

Memorandum

SRF No. 15015.00

To: Emily Welty, CEcD, EDFP

Downtown Development Program Director

Wisconsin Economic Development Corporation (WEDC)

From: Tom Sachi, PE, Project Manager

Date: June 29, 2022

Subject: Watertown Downtown Parking Study

Introduction

SRF has completed a parking study update for the Downtown district of the City of Watertown (see Figure 1: Parking Zones). A previous parking study was completed in 2018 with parking utilization surveys of on and public and private off-street parking. This study will serve as an update to those public parking lots and development assumptions. The core project area is generally bounded by Washington Street to the west, Cady Street to the north, Seventh Street to the east, and Milwaukee Street to the south. The defined project area and zones are shown in Figure 1. The main objectives of this study are to review the existing parking utilization within the project area, document any supply issues that exist, and plan for potential future parking opportunities as redevelopment is expected to occur. The following assumptions, analysis, and study conclusions are offered for your consideration.

Existing Conditions

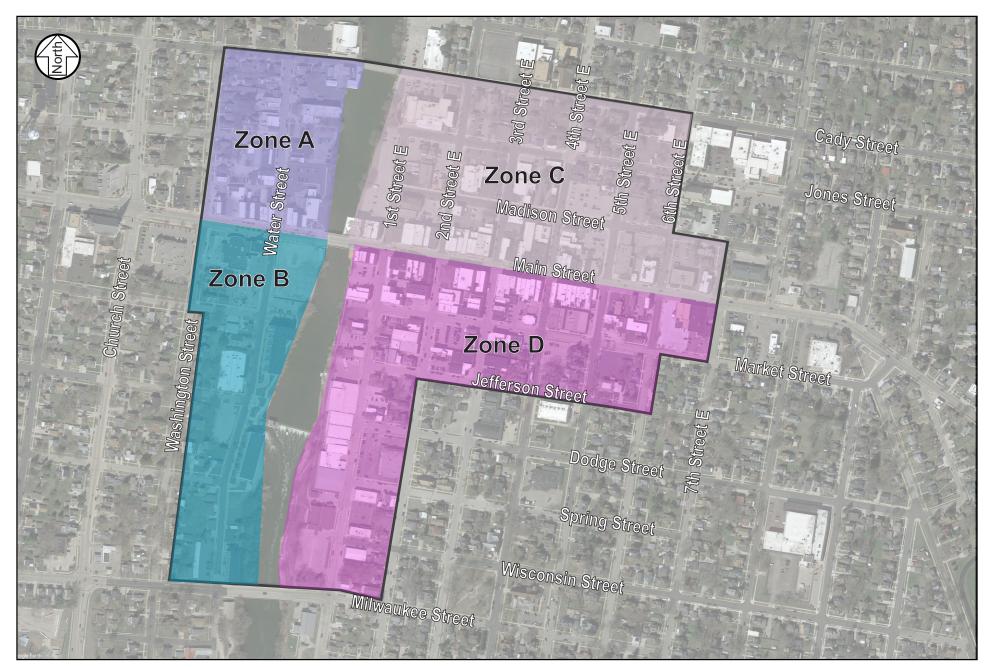
The existing conditions were reviewed to establish a baseline to identify any existing supply issues facing this area of downtown for both the parking lots and on-street parking locations shown in Figure 1. The evaluation of existing conditions includes parking utilization surveys collected during different time periods.

Parking Utilization Survey

Parking utilization surveys were collected during the week of July 15, 2021 and the weekend of June 26, 2021 within public lots in Downtown Watertown. Parking data was collected during several time periods to help identify the fluctuation in parking utilization within the lots. The study time periods included:

- Saturday, June 26, 2021 12:00 p.m.
- Saturday, June 26, 2021 5:00 p.m.
- Saturday, June 26, 2021 6:00 p.m.
- Thursday, July 15, 2021 6:00 p.m.
- Thursday, July 15, 2021 7:00 p.m.

- Friday, July 16, 2021 12:00 p.m.
- Friday, July 16, 2021 5:00 p.m.
- Friday, July 16, 2021 6:00 p.m.
- Friday, July 16, 2021 7:00 p.m.





Zone Map

Note that the parking data collection occurred on mild temperature summer days when both commercial and recreation activity was taking place. The bