer the following benefits:

- They encourage turnover of spaces for use by business patrons and visitors.
- They discourage employees/business owners from monopolizing convenient curbside parking.
- They reduce but do not eliminate the role that parking enforcement plays in encouraging effective utilization and turnover. Generally speaking, parking systems that are dependent solely on parking enforcement, violations, and fines tend to be viewed more negatively than parking systems that employ fee-based incentives.

Single-Space Meters

Single space meters, as shown in the image, are the most common type of parking meters used for pay parking. Newer electronic versions of these meters are now capable of accepting credit cards and rechargeable smart cards, although some still only accept coins as payment.

Unlike older mechanical meters, electronic meters are very easy to service. They require periodic battery changes (annual in most cases) and instead of repairing mechanical parts, meter maintenance is performed by merely replacing modular plug and play parts kept in inventory. Many users of electronic parking meters enter into service contracts whereby defective inserts are routinely exchanged for repaired ones. Unlike mechanical parking meters, the electronic parking meter's internal clock is highly accurate and is not likely to incorrectly display time.

Basic Functions and Capabilities

From the user's perspective, single space meters operate the same way they did when they were first introduced almost 75 years ago. Parking customers estimate the amount of time their vehicle will be parked and pre-pay for that amount of time. The parking meter displays the amount of time remaining before the paid amount of time expires. Some electronic meters have the ability to track when payment is made, meaning that if a parking customer receives a parking citation, the parking meter can provide exact information about when the meter was paid, how much was paid, and the duration of time in which the payment was valid. This information can be downloaded to a handheld unit and compared to the time the citation was issued in order to determine if the parking was paid for at the time in question. When used with a space sensor, single space meters can eliminate piggybacking, that is, the use of meters with time remaining from previous customers.

Payment Options

Pre-paid smart cards or cash keys are an alternate form of payment that is offered on most new electronic single-space meters. These devices are inserted at the parking meter and as time is added to the meter, the cash value on the card or key is deducted. When the value has been used in its entirety, the card or key can be recharged at the location where it was originally purchased, which is usually a city office or local merchant.

Credit card payments are processed in real time using wireless telephone, wireless internet (WiFi) technology or mesh networking. Wireless telephone systems use cellular phone systems and require recurring payments to a third-party service provider. WiFi requires that the parking meters be part of a wireless network, which means numerous routers would be necessary. These wireless processing methods allow for credit cards to be processed remotely without the need to physically download credit card transaction data from each parking meter, thereby saving a tremendous amount in labor costs.

Reliability

Modern electronic parking meters contain very few moving parts; reliability over mechanical meters has been improved dramatically. Coin and card slots still remain susceptible to being jammed or clogged by foreign substances, however, sensor technology now has the capability to sense and reject unwanted objects or foreign coins.

Modern single-space electronic parking meters have been designed to allow for very easy serviceability and upgrades. By removing the top of the meter-head using an access key (no special tools required), the single-piece internal electronic component which includes everything but the coin hopper (where coins are stored) can be removed and exchanged in seconds.

Multi-Space Meters

Multi-space parking meters, as shown in image**,** have some distinct advantages over single-space meters. Aside from having the ability to offer more payment options that single-space parking meters, such as cash, credit cards, smart cards and tokens, a major advantage is that a single multi-space parking meter can be used in place of 10 to 20 traditional single-space parking meters and are more aesthetically appealing since fewer devices are required. Additionally, they provide a full audit trail of all transactions. The operating components are modular and interchangeable, meaning maintenance efforts are minimized and most major manufacturers offer solar powered units which require no more effort to be installed than the unit being bolted to the ground.

Pay-and-Display

With the Pay-and-Display systems, the user can insert cash, coins, tokens, smart cards or credit cards for payment. The user obtains a receipt from the unit that displays the date, amount paid, and expiration time which is then placed on the vehicle's dashboard. The advantage of the pay-and-display application is that parking spaces do not need to be identified as with single-space meters, conceivably allowing more cars to be parked in a given area. The disadvantage of this system is that a patron must go back to their vehicle after paying to place the receipt on the dashboard.

Pay-by-Space

The customer enters their space number and the desired amount of time and then pays the appropriate amount. The pay station issues the customer a receipt, and the parking meter keeps track of which parking spaces are paid for and for how long. Unlike single space parking meters, the remaining time is not displayed on the meter itself, which helps reduce "piggybacking", where someone will pull into an empty parking stall with time remaining and not have to pay.

Networking

Using wireless communication, modern parking meters can be networked to allow for better customer convenience, enforcement and management. In pay-by-space systems, this allows customers to pay for their parking at any available meter. From an operator's standpoint, networked parking meters allow for more efficient enforcement and system management. For pay-by-space systems, this allows enforcement personnel to collect payment data for an entire block or parking system off of a single parking meter rather than from individual meters, which means less time spent collecting payment information and more time doing actual parking enforcement.

Reliability

Multi-space parking meters have the capability to perform internal self-diagnostic tests on their components. When a problem is found, alarm messages are communicated to the parking operator through a centralized management system in real time. Because the components are modular, a meter will only shut down completely if it can no longer serve its intended purpose of selling parking.

If a multi-space meter does go offline, customers can still pay other parking meters (with pay-by-space they must be networked), unlike single-space meters. Because a single-space meter serves only one parking space, if it goes off-line, parking fees cannot be collected for the use of that parking stall, resulting in lost revenue.

Pay-by-Phone

When paying by phone, customers call the pay-by-phone service number and then enter their location (space number) and the amount of time they wish to park. After being parked, they may also wish to receive text message reminders a few minutes before their time expires and in order

to add more time via their telephone. Pay-by-Phone can be used with almost all types of meters provided license plates are tracked. This is a new technology that seems promising.

Space Monitoring/Control Management

In recent years, on-street vehicle detection technology has been introduced which monitors individual metered parking spaces. Through the use of in-ground detection sensors, the system is linked to the single- or multi-space parking meter serving the space, allowing it to provide critical information to parking management. This allows for real time communication of important information such as which spaces are occupied, which are occupied and unpaid, maintenance issues, and when money collection is required. This information can be transmitted to the parking management's office and directly to the enforcement personnel's handheld computer or PDA. With detailed reporting capabilities, these systems can provide accurate space occupancy and revenue data, turnover rates, and violation and revenue information.

A comparison of meter technology is shown in **Table 16** below.

On-Street Recommendations

Credit Card enabled single space meters are recommended for Green Bay for several reasons:

- **Multiple forms of payment can be accepted** – By accepting credit cards and smart cards in addition to coins, revenue may increase. This can be attributed to the fact that people are more likely to pay a meter when they have more payment options. In some cases, credit card transactions account for more than 75% of all transactions, meaning that coin collection and processing costs are greatly reduced. Some companies will install the parking meters and finance the cost and manage the system free of charge.
- **Easy Installation** – New electronic components and features can be installed in the housings of older meters. Since only parts of the meters will be replaced, this will decrease installation costs. Also because the city has already decided to continue using the single space meters, this options offers a relatively cost effective method to enhance revenue collection and provide convenient payment options for downtown parkers.

The cost to upgrade the recently installed Duncan Eagle 2100 single space meters to have credit card capability is approximately $250 per meter if performed within the first two years of installation (by Fall 2014). The estimated total cost to upgrade all 462 on-street meters is $115,500. This cost estimate does not take into account any potential bulk discount.

Table 16: Parking Meter Technology Comparison

	Single Space	Pay-and-Display	Pay-by-Space
Can accept coins	✓	✓	✓
Can accept cash		✓	✓
Can accept credit cards	✓	✓	✓
Can accept smart cards	✓	✓	✓
Capable of accepting validations		✓	✓
Issues receipts		✓	✓
Auditing capabilities	✓	✓	✓
Displays remaining time	✓	✓	✓
Can be intergraded with space monitoring system	✓	✓	✓
Can be intergraded with pay-by-phone	✓		✓
Does NOT require enforcement of every parking space			✓
Meter serves more than one parking space		✓	✓
Customer can pay at any meter		✓	✓
Modular components	✓	✓	✓
Uses existing meter base	✓		

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Off-Street Systems

In order to reduce labor costs and remove the human element from parking facility operations, many municipalities have automated their operations using a variety of technologies including: pay-in-lane or pay-on-foot machines and card in/card out systems. These systems significantly reduce labor expenses which historically have accounted for about 60% of the cost of running an off-street parking facility, as well as providing more options for parkers.

Cashiers

Currently, most systems print a bar code onto the ticket or encode a magnetic stripe when the ticket is dispensed. Upon exiting, the cashier inserts the ticket into the fee-computer to calculate the time and amount owed. Because the ticket dispenser and cashier's fee computer are networked, the time and ticket information is accurate and the possibility of employee manipulation is virtually eliminated.

Pay-In-Lane

Pay-in-lane systems, as shown in image on the right**,** require a customer to be issued a ticket from a ticket dispenser upon entry. Upon exiting, the ticket is fed by the customer into a reader that calculates the amount owed. The customer then feeds cash into the machine (if allowed) or

swipes a credit card on the same unit to make payment. Once payment is received the exit gate raises and the customer is allowed to exit.

Pay-On-Foot

Pay-on-foot technology, like the pay-in-lane system, requires a customer to be issued a ticket from a ticket dispenser upon entry. When the customer is ready to leave the facility they take their ticket to a centrally located pay station. Once the ticket is inserted into the machine, the pay-station (as shown on image to the left) calculates the fee and accepts the payment. The customer then takes the ticket to their vehicle and inserts the ticket into a reader in the exit lane upon leaving the facility. The reader verifies that the fee is satisfied and then raises the exit gate.

Card In/Card Out

A credit card in/credit card out system, as shown in image, is a ticketless and cashless system where customers insert their credit card into a machine at the entrance of the facility which records the credit card data and stores it in an internal database. This process opens the entry gate and grants the car access to the garage. Upon exiting, the credit card is inserted into a similar machine that retrieves the original card data from the database, including the entry time, charges the appropriate fee, produces a receipt, and raises the exit gate.

A comparison of the off-street revenue control systems is shown in **Table 17**.

Table 17: Off-Street Payment Systems Comparison

	Cashiers	Pay-in-Lane	Pay-on-Foot	Card in/out
Can accept coins	✓	✓	✓	
Can accept cash	✓	✓	✓	
Can accept credit cards	✓	✓	✓	✓
Can accept smart cards		✓	✓	✓
Capable of accepting validations	✓	✓	✓	
Issues receipts	✓	✓	✓	✓
Subject to employee manipulation	✓			
Reporting capabilities	✓	✓	✓	✓
Auditing capabilities	✓	✓	✓	✓

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Off-Street Recommendations

Pay-on-foot stations are most often recommended for automating a facility, when there is a large amount of congestion occurring as customers leave the garage. A critical component of these systems is good instructions and signage so that first-time customers know where and how to pay. Confused customers may hold up traffic if they pay at the exit lane.

Today's parking companies have embraced this automated technology and understand the benefits of these systems. Of particular importance is the significant reduction in labor costs. Machines can accept payments 24 hours per day, 7 days per week. The labor costs associated with this system include preventative maintenance, revenue collection, replenishing ticket and receipt stock, collecting tickets and replacing components that may fail. One employee can oversee several parking facilities with automated revenue control systems, thereby spreading out and minimizing labor costs.

Lastly, parking managers understand the financial security offered by these systems. Aside from unparalleled auditing capabilities, these systems offer features that secure the cash and coins in locked canisters that can only be opened by cash-room or banking personnel. This creates less financial liability for the managers and more security for the individuals servicing the equipment.

For off-street lots, pay-by-space or by license plate number, is the preferred option because parking spaces must be marked regardless. Also, it is easier for the parking customer to pay for a numbered parking stall rather than having to return to their vehicle to put a receipt on the dashboard, as is the case with pay-and-display. Enforcement is also made easier because enforcement personnel can run a report from the pay-station informing them which spaces are unpaid, allowing easy identification of violators without having to check each vehicle. The issue

with pay by space is that each space needs to be numbered, preferably on a pole-mounted sigh. However, the convenience for customers is worth the minimal cost of the sign.

Access Control Systems

For monthly parking customers, card access systems provide a viable alternative to paying on a daily basis. Most card reader access systems are comprised of entry and exit card readers and barrier gates. When the reader detects a valid card, it raises the gate to allow entry or exit. A typical feature of card access system is the Anti-Passback feature, which eliminates card sharing by requiring cards to be used on an in-out-in-out sequence in order to remain valid. For example, if a parking customer enters a parking facility then gives their access card to a friend so they may park there as well, the card will not allow the friend access because the card must be used to exit before it can be used to re-enter.

The two most common types of access cards used today are proximity card systems and radio frequency identification (RFID) systems.

Proximity Card

As the name implies, proximity cards must be held within the proximity of a card reader to activate the gate and allow parking access. The size of the reader depends on how close the card must be held. Generally, proximity cards are about the size of a credit card and contain an imbedded wire coil and capacitor. An electrical field emitted by the card reader is detected by the coil which charges the capacitor, which then transmits the card number and its access parameters to the card reader. The reader can either contain the access information itself or it can communicate with a central parking management system in order to verify the validity of the access card.

Radio Frequency Identification (RFID) system

From a user's perspective, an RFID system works much like a proximity card, only it offers more convenience. Using Automatic Vehicle Identification (AVI), the system is able to automatically identify a vehicle when it enters a parking facility, allowing the parking system to authorize access and open the barrier gate without the driver having to stop or open their window, essentially eliminating queuing. They are most commonly associated with toll roads and are often referred to as a "transponder".

RFID cards contain an embedded radio transmitter that can be either "active", which requires a small battery, or "passive", which relies on the radio receiver for power. When the transponder, usually located near the front of the vehicle inside the windshield, is within a certain distance from the radio receiver, the parking access system confirms the signal being transmitted and allows access.

Off-Street Access Control Recommendations

Parking Ramps

The city should consider installing new automated revenue control systems in the parking ramps with pay-on-foot stations that have both credit card and cash capability. The system can be programmed to meet the specific needs of the City including reduced fee parking in the evenings or weekends and at other times.

Depending on the particular features and functionality of the new parking access and revenue control system, the City may have to spend between $100,000 and $250,000 per ramp to install an automated revenue control system.

Parking Lots

For the Adams Street Lot, City Hall Lot and the Old Fort Square, the city should consider installing pay stations in lieu of parking meters or attendants. Pay-by-space, or license plate number, is recommended so that patrons do not need to walk back to their cars after parking to place a receipt on their dashboard. The pay stations should accept cash and credit cards to provide multiple and more convenient payment options for patrons.

Automated Revenue Control Technology Payback Analysis

An analysis was performed to determine the payback period for an automated revenue control system in each of the three City parking ramps and Adams Street Lot, which are the parking facilities that currently use cashiers. We recommend that an automated revenue control system be implemented in the three City parking ramps with pay-on-foot stations and pay-in-lane. In the Adams Street Lot it is suggested that a pay-station with pay-by-space or by license plate number be installed.

The use of these automated revenue control systems will allow the amount of staff needed in each parking facility to be reduced and potentially eliminated. Currently, there is a full-time cashier in each of the parking facilities and an extra part-time cashier in each of the parking ramps. It was assumed that only part-time parking attendants would be needed in the parking ramps to assist with any on-site issues, patron questions or broken equipment. With the installation of cameras and intercoms the system would be designed so that the gates and revenue control system would be centrally managed from the parking office in the Pine Street Ramp. Once the system is learned and operated at an efficient level, even less staff time would be necessary in the parking ramps. We feel that no staff would be needed at the Adams Street Lot, except during a big event downtown to assist with traffic management.

Table 18 shows the estimated cost of installing an automated revenue control system in each of the three City parking ramps and the Adams Street Lot. These cost estimates assume that all new equipment would be installed, including gates, ticket spitters, and pay-in-lane systems. Due to the condition of the existing revenue control system and gates it is suggested that new equipment be installed in each of the parking ramps.

Table 18: Automated Revenue Control System Cost

Item	Unit Cost	Cherry Street Ramp		Pine Street Ramp		Main Street Ramp		Adams Street Lot	
		Units	Cost	Units	Cost	Units	Cost	Units	Cost
Entrance Lanes	$ 26,450	3	$ 79,350	5	$ 132,250	2	$ 52,900	0	$ -
Exit Lanes	$ 28,300	2	$ 56,600	5	$ 141,500	2	$ 56,600	0	$ -
Pay Stations (Cash/Credit)	$ 50,000	2	$ 100,000	4	$ 200,000	3	$ 150,000	2	$ 100,000
Equipment Subtotal			**$ 235,950**		**$ 473,750**		**$ 259,500**		**$ 100,000**
Discount	25%		$ (58,988)		$ (118,438)		$ (64,875)		$ (25,000)
Freight	1%		$ 2,360		$ 4,738		$ 2,595		$ 1,000
Electrical Work	10%		$ 23,595		$ 47,375		$ 25,950		$ 10,000
Installation	8%		$ 18,876		$ 37,900		$ 20,760		$ 8,000
Equipment Total			**$ 221,793**		**$ 445,325**		**$ 243,930**		**$ 94,000**
Host Computer System, Data Converter, Software, Credit Card Processing, etc.									**$ 30,000**
TOTAL COST									**$ 1,035,048**

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Since the equipment needs to be replaced soon due to its condition, we estimated the cost to replace the existing equipment with the current cashier system. **Table 19** shows the estimated cost to replace the existing equipment in each of the three parking ramps and Adams Street Lot.

Table 19: Cashier Revenue Control System Replacement Cost

Item	Unit Cost	Cherry Street Ramp		Pine Street Ramp		Main Street Ramp		Adams Street Lot	
		Units	Cost	Units	Cost	Units	Cost	Units	Cost
Entrance Lanes	$ 26,450	3	$ 79,350	5	$ 132,250	2	$ 52,900	1	$ 26,450
Exit Lanes	$ 20,000	2	$ 40,000	5	$ 100,000	2	$ 40,000	1	$ 20,000
Equipment Subtotal			**$ 119,350**		**$ 232,250**		**$ 92,900**		**$ 46,450**
Discount	25%		$ (29,838)		$ (58,063)		$ (23,225)		$ (11,613)
Freight	1%		$ 1,194		$ 2,323		$ 929		$ 465
Electrical Work	10%		$ 11,935		$ 23,225		$ 9,290		$ 4,645
Installation	8%		$ 9,548		$ 18,580		$ 7,432		$ 3,716
Equipment Total			**$ 112,189**		**$ 218,315**		**$ 87,326**		**$ 43,663**
Host Computer System, Data Converter, Software, Credit Card Processing, etc.									**$ 30,000**
TOTAL COST									**$ 491,493**

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As shown in **Table 19**, the total cost to replace the existing revenue control equipment in each of the City parking ramps and Adams Street Lot is less than half the cost to implement an automated revenue control system. However, there are substantially more labor costs.

Table 20 shows the payback period for an automated revenue control system in each of the three City parking ramps and Adams Street Lot. This analysis simply takes into account the average annual salary for cashiers and part-time cashiers, and not benefits or pay increases over time. Taking into account benefits and pay increases would reduce the payback period slightly. The payback period ranges from 17 months in the Adams Street Lot to 72 months in the Pine Street Ramp. The reason for the lengthy payback period in the Pine Street Ramp is because there are

such a large number of exit lanes and pedestrian access points which would require pay-in-lane machines and pay-stations, respectively.

Table 20: Payback Period Analysis for an Automated Revenue Control System

Equipment Costs	Cherry Street	Pine Street	Main Street	Adams Lot
Pay-on-Foot Revenue Control System	$ 221,793	$ 445,325	$ 243,930	$ 100,000
Cashiers at Exits Revenue Control System	$ 112,189	$ 218,315	$ 87,326	$ 46,450
Net Difference in Cost	**$ 109,604**	**$ 227,010**	**$ 156,604**	**$ 53,550**
Staff Costs				
Annual Staff Costs with Cashier System [1]	$ 50,400	$ 50,400	$ 50,400	$ 37,800
Annual Staff Costs with Pay-on-Foot System [2]	$ 12,600	$ 12,600	$ 12,600	$ -
Annual Savings with Automation	$ 37,800	$ 37,800	$ 37,800	$ 37,800
Monthly Savings with Automation	$ 3,150	$ 3,150	$ 3,150	$ 3,150
Payback Period (Months)	**35**	**72**	**50**	**17**

[1] *Assumed 1 full-time and 1 part-time cashier at each parking garage and 1 full-time cashier at Adams Lot.*

[2] *Assumed 1 part-time parking attendant required at each garage and nobody at Adams Lot.*

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7. Recommended Parking Rates

Hourly and Daily Rates

Increases in parking fees are recommended to increase revenue and make adjustments for the most heavily used facilities, such as the Adams Street Lot. As part of the fee increase it is recommended that pay-on-foot technology be incorporated into the Adams Street Lot and the City Hall Lot with payment required from the hours of 8 AM until 8 PM. We also recommend that a flat fee be introduced in the City Ramps for evening and Saturday uses, but this cannot be implemented until new revenue systems are installed in the ramps.

Following are the recommended hourly and daily maximum rates of the on-street meters, parking lots, and the parking ramps:

	Hourly Rate	Daily Maximum
Parking Meters	$0.75/hour	-
Adams Street & City Hall Lots	$1.00/hour	$8.00
Parking Ramp	$0.75/hour	$7.50

The fee for overtime parking at a parking meter of $10 is at the low end of comparable cities, but one that is consistent with the daily maximum parking rate in the City's lots and ramps, so no change is recommended. The recommended penalty for late fee is an additional $10 if paid within 15 days from the date of issue, increasing to a $20 late fee if not paid within 30 days.

Parking Ramp Monthly Parking Rates

There currently is a wide range of monthly parking rates in the three city ramps depending on the volume of permits purchased by a business or user group. The current monthly rates range from a low of $14.50 to a high of $67.70. The lower rates are based on long-standing agreements and policies to encourage large employers to locate in the downtown area. As a consequence, the rates of the lower end of the scale are heavily subsidized and perceived as unfair by those paying the higher rates. In the future it is recommended that the lower rates be raised gradually over time to more accurately reflect the cost of providing the spaces. A suggested approach would be to raise the lower rate gradually over a three year period from the current rate of $14.90 per month $30.00 per month in $5.00 increments.

Broadway Corridor

Desman recommends that parking meters, or pay stations, be installed on Broadway with a two hour time limit to promote turnover and use by transient/visitor parkers and to discourage all day use by area employees.

8. Future Development and Parking Supply and Demand

Future Development

Table 21 shows a summary of the projects planned for the Downtown area, the Broadway Corridor and the northeast, specifically the Belgioioso Cheese and Wenz Furniture sites. The table shows the added estimated weekday public parking demand and potential loss of existing parking spaces for new development. This list of developments is based on the latest data and information available from the City of Green Bay. For the purposes of this analysis and study the residential developments are assumed to provide sufficient on-site parking for residents. It should also be pointed out that the developments proposed for the Broadway Corridor are assumed to be self-supporting, with sufficient on-site parking provided to meet the needs of each project. The proposed location of each future development for the 0-5 year and 5-10 year periods are shown in **Figure 6**.

Table 21: Summary of Proposed Developments in the Study Area

Future Developments	Site/Location	Land Use	Size Factor	Timeline	Added Weekday Demand (Spaces)	Parking Eliminated (Spaces)	Comments
Near Term 0-5 Years							
K.I. Convention Center Expansion	KI Convention Center	Conference	35,000 S.F.	0 - 5 Years	174		Weekday and Weekend Demand
Schreiber Foods-Corporate office [1]	SE Corner of Main and N. Washington St.	Office	650 Employees	0 - 5 Years	162		Currently lease 500 spaces downtown. Will add up to 200 employees
Van Drisse Building	West side of S. Adams St. between E. Walnut and Doty St.	Office		0 - 5 Years	-		No Specific details provided on project
Associated Bank	NE Corner of Cherry and Adams St.	Bank	450 Employees	0 - 5 Years	-		200 Spaces to be provided in Main St. Ramp
Nicolet National Bank [1]	Washington St. and Cherry St.	Office	10 Employees	0 - 5 Years	8		Use Cherry St. Ramp
Former Northland Hotel	NE Corner of N. Adams and Pine St.	Hotel Retail	120 Rooms	0 - 5 Years 0 - 5 Years	20 -		New demand 60 spaces, less 40 spaces currently rented in Pine St. Ramp by existing low-income housing residents=20 spaces net Assume captive retail-no additional parking [2]
Flatley Site	SW Corner of N. Washington and Main St.	Residential Retail	84 Units 7000 S.F.	0 - 5 Years 0 - 5 Years	- -		Assume developer will provide on-site parking Assume captive retail-no additional parking [2]
APAC [1]	Washington St. and Pine St.	Office	40 Employees	0 - 5 Years	32		Cherry Street Ramp
Bellin Building	SW Corner of Walnut St. and Washington St.	Theater	300 Seats	0 - 5 Years	-		Evening and weekend demand in Cherry Street Ramp
Watermark Building [1]	West End of Pine Street	Office Retail	30,000 S.F. 30,000 S.F.	0 - 5 Years 0 - 5 Years	81 -		Assume 3 spaces per 1,000 S.F. Assume captive retail-no additional parking [2]
Former Schauer and Schumacher Building	NW Corner of E. Walnut and N. Adams St.	Residential Retail	14 Units 10,000 S.F.	0 - 5 Years 0 - 5 Years	- -		Indoor parking to be provided on site Assume primarily captive retail
Site 4 - City owned parking lot	NW Corner of E. Walnut and N. Washington St.	Residential	100 Units	0 - 5 Years	-	(68)	Replacement parking provided for Nicolet Bank. Assume residental parking provided on site.
				Subtotal	**478**	**(68)**	
Long Term 5-10 Years							
Downtown							
Former Daily Planet Building	SE Corner of E. Walnut and S. Washington St.	Banquet Hall		5 - 10 Years	-		No specifc details available
Associated Bank [1]	Employee Shuttle Lot (Monroe, Pine, Quincy, Cherry)	Bank/Office Bank/Office	 200 Employees	5 - 10 Years 5 - 10 Years	- 162	(150)	Potential if lost for future development Add up to 200 employees
Main Street Ramp	Main Street and Adams Street	Parking Garage	681 Spaces	5 - 10 Years	-	(681)	To be demolished when Schrieber exercises option to expand on the site per agreement with City
Adams Street Lot	Washington St. and Cherry St.	Retail		5 - 10 Years	-	(133)	Assume captive retail-no additional parking [2]
Schreiber Foods [1]	SE Corner of Main and N. Washington St.?	Office	100 Employees	5 - 10 Years	81		Add additional 100 employees
Schrieber Foods [1]	Vacated downtown spaces	Office	81,400 S.F.	5-10 Years	198		Assumed 3 spaces per 1,000 S.F.
			Subtotal with loss of Main Street Ramp		**918**	**(964)**	
			Subtotal with no loss of Main Street Ramp		**441**	**(283)**	
Broadway Corridor							
Platten Building	SW Corner of Dousman and Broadway St.	Residential	24 Units	0 - 5 Years	-		Assume parking provided in Lot F
Leicht Park	West Bank of Fox River and Dousman St.	Events	1 Stage	0 - 5 Years	-		Currently 50 Spaces provided-demand expected to increase
Larsen Green Site	Dousman, Broadway, Kellogg, and Pearl	Residential, Office, Recreation and Retail		5 - 10 Years	-		Parking to be Provided On-Site
Greenfield Site	Arndt, Fox River, Mason and Broadway	Mixed Use		5 - 10 Years	-		
				Subtotal	**0**	**0**	
Other							
Belgiooso Cheese and Wenz Furniture Warehouse	Van Buren, East River, Webster, and Elm			5 - 10 Years	-		No specific plans, assume parking provided on site
				Subtotal	**0**	**0**	

[1] *Assumed 81% drive alone based on U.S. Census data for Green Bay commuters.*

[2] *Capitve retail-assumes patrons already parked for other trips, i.e., office workers.*

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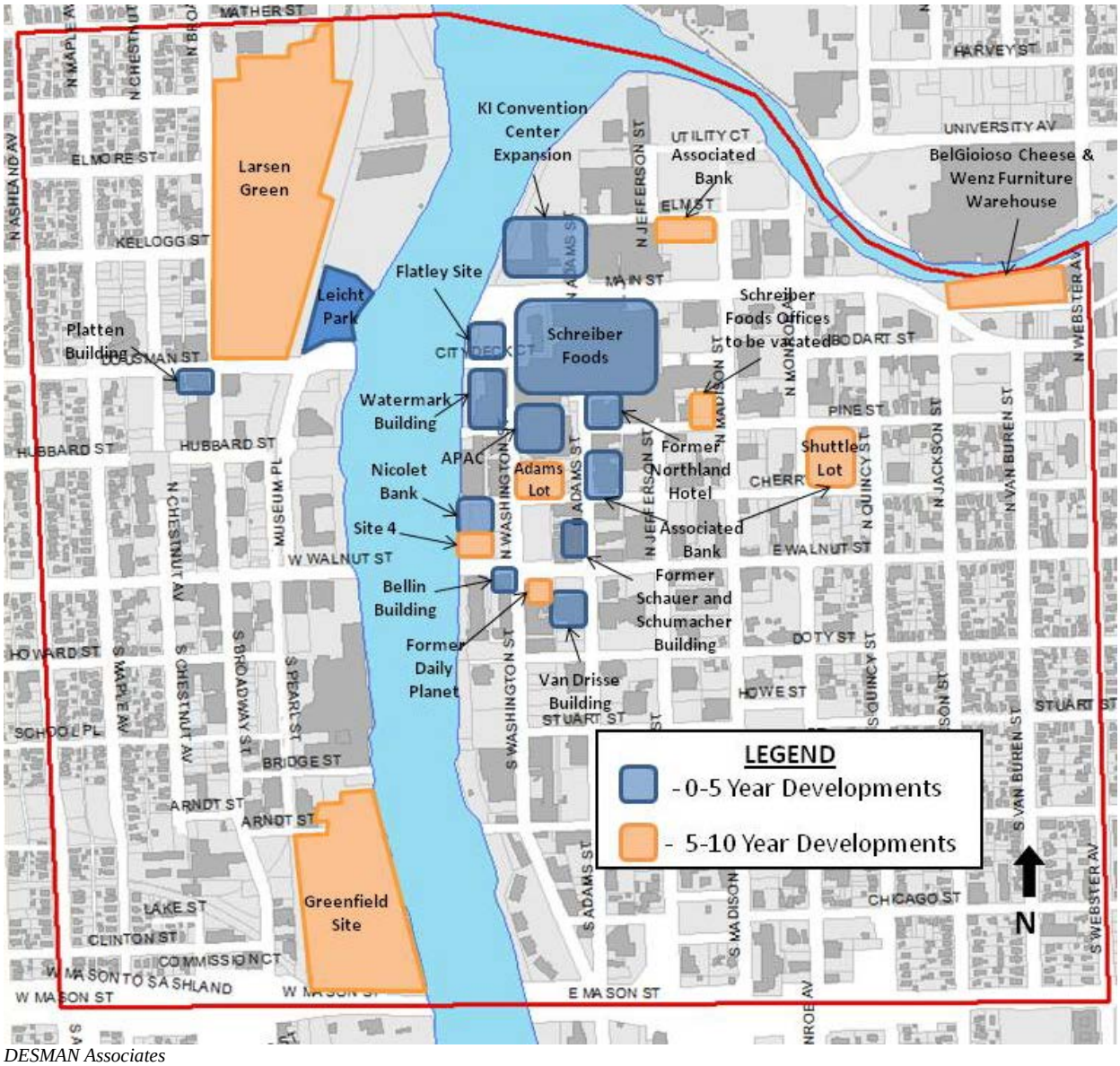
Figure 6: Future Downtown Developments



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The assumptions applied for the parking demand analysis are listed below.

- Based on U.S. Census data for Green Bay commuters, 81% of people drive in a single-occupied vehicle to work.
- A parking demand ratio of 3 spaces per 1,000 square feet was applied for office space, which is based on the parking generation data for office space provided in the Institute of Transportations Engineers (ITE) *Parking Generation, 4th Edition* and the Urban Land Institutes (ULI) *Shared Parking, 2nd Edition*.
- Assumed residential developments would provide parking on-site, since parking is a necessary amenity to be competitive in the Green Bay residential market.
- Assumed the retail land uses would generate already captive demand (already parked) in the Downtown or patrons would park on-street. Due to the substantial amount of office space in the Downtown, already captive office workers would be the primary people generated to Downtown retail.
- Assumed the proposed theater space would generate parking demand during weekday evenings and on weekends, but not during weekday peak periods (approximately between 12 PM and 2 PM).
- Only office/bank, hotel and conference space were assumed to generate additional parking demand during the weekday peak period. Non-captive retail parking demand would be minimal and would be primarily supported by on-street parking. Entertainment space, other than the conference/convention center, would not generate parking demand during the weekday peak period.

Following is a summary of the future added parking demand in the study area:

Added Demand 0-5 Years	478 spaces
Added Demand 5-10 Years	441 spaces
Total 0-10 Years	**919 spaces**

Some parking is also anticipated to be lost for future development, as sites currently used for parking are eliminated for construction of new buildings. Also, at some point in the future, the Main Street Ramp may be eliminated for expansion of the Schreiber Foods headquarters.

Following is a summary of those potential losses.

Parking Eliminated 0-5 Years	68 spaces
Surface Parking Eliminated 5-10 Years	283 spaces
Total Eliminated 0-10 Years	**351 spaces**
Main Street Ramp (possible demolition)	681 spaces
Total 0-10 Years with Loss of Main Street	**1,032 spaces**

It should be noted that this loss of spaces assumes that all the proposed developments indicated in **Table 21** take place within the 10 year time frame. The loss of spaces will be less if any of them do not take place within that time period.

Future Parking Supply and Demand

Table 22 shows a summary of the parking supply and demand for the 0-5 year horizon and the 5-10 year horizon for the Downtown parking area. It should be noted that the available parking capacity included in this analysis takes into account a 90% practical capacity factor, so additional parking would be available above what is being stated in **Table 22**. An analysis was performed with and without the loss of the Main Street Ramp, and with and without, a convention/conference at the K.I. Convention Center. Based on the 2012 Facility Usage Report, when there is no conference/convention, an additional 401 spaces are on average available in the Main Street Ramp during the weekday period between 8 AM and 6 PM. The 2012 Facility Usage Report, provided by the City, also shows that only 10% of the counts had an occupancy of 300 spaces or more in the Main Street Ramp, and 43% of the time, less than 99 spaces were occupied. The calculation of the additional 401 spaces available during an average weekday when there is no convention or conference is provided below.

Main Street Ramp Peak weekday parking occupancy (During conventions) (6am-6pm)	470 spaces
Main Street Ramp Average weekday parking occupancy (No Conventions) (6am-6pm)	69 spaces
Additional spaces available in Main Street Ramp when no convention	**401 spaces**

There is existing capacity available in the three City ramps:

Capacity available during peak times with convention events	767 spaces
Additional capacity available during non-convention days	401 spaces
Total spaces available during non-convention days	**1,168 spaces**

Table 22 – Future Parking Supply and Demand Summary

	During Convention [1]		No Convention [2]	
	0-5 Years	5-10 Years	0-5 Years	5-10 Years
Suppy and Demand with Main Street Garage				
Capacity Available In Existing Garages	767 spaces	767 spaces	1168 spaces	1168 spaces
Added Parking Demand	(478) spaces	(919) spaces	(478) spaces	(919) spaces
Potential loss of existing parking lots	(68) spaces	(351) spaces	(68) spaces	(351) spaces
Surplus/(Deficit)	**221 spaces**	**(503) spaces**	**622 spaces**	**(102) spaces**
Suppy and Demand without Main Street Garage				
Capacity Available In Existing Garages[1]	767 spaces	767 spaces	1168 spaces	1168 spaces
Added Parking Demand	(478) spaces	(973) spaces	(478) spaces	(973) spaces
Potential loss of existing parking lots	(68) spaces	(351) spaces	(68) spaces	(351) spaces
Loss of Main Street Ramp	(681) spaces	(681) spaces	(681) spaces	(681) spaces
Surplus/(Deficit)	**(460) spaces**	**(1238) spaces**	**(59) spaces**	**(837) spaces**

[1] *Based on available parking capacity from Table 8: Peak Weekday Available Parking Capacity*

[2] *Incorporates the average available weekday parking capacity for the Main Street Garage, which is an additional 401 spaces*
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Based on these results, there will be adequate parking in the existing public parking ramps to absorb the added parking demand for the next five years, unless the Main Street Ramp is eliminated within that time frame. If that is the case there would be a shortage of 460 parking

spaces at peak times during a convention/conference, which would require consideration of a new parking facility to handle the unmet demand. However, when no convention/conference is happening at the K.I. Convention Center during the weekday peak periods there would be a deficit of only 59 spaces, without the Main Street Garage.

Within the next 10 years an anticipated shortage of approximately 503 parking spaces (during a convention/conference) or 102 parking spaces (no convention/conference) would result if all the projects are realized. It should be noted that this would be only during peak times and that there is a substantial amount of available on-street parking, which could effectively capture the retail and short-term parking demand when the parking ramps are full.

That said, the elimination of the Main Street Ramp would increase the shortage to 1,238 parking spaces (during a convention/conference) or 837 parking spaces (no convention/conference), which would require the construction of one, or possible two ramps, if all the demand and displacement/loss of parking is realized within the 10 year time frame. Also, given the unpredictable nature of downtown development, Desman recommends that the City revisit the list of developments in 3 to 5 years and make adjustments in the list of projects, or if the Main Street Ramp's elimination is imminent.

9. Public Transit Use Impact on Parking Demand

Table 23 shows a list of cities comparable to Green Bay by population and region. Mode of travel data was gathered from the U.S. Census Bureau for the comparable cities. This data shows the percentage of commuters that drive alone/carpool, use public transit, or use other methods of travel (i.e. walking, biking, etc.). According to U.S. Census Bureau data for comparable cities, between 1% and 9% of people commute to work using public transit. The City of Madison, which has 9% of its commuters using public transit, is unique compared to the other cities due to it having double the population of Green Bay and a large University. The other comparable cities range from 1% to 5% of commuters using public transit to work.

Currently, about 2% of commuters use public transit in Green Bay. If the public transit system were to be improved in Green Bay, the number of public transit users could hypothetically and realistically reach 5%, which is more than double the existing transit usage. **Table 24** shows the total number of people who commute to work by driving alone or carpooling among the City public parking facilities. Assuming that an additional 2% of commuters use public transit, the third line in **Table 24** shows the number of public transit users. If the percent of public transit users increased from 2% to 5%, the number of transit users that would not require parking in the City Public parking facilities is shown in the fifth line of **Table 24**. The sixth line of the table shows the net gain in transit users with a 5% commuter transit usage.

Table 23 – Commuting to Work Method of Travel in Green Bay and Comparable Cities

State	City	Population	Commuting to work	Driving		Other		Public Transit	
Wisconsin	Green Bay	104,000	48,944	43,962	90%	4,230	9%	752	2%
	Racine	82,000	34,230	29,554	86%	3,287	10%	1,389	4%
	Kenosha	99,218	43,251	39,946	92%	2,602	6%	703	2%
	Madison	233,000	130,935	95,989	73%	23,437	18%	11,509	9%
	Appleton	70,000	35,708	32,445	91%	3,017	8%	246	1%
Michigan	Kalamazoo	80,000	31,786	27,487	86%	3,567	11%	732	2%
Minnesota	Duluth	86,000	39,978	32,909	82%	5,093	13%	1,976	5%
	Rochester	108,992	57,196	49,292	86%	5,190	9%	2,714	5%
Illinois	Springfield	116,250	55,062	49,257	89%	4,435	8%	1,370	2%
	Peoria	115,607	46,333	42,560	92%	2,245	5%	1,528	3%
	Rockford	150,843	56,658	51,804	91%	4,275	8%	579	1%
Iowa	Cedar Rapids	127,000	66,905	61,000	91%	5,193	8%	712	1%
	Davenport	100,000	44,639	41,807	94%	2,309	5%	523	1%
Ohio	Akron	198,402	80,926	74,389	92%	3,833	5%	2,704	3%
Missouri	Springfield	162,191	76,900	69,653	91%	6,639	9%	608	1%

Source: U.S. Census Bureau, 2012 Statistics

Table 24 – Existing & Future Transit Users

		Existing Utilization	Future Utilization	
			0-5 Years	0-10 Years
1	Driving and Carpooling Commuters [1]	1664	2142	2583
2	Other Commuters (i.e. Biking, Walking, etc.) [2]	148	190	230
3	Transit Commuters [2] (2% Transit Use)	37	48	57
4	Total # of Commuters [2]	2,054	2,380	2,870
5	Potential Transit Users [3] (5% Transit Use)	93	120	143
6	**Net Gain in Transit Users**	**56**	**72**	**86**

[1] *Based on Average Weekday Parking Demand (Table 3) and Future Parking Demand (Table 22)*

[2] *Commuter trips is based on the observed parking demand in the City parking facilities and the U.S. Census Bureau commuter data. (2% transit)*

[3] *Based on a transit usage of 5%, up from 2%.*

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By increasing transit usage from 2% to 5%, Green Bay would be able to decrease the parking demand in the City public parking facilities by approximately 56 spaces in the current year, 72 spaces within 5 years, and a total of 86 spaces in 10 years. This translates to a potential parking demand reduction of 86 spaces within the City public parking facilities over a 10 year period.

Assuming the construction costs of each space is approximately $25,000, this would translate to a cost savings of $2.15 million for the City by not building the additional 86 spaces. The cost savings could instead be repurposed to purchase additional buses as well as create new transit routes. The annual cost to operate a transit route ranges from $600,000 to $900,000. With $2.15

million the City would be able to cover operation costs for a bus route for at least 2 years as well as purchase a bus, which costs around $500,000. This cost analysis assumes the City receives no additional funds or grants.

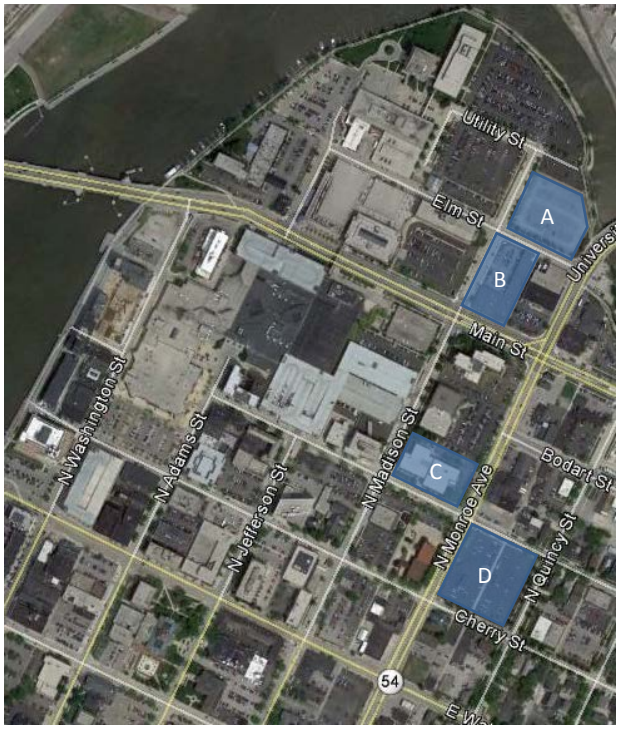
10. Parking Site Evaluation and Preliminary Garage Concepts

Four potential sites have been considered for construction of a future parking ramp(s).

Site A: Regency Center Site at Madison and Elm
Site B: Schreiber Foods Site at Main and Monroe
Site C: Brown County Library Site
Site D: Associates Bank Lot

The locations of the four sites are shown in Figure 7.

Figure 7: Potential Parking Ramp Sites



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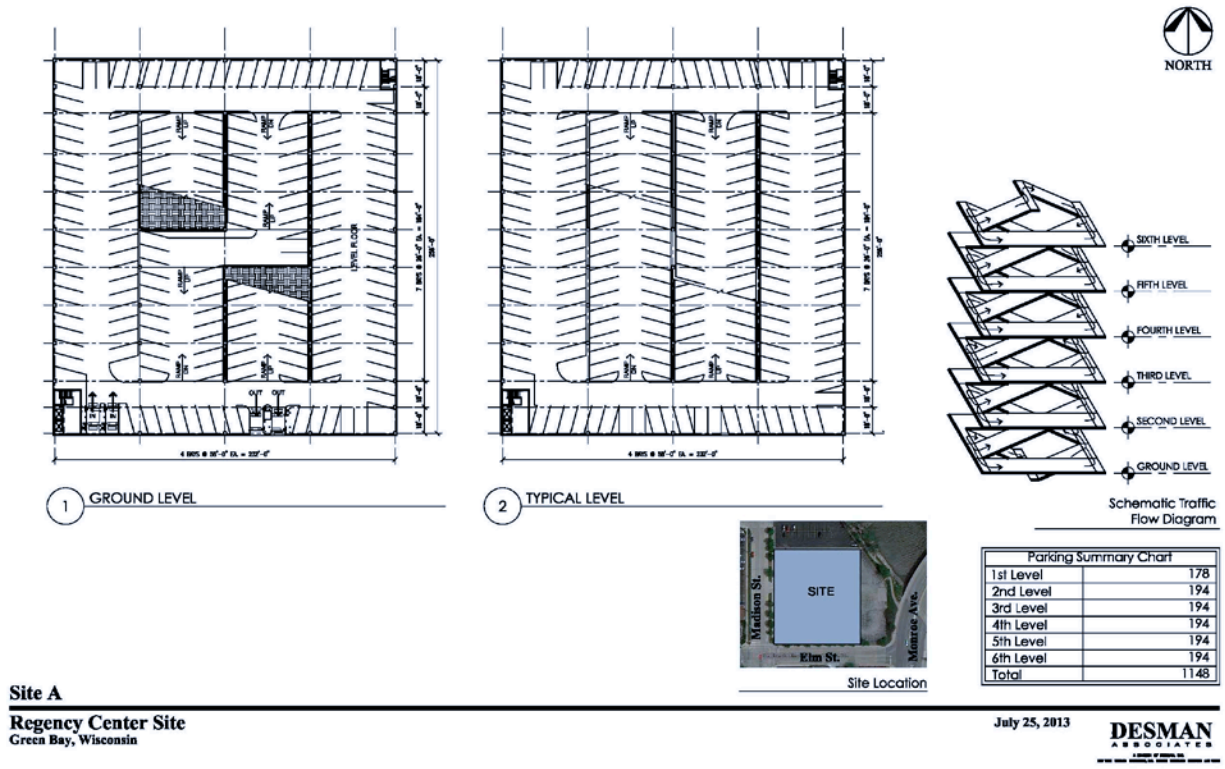
Site A: Regency Center Site

The Regency Center Site is currently occupied by a 262-space parking lot. It is owned by the Regency Center and may have some sub-grade environmental issues. The site is approximately 260 feet long along Madison and 315 feet along Elm. A four bay parking ramp with an approximately footprint of 232 feet by 256 feet could be built on the site as shown in Figure 8. A six level garage on the site would have an approximately capacity of 1,148 spaces.

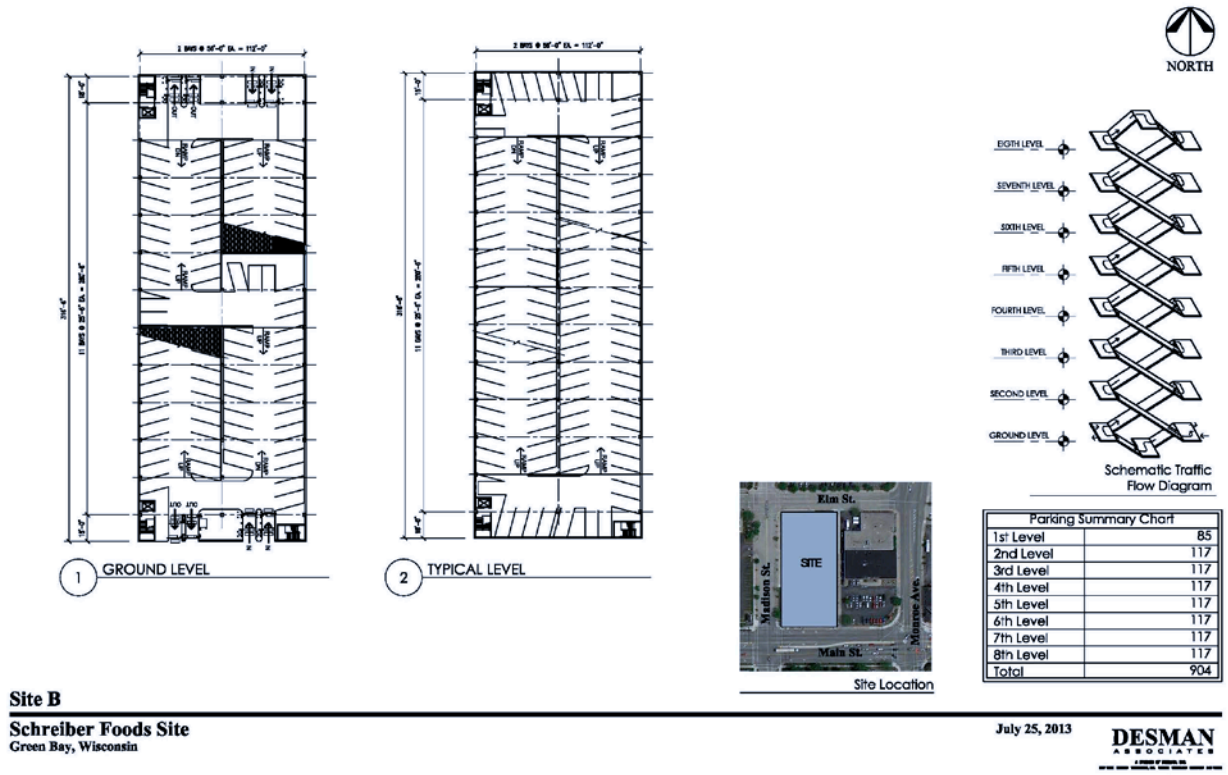
Figure 8: Regency Center Site - Potential Parking Garage



Site B: Schreiber Foods Site

The Schreiber Foods Site is currently occupied by their engineering department, which is expected to be relocated in the future. The site is approximately 320 feet long along Madison and 150 feet along Main. A two bay parking ramp with an approximately footprint of 112 feet by 315 feet could be built on the site as shown in Figure 9. An eight level garage on the site would have an approximately capacity of 904 spaces. Because the site is wider than needed for the ramp structure, it would be possible to develop retail space along Madison as an alternative.

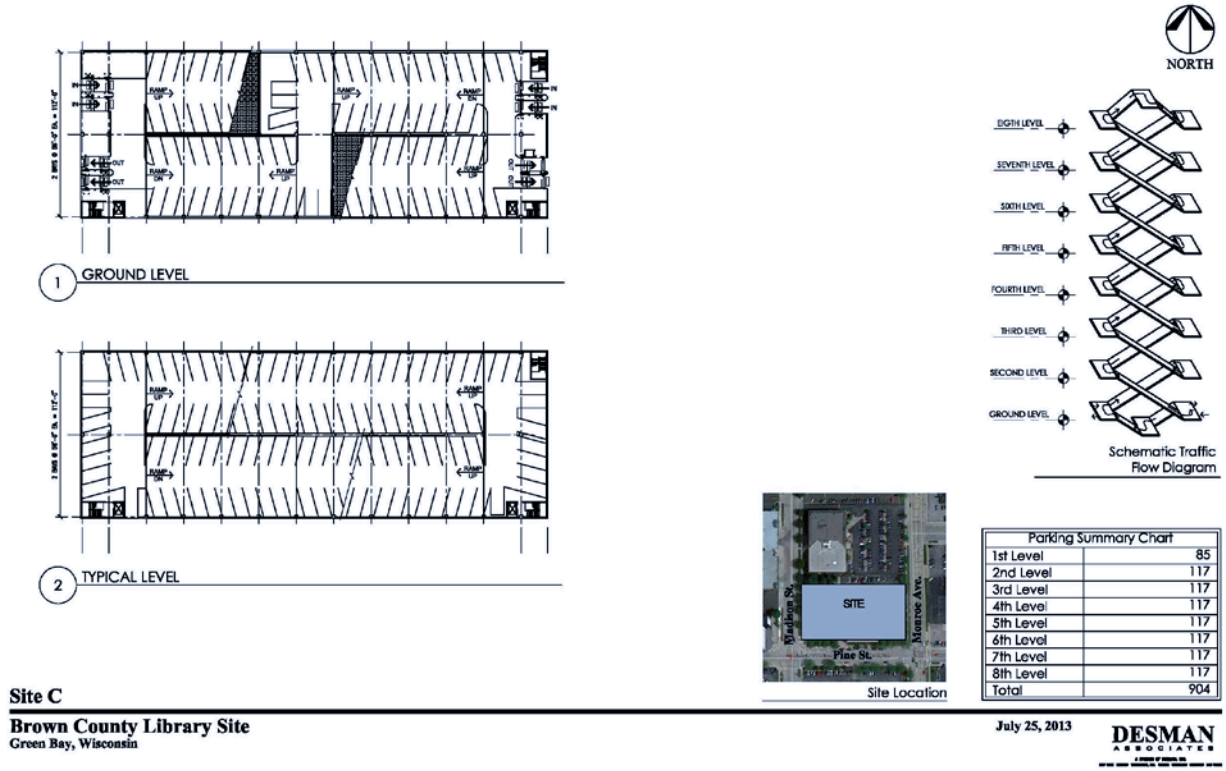
Figure 9: Schreiber Foods Site - Potential Parking Garage



Site C: Brown County Library Site

This site is currently occupied by the Brown County Library which the county would like to combine with the Brown County Museum located west of the river. If this were to happen the site could be available for construction of a multi-level parking ramp. The site is approximately 320 feet long along Madison and 150 feet along Main. A two bay parking ramp with an approximately footprint of 112 feet by 320 feet could be built on the site as shown in Figure 10 An eight level garage on the site would have an approximately capacity of 904 spaces.

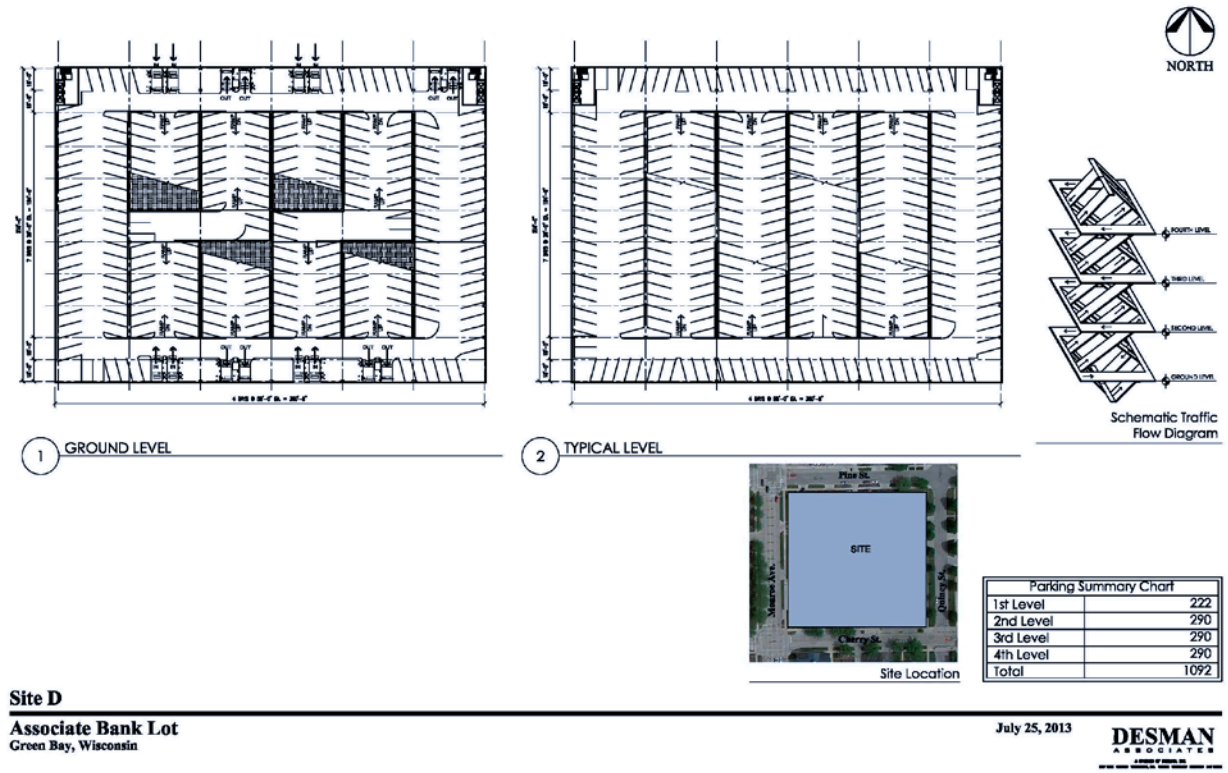
Figure 10: Brown County Library Site - Potential Parking Garage



Site D: Associated Bank Lot

This site is owned by Associated Bank and is currently occupied by a 325-space surface parking lot. The site is approximately 330 feet square. A six bay parking ramp with an approximately footprint of 327 feet by 324 feet could be built on the site as shown in Figure 11. A four level garage on the site would have an approximately capacity of 1,092 spaces.

Figure 11: Schreiber Foods Site - Potential Parking Garage



Conceptual Design and Cost Estimates for Four Alternative Sites

The cost of constructing a new parking ramp has been developed for each of the four sites as shown in Table 25. These costs represent 2013 costs and do not include the costs of site acquisition or any site remediation or other costs associated with preparing the site for construction. For comparative purposes an approximate net gain in the range of 800 parking spaces has been used for each of the sites to reflect the loss of spaces on the locations that are currently occupied by surface parking. The 800 space gain corresponds to the estimated added demand in 5-10 years, including the loss of the Main Street Ramp for a non-convention day (See Table 22).

The costs for the Site B and Site C, which are not currently occupied by surface parking, would be about $20,000,000, and the costs for Sites A and Site D, which are currently occupied by large surface parking lots, would be about $25,000,000, excluding any site acquisition costs.

Table 25 – Parking Ramp Cost Estimates for Four Alternative Sites

	Site A	Site B	Site C	Site D
	Regency Center Site	Schrieber Foods Site	Brown County Libray Site	Regency Center Site
Number of Parking Levels				
Estimated Ramp Capacity	1148	904	904	1092
Existing Lot Capacity-if applicable	262	0	0	335
Net Parking Space Gain	886	904	904	757
Estimated Costruction Cost	$20,664,000	$16,272,000	$16,272,000	$19,656,000
Fees and Contingencies[2]	$5,166,000	$4,068,000	$4,068,000	$4,914,000
Total Estimated Project Cost	**$25,830,000**	**$20,340,000**	**$20,340,000**	**$24,570,000**

[1]Estimated construction cost at $18,000 per parking space

[2]Includes 25% allowance for construction admin,contingency, contractor profit and overhead, design fee, testing. etc.
DESMAN Associates

Summary and Conclusions

Site B, the Schreiber site, is in a good location to replace the Main Street Ramp and continue to provide good proximal parking for convention visitors. It also does not result in any displacement of existing parking, as would Sites A or D, which increases the cost by over $5 million. Site C, the Brown County Library site, is not in a good location to serve convention visitors, especially in comparison to Site B. Assuming the site could be obtained for a reasonable price, Desman recommends that Site B be considered for future parking when needed to meet the added demand or replace the Main Street Ramp.

11. Parking Structure Repair/Replacement Transition Plan

The condition assessment of the Main Street Ramp determined that this garage is in 'Fair to Poor' condition, which means that substantial repairs are needed to allow the garage to function as intended. The condition assessment of the Pine Street Ramp determined that the original parking structure constructed in 1977 is in 'Fair' condition, and the additional parking structure (2000 construction) is in 'Excellent to Good' condition. This shows that the garage has some issues that need to be addressed, but it is still performing its function as intended.

The total estimated repair costs over a five year period for the Pine Street and Main Street Ramps is $1.69 million and $1.86 million, respectively. These repairs will extend the service life of the garages by approximately 10 years.

The cost to replace these garages with the same number of spaces would be substantially greater than the estimated repair costs. Assuming a construction cost of $25,000 per space, it would cost approximately $46 million to replace the Pine Street Ramp and $17 million to replace the Main Street Ramp. Based on these cost estimates, it makes economic sense to renovate the parking structures versus constructing replacement garages.

Due to the substantial number of spaces available in the Main Street Ramp during a typical weekday (average of 544 spaces) and that it is located adjacent to the Pine Street Ramp, it is suggested that the repairs needed in the Pine Street Ramp be performed prior to the potential demolition of the Main Street Ramp. The available parking in the Main Street Ramp will support parking displaced during Pine Street Ramp renovations.

The repair program can be staged in a way where only a section of the garage (i.e. level, side of the garage, portion of ramp, etc.) is displaced so that there will still be parking available during renovations and vehicles can circulate the garage. The staging plan is completely dependent on the level of repairs performed during each phase, which is primarily dependent on the amount of money the City has available to invest in repairing the parking structures.

Not only can the repairs be staged effectively as not to displace all parking and impact circulation to available spaces, the repairs can also be performed during the weekend when the parking structures are less occupied. However, weekend renovations will increase labor costs. If it is decided that one of the garages is to be demolished, it is suggested that a parking structure is constructed prior.

Based on the types of repairs needed in each of the garages, the functional layout of the garages and the needed space to perform renovations, it was estimated how many spaces would be displaced in each parking structure during a phase of renovations.

Due to the double-helix layout and extensive amount of repairs needed in the Main Street Ramp it is estimated that approximately 20% of the spaces would be displaced, which equates to approximately 140 spaces. If these repairs are performed prior to Schreiber Foods expanding their facility, there is adequate available capacity in the Main Street Ramp to support the displacement of 140 spaces. If the repairs are performed within a five year timeline there is available capacity in the Downtown public parking system to support the displacement of 140 spaces when there is no large convention at the Conference Center. It is suggested that renovations in the Main Street Ramp not be performed during a popular weekday event at the conference center.

The Pine Street Ramp has greater circulation options and has less extensive repairs than the Main Street Ramp. It is estimated that approximately 10% of the spaces would be displaced during each phase of repairs, which equates to approximately 185 spaces. Currently, there is adequate parking capacity available in the Pine Street Ramp during the weekday peak parking period to support the displacement of 185 spaces. If the repairs are performed within a five year timeline there is available capacity in the Downtown public parking system to support the displacement of 185 spaces when there is no large convention at the Conference Center.

It is suggested that Main Street Ramp and Pine Street Ramp renovations not be performed simultaneously, which would cause a shortage of parking. If repairs are performed simultaneously or after Schreiber Foods has fully moved into their new location, it is suggested that temporary parking lots be utilized to support any overflow parking demand. Potential

locations for weekend event overflow are the Wisconsin Public Service Lots and the Associated Bank lot at Cherry and Monroe.

Below is a summary of the recommended strategies regarding parking structure renovations or replacement of a parking structure:

- It is more cost effective to renovate the garages, as opposed to replacing the garages.
- Effectively stage repairs as not to displace more spaces than necessary.
- It is estimated that approximately 140 spaces would be displaced in the Main Street Ramp and 185 spaces in the Pine Street Ramp.
- Do not perform renovations in the Pine Street Ramp and Main Street Ramp simultaneously.
- Do not perform repairs during a high-volume weekday conference center event.
- Potentially perform repairs during weekends when parking demand is low, if necessary.
- If the renovations are performed in the Main Street Ramp and Pine Street Ramp simultaneously after Schreiber Foods has expanded, implement a temporary parking lot for any overflow parking demand.
- Construct garage on available site prior to demolition of existing parking structure(s).

Appendix A

2013 Downtown Parking Study
Summary of Stakeholder Meetings
(February 26-27 of 2013)

Initial Meeting with City of Green Bay Staff

- New development will act as precursor for new parking development. If the garages are rehabilitated. Or replaced in the case of Main Street Ramp, the City is concerned about managing the parking supply during construction
- Main Street Ramp, with 681 spaces, will be eliminated within the next 20 year period base on an agreement with Schreiber Foods.
- Schreiber Foods world headquarters will open 2014 with 500 employees with the possibility of up to 700 total. The City needs to provide up to 700 parking permits in the Pine Street Ramp. Associated Bank has 200 parking permits in the Main Street Ramp.
- The on-street parking meters have recently been replaced. The City looked at multi-space parking meters and decided to continue with single meters, but with slot for a Green Bay debit card.
- The City is about to embark on a Downtown Master Plan Study. The RFP will be issued within the next two months. The Parking Study will be ahead of the Downtown Master Plan, but it will take into consideration the recommendations of the Master Plan as they are developed.
- Short-Term Developments (3-5 years)
    - Doubling size of KI Convention Center
    - Associated Bank (next to Hyatt Hotel)-adding 500 space demand
    - 150-room Northland Hotel will get developed. Their patrons will park in the Pine Street Ramp.
    - Admiral Flatley has a future project, which has recently been approved.
- Longer Term (5-10 years) Developments
    - West Side of the river-Larson Site will be developed, possibly with a recreational component
- Parking financing-all ramps have been financed using City bonds, and have been paid by the City. Parking pays a payment to the City annually in lieu of bond repayment.
- Summary of Key Issues identified at the initial meeting
    - Lack of on-street overnight parking
    - Culture-patrons do not want upper floor parking.
    - Perception on Broadway that there not enough parking spaces
        - Farmer's Market on Broadway 20 weeks during the year
        - Want to get a circulator to connect the two sides of the Fox River
        - No parking meters on the west side of the Fox River

- City wants report format to be similar to the RFP outline.
- TDM concerns and issues
    - Want more parking for bicycles
    - Issue with motorcycles and scooters not large enough to activate gate sensors

Mike Daniels, Nicolet National Bank and Bob Weyers, Commercial Horizons

- City property-improvements belong to Nicolet Bank
- If the City develops the lot, Nicolet must provide alternative parking
- The bank is concerned about losing surface parking near the bank and what will happen when the Main Street Ramp is torn down
- Bank will add 7-10 employees in the near term-1 year
- Commercial Horizon has one level underground parking the building-17 people park in the garage and 25 in the Cherry Street ramp.
- Don't see any big increase in the building use.
- Employees don't like parking on the upper levels of the ramps.
- APAC call center doesn't need to be downtown.

Jeff Mirkes, Director (Downtown Green Bay, Inc and Olde Main Street, Inc)

- Downtown Green Bay is an Ad Hoc entity and is a resource to DESMAN during the study.
- City removed the parking meters on Broadway in response to request.
- Some limited destination retail in the downtown and Broadway
- What are some of the best practices in other cities?
- Would like to see "smart" parking meters that accept credit cards
- Green Bay Gold program has "free" coins that merchants could buy and give to their patrons. The program was implemented 12 years ago. Last year they only sold $2,500 worth of tokens and he believes they need to "move to the next level."
- Issue with handicapped parking using many of the downtown parking meters in some locations. State Law requires HC parking to be free at meters if the time limit is 30 minutes or more.
- Valet parking does not work well in the downtown
- The Main and Pine Street Ramps are not well lit.
- Concern with resident parking ban as an issue with more downtown residential development.
- Meter time limits-Library has 1 hour limit, but would like 2 hour limit.
- Adams Lot has many abusers parking longer than 2 hours.
- Future plans in the downtown:
    - Associated Bank will move 500 people downtown with 200 stalls in the Main Street Ramp. They have a concern with the capacity of the Main Street Ramp with future development plans, including the KI Convention Center and the Northland Hotel development.
    - Residential 200-300 new units

Christopher Naumann, Director (On Broadway, Inc)

- There are many private lots and there is a perception that parking is difficult
- City lot is confusing with some contract spaces and metered spaces. Circulation in the lot is difficult.
- The area is healthy and many storefront building are being leased.
- One restaurant tried valet but it didn't work
- Larson Green site will be developed in 7-10 years. It will have its own parking for employees and visitors.

Jim Schmitt, Mayor (City of Green Bay)

- Make sure we have adequate parking with first floor retail
- Would like to have adequate parking within a couple of blocks of a parker's destination.
- Flatley will have two floors with on-site parking
- Mayor does not like the angled parking on Washington.
- Likes Appleton's approach with pay on entry.
- Automating parking is okay, but likes idea of having people in the ramps for customer safety.
- The City will own the parking and use it to negotiate with owners and developers.
- Adams Street Lot may go away. City thinking about developing it as an urban plaza.
- Competing businesses have free parking outside downtown.
- City should consider marketing "covered parking" in the ramps.
- Currently people come downtown to pay parking tickets because they cannot pay online. Would like more modern system with ability to accept credit cards. Possible pay meter with cell phone.

Jeff Tappen, Facilities Manager (Schreiber Foods)

- They have approximately 500 parking spaces with 30-40 more people in the summer.
- Their employment will be flat until the new office building opens.
- A total of 80 people in other areas will move to the Pine Street Ramp- 40 cars from Main/Madison and 40 people from R & D facilities.
- Future growth in consultant employess-600-700 future population with 650 the day the new building opens, and they expect to add another 100 people in the next decade with acquisitions and new products. They want to provide covered parking for all their employees.
- US Bank allows parking for 10 executives
- "perception of parking not being safe"
- Motorcycles do not trip sensors in the garages
- Bicycles need secure parking
- Consider enclosed bridges or skywalks with direct connections to buildings

Anthony Ferro, Property Manager (Associated Bank)

- They will have 450 new employees with the possibility for 680. August 1, 2013 they will move in 450 employees. The city will provide 200 spaces in the Main Street Ramp.
- They tried unsuccessfully to reach an agreement to provide some parking in Hyatt lot.
- Their main concern is to have stability in parking, and they are concerned about what will happen when there are weekday events at the expended KI Convention Center

Tim Farel, General Manager, Tracy Hilles-Heim, Assistant Manager (Hyatt on Main/KI Center)

- Hyatt Hotel has 241 rooms and 168 parking spaces in adjacent surface parking lot with 43,000 sf meeting center including breakout rooms.
- 80% of convention center attendees drive
- Parking lot is full when hotel is 70% occupied
- Parking is not an issue now, but will be on issue in the future. Overflow parking is accommodated in the Main Street Ramp
- The KI Convention Center expansion is anticipated to increase the hotel's average occupancy from 50% to approximately 60% with an ideal goal of 70%
- Hotel would like 80 more parking spots over the 50 they have now. Total employees 130, with up to 160 for banquets
- The Hyatt will manage the expansion of the convention center and expect to add 50 employees for the expansion
- General comments about parking
    - Critical that people know where to find parking. It should be inviting and feel safe
    - There are dark spots in the Pine and Main Street Ramps

Paul Belschner, Property Manager (Smet Company/APAC Services-Baylake Bank building) Rob Cera, President (Baylake Bank)

- Smet is a construction development firm with real estate development subsidiaries
- They have approximately 100 employees and represent APAC
- APAC has 1,200 employees. They have 450 permits in the Cherry Street Ramp and 400 in the Pine Street Ramp, all at a low fee. Emphasized that APAC is not a "relationship" organization, but interested in low cost as a tenant
- APAC is basically maxed out at the site and their lease runs out in 2017
- Baylake bank
    - Bank has 70 employees who currently park in Pine Street Ramp
    - They have 8 spaces in the parking lot signed for employees
    - 30 minute signs for bank customers
    - They need 30-40 parking spaces. Currently have 30 permits in Cherry Street Ramp

- Plans for additional employees-unfinished space 25-40 employees in 3 years
- Schreiber subleases 11,000 SF with 100 employees now. Expect fewer in the future.

Denis Feld, President (Feld Companies)

Walnut and Jefferson-leases parking from church

- Properties
  - Columbus Building 25,000sf less than 50% occupied
  - 225 Monroe 65,000 SF-93% occupied
  - 300 N Madison 93% leased. Parking 100 on site with the balance in Pine Street
  - Humana 400 people with 300 parking in Pine Street Ramp
  - "parking as it is today is adequate"
  - Does not anticipate growth in the downtown. There is currently about 200,000 SF of vacant space
  - Parking ramps have improved with new lighting and other improvements

Doug March and Paul Donowski (Brown County)

- Brown County does not provide any parking
- They have approximately 350 employees at several locations in the downtown
- Public park on-street or in a ramp
- Jurors park in the Cherry Street Ramp and have their parking validated
- County does not see any change in the future-they are at full capacity and don't have any vacant space

Mark Winter, Building Services Supervisor and Bob Juidici (Integrys/Wisconsin Public Service Corp)

- Their parking is currently just right
- They have 850 employees 1,000 with contractors
- Employees park in surface lot that is open to the public after 5 pm
- They do not anticipate any growth in the future and some functions may go to other locations in the future

Steve Schneider, Owner (Bellin Building)

- Bellin Building is a historic building. Have 160 employees with 300 visitors per day. Has law offices and up-scale restaurant Black and Tan
- Also couldn't rent spaces in a city lot or parking prices. Tried valet parking but couldn't reserve specific rented stall in a city lot or parking garage to park the vehicles

- They pick up the cost of parking for their tenants. They have 160 people and need 120 permits
- Future plans (2016) include a 300 seat dinner theater on the 3rd floor with possible roof top dining similar to the Witt Hotel in Chicago
- The Walnut/Washington intersection is dangerous for pedestrians.

Mike Daniels, President (Nicolet Bank); Bob Weyers, Building Owner (Commercial Horizons) (Green Bay Area Chamber of Commerce)

- On Broadway lot (east side of Broadway) is not well maintained. They pay $20 per stall per month for 40 spaces
- They have no real issues
- Suggest allowing on street overnight parking for Packer games for visitor/guest parking

Appendix B

2013 Downtown Parking Study
Summary of Meetings with City of Green Bay Staff
(February 26-27 of 2013)

Mary Scanlan, Parking Field Supervisor

Operations and Policies

- Parking staff installs meter bag hoods upon request - $6.00 per meter per day including weekends

Operational Organization

- Mary Scanlan concentrates on the maintenance of the parking system
- Revenue tabulation and parking reports managed by Parking Division clerical staff supervised by another person.
- In 2005, the Parking Division clerical staff was moved to City Hall as part of an administrative consolidation initiative

Revenue Control Equipment

- PARCS equipment installed in all the garages and lots (except the Cherry Street Garage) is about 12 years old – Cherry Street Garage equipment is 7 years old
- In Fall 2012 implemented Duncan Eagle 2100 meter mechanisms throughout the system, which accept coin and parking meter debit cards, but no credit cards
- Meters can be upgraded to credit card capable with bulk downloads at night; estimated to cost approximately $250.00 per unit to convert if instituted in the first or second year after purchase
- Meter debit card program to be implemented – cards can be replenished at City Hall
- Multi-space pay stations would work best in the Adams Street and City Hall Lots

Garage Lighting

- Lighting in all the Pine and Main Street Ramps needs to be improved and lighting in the Cherry Street Ramps need to be made to be more cost-efficient

Parking Rate Schedule and Operations

- 1 hour free parking and free parking after 6 PM and on weekends and holidays for the Adams Street Lot, Pine Street Ramp, Main Street Ramp, and Cherry Street Ramp
- Parking Division is staffed until 10 PM daily, but there is a cashier only until 7 PM
- Free parking for City employees in Pine Street Ramp. Nine City employees park in the Cherry Street Ramp.

Enforcement

- Informal directive to not enforce 2 hour parking restriction along Broadway Street due to business development agreement with the *On Broadway* organization

- Enforcement applied in all metered areas and tires chalked in time restricted areas
- Right side driven jeeps are used to enforce three of the City's four enforcement beats but no auto chalker vehicles
- Enforcement occurs from 7 AM to 6:30 PM (enforcement areas include schools, CBD, hospital district, Northwest Wis. Tech College (NWTC), residential neighborhoods, setbacks/front yards, private apartment lots, etc.)
- Expect to have new handhelds in service within 30 days (cameras and voice recording capability); policy is that public must be told that they are being recorded. Handhelds are Duncan Autocite
- Negative 10 minutes count on meter dials - allow a 10 minute grace period for expired meters
- Handicapped customers can park for free at any meter of 30 minutes or more – State Law

Data Collection and Reports

- Ramp lane counters are fairly reliable and are routinely reset once a week. Use differential counts only to determine peak occupancy levels in the ramps

Maintenance

- Parking staff does all maintenance including power washing, scrubbing, painting, bird droppings removal, basic repairs to revenue control equipment, grounds, and litter/trash and snow removal
- Electric repairs and parking equipment fixes are done by Public Works (PW) electricians
- No current service contract with Federal ADP (3M) so the City pays for equipment repairs on an "As Needed" basis - TAPCO is the current repair service provider. In 2012, the City spent only $18,800 on out-sourced parking equipment repairs
- When snow accumulation is excessive, outside contractors are used to assist with snow removal

Security

- Parking Division has a contract with a private security company to provide one walking patrol officer in the ramps on weekdays between 10 AM and 5 PM and between 3 PM and 9 PM and provide two walking patrol officers on weekends between 10 PM and 3:30 AM at an annual cost of approximately $95,000 in 2012
- Security present only after 9 PM on weekends

Events

- Considered possibly operating a Packer's game day shuttle bus to and from Lambeau Field and the downtown ramps, but never implemented

Staffing

- MEA – Maintenance Enforcement Attendants: 3.5 employees, 7 days a week (10 PM to 6 AM) enforce night parking, setbacks and apartments. Also provides power washing and other maintenance that must occur when the ramps are empty.

Operational Issues

- Ticket swapping has occurred because of the Free 1st Hour Parking Policy (for example: a downtown YMCA employee that starts work at 5 PM will swap his/her entry ticket with another co-worker assigned to work the next shift until say 7 AM – the process is repeated daily and neither employee ever pays for parking)
- Open system when cashier is not on duty (approximately after 7 PM weekdays and on weekends)
- Substantial revenue loss from free parking after 6 PM and using an open system after cashiers shift in pay parking facilities
- Online payment for monthly passes, citations, or debit cards is not currently offered
- Mary believes the Parking Division is overstaffed in comparison to Appleton, WI
- Mary is not well versed in Scan Net System (PARCS software) due to administrative consolidation initiative
- The Parking Division staff has received little formal training on Scan Net from Federal APD – knowledge has mostly been passed from person-to-person over the years
- City web site is not user-friendly for parking information
- No specific plan implementing debit card program
- PARCS – needs replacement and wiring problems need to be resolved (PARCS parts are hard to get and very expensive)

Sharon Gerrits & Eileen Clark, Maintenance & Operations Attendants (MOA)

Duties

- Maintenance/Operations Attendants (MOA) have multiple duties, including enforcement, troubleshooting, snow removal, paint meter poles, and repairs of broken meters
- Meter collections (2 people) are regularly performed on Monday, Tuesday and Wednesday
- 4th shift is responsible for collecting all cashier receipt bags for deposit at bank drop safe
- Ticket and receipt paperwork processed at City Hall

Shifts

- 4 total weekday MOA shifts – 1st shift 6:00 AM - 2:30 PM (responsible for opening), 2nd shift 7:00 AM – 3:30 PM, 3rd shift 8:30 AM – 5:00 PM, 4th shift 2:00 PM – 10:30 PM
- On Sat/Sun only one MOA is on duty between 8:30 AM - 5:00 PM

Operation Practices

- Elevators are powered off overnight at the Pine and Main Street Ramps, but Cherry Street Ramp elevators run 24 hours
- Upon hiring, Cashiers are given a $200 cash bank which they remain responsible for during the tenure of their employment – avoids having to create daily bank runs for cashiers

Operational Issues

- Meter coin collection process is open (no closed coin containers) and vulnerable to theft

Shirley Tillman & Sharon Ruby, Enforcement Attendants (EA)

Duties

- EA's are responsible for parking enforcement and cleaning/snowplowing of lots after closing
- On average EA's write about 20 tickets per day per attendant
- Do not attend adjudication hearings

Shifts

- Enforcement work shifts (2) 7:30AM 3:30PM, (1) 8:30AM-4:30PM and (1) 10:30 AM-6:30 PM

Enforcement Practices

- Meters are enforced between 8:00AM and 6:00PM
- One walking beat which encompasses about 90% of metered area in downtown
- Three driving beats enforce non-metered areas (chalking tires), school areas, City waterpark lots, residential areas on-call, private apartment areas and illegal on-street parking between 3:00 AM to 5:00 AM (Wisconsin State Law).
- Illegal on-street parking between 3 AM and 5 AM account for nearly half of the parking tickets
- Overnight on-street parking is permissible up to 6 occurrences a year without being ticketed but parkers must call-in to the Parking Division to get pre-approval. Each occurrence or event can be up to a week long
- Shirley has created an enforcement training manual
- Can void tickets if license plate number has not been entered into the ticket writer
- City does not maintain a scofflaw list or boot vehicles
- Vehicles on-street for three consecutive days will be towed but the Police must issue a tow ticket before a vehicle can be legally towed. Calls for tows are processed by City hall parking office
- Standard parking policies are waived on Packer Home Game days – ordinance allows front lawn parking on game days city wide and residents are allowed to charge for front yard parking

Enforcement Equipment

- Duncan Autocite handhelds
- Recently purchased new Duncan Autocite handhelds with integrated camera that have recently been placed in service

- Use cameras to document certain types of parking violations

Operational Issues

- No scofflaw system or car boot program in place

Mindy Stacie & Sue Bdadeau, Public Works Administration Accounting Clerks II and III

Duties

- Routine tasks include group customer permit and voucher invoicing, mail out notices, related collection of parking citation fees and penalties, token sales, parking report production, data entries to the Federal APD Scan Net software system, enter hand written tickets into the Cardinal Ticket Trak System, prepare ticket files scheduled for adjudication hearings, collect meter hood bag fees
- Reconciliation of parking receipts
- Handle customer service issues related to parking
- Handle and process payment of parking fines and monthly passes
- Approximately 70 to 80 tickets processed a day in Ticket Trak software

Payment Practices

- Payments methods include checking, cash or auto-debit (ACH)
- City charges $10 for replacement access cards but does not collect deposits on cards
- Deactivate monthly pass cards after a 5 day grace period for non-payment
- One outstanding unpaid ticket (after 30 days plus the grace period), State is notified to suspend in-state vehicle registration
- GovPayNow.com is the on-line credit card payment service that citizens can use to pay parking tickets – the per transaction fee online is $3, $5 if processed over the telephone.
- City has several parking ticket payment drop boxes that are collected by MOAs daily
- Meter revenue collections are processed and reconciled at the end of the week
- Parking tickets have $5 late fee after 5 days and $10 late fee after 20 days

Operational Practices

- Scan Net has been used to track access cards in circulation vs. cards that are regularly used
- At the Adams Street Lot, all vehicles present in the lot at or around 5:30PM are issued a $10 Failure to Pay Citation along with instructions that explain how to calculate and pay their parking fee when they leave the lot after 6:00PM. If the customer properly calculates and pays their parking charge, the parking citation will be nullified. If not, the parking citation will stand.
- Machine-dispensed parking ticket stubs are usually destroyed after the daily reconciliation process is completed, but voucher ticket stubs are kept until payment is received from voucher customers
- Ticket appeals are scheduled by the Municipal Court on the first Tuesday of every month – tickets being appealed are entered into Ticket Trak software

Operational Issues

- Some exceptions to the deactivation of monthly parking passes for some people who do not pay on-time
- Scan Net training has kept current
- Community Service Intern connected with City Planning and the Police Department had been assigned parking enforcement duties in school zones, but their of lack training lead to some problems and they're continued role as enforcement personnel is presently under review
- Except for the Park Department, City does not directly accept credit cards as a method of payment
- Parking Clerks have to spend a significant amount of their time explaining to citizens how the GovPayNow.com service works

Mary Stutleen (Administration) & Jeanine Charlier (Finance), Public Works Supervisor

Duties

- Mary Stutleen spends 50% of time on parking related functions
- Jeanine Charlier spends approximately 10% of time on parking related functions
- Reconcile revenue collections using Scan Net system
- Duties split between Public Works and Parking Operations

Operational Practices

- Group Account Customers are asked to keep track of the ID, vehicle and license plate info for the individuals within their Company group – the PW admin. staff only obtains this information from individual permit pass holders
- Use a pricing discount schedule for groups of monthly parkers
- Handle public's questions and concerns regarding parking issues
- Contested ticket revenue is claimed and retained by Municipal Court which handles the adjudication hearings
- City attorney has designed the appeal procedures and process to be a bit burdensome to intentionally discourage frivolous appeals

Operational Issues

- Digital communication problems between the Cherry Street Ramp and the PW Administration office that prevents retrieval of the Scan Net reports
- Counting of collected meter coins is unsupervised and done on the honor system, however, auditors have been implemented in August and are working well
- Only significant revenue reconciliation discrepancies are reported – more than $10 to $15
- Current pricing discount schedule makes it hard to keep track of the per pass amount the various group accounts pay
- Scan Net software is not used to monitor the real-time or historical parking activity patterns
- Structural issues at Pine Street Ramp prevent anti-passback

- Credit card payments through a third party - GovPayNow.com charges 3% processing fee per transaction
- Credit card payment capability or kiosk pay station will be needed to facilitate easy replenishment of parking meter debit cards
- Administration staff often finds it difficult to field the public's questions that concern field activities and operations due to communications gap
- Scan Net alarm signals ring in the PW Admin. office and clerks have to respond and shut off alarms without knowledge of what triggered the alarm in the field – believe parking operations personnel should be alerted to the alarm and respond instead of Admin staff
- Coordination meetings between the Parking Admin. staff and the field operations staff are held very infrequently – maybe 2 or 3 times a year
- Green Bay Gold Token program is outdated and not being regularly monitored - token mostly used at meter but also can be presented as payment in the garage

Chris Pirlot, Parking Manager

Duties

- Parking manager spends only 20% of his time on parking matters, and mostly is involved with Public Works projects and activities
- Heavily relies on Mary Scanlan to supervise daily parking field operations

Operational Practices

- Discussed community and civic groups (i.e. OMSI, OBI, DGBI) promoting growth and development in downtown areas on either or both sides of the River which have differing views on the issue of parking
- DGBI and Old Main Street Inc. are the same people with slightly different focuses in relation to parking
- DGBI wanted free on-street parking along Broadway so meters were removed
- All ticket revenue generated by police and CSI tickets goes to Parking Division

Financial Structure

- Parking Division has separate fund for capital improvements and vehicle replacement
- Parking previously was an Enterprise Fund which had a Capital Reserve Fund over a $1 million dollars
- City Finance Department determines how much of Parking's net revenue is retained in the Parking Division reserves – recently about 10% has been retained while balance of the net revenue goes to the City general fund to offset parking related debt retirement

Operational Issues

- Consolidation of all PW clerical staff in the PW City Hall office hasn't worked as smoothly as it was envisioned on paper. Communication breakdowns occur – the silo affect
- Believes that daily parking administration and operations activities should be managed by one person

- Feels that parking should not be offered for free or at discounted rates outside of the standard rate structure, as has been practiced
- Requested break-out of payroll and benefits for all personnel on the Parking Division's payroll
- No clear and consistent policy rationale behind the discounts that have been made available to downtown businesses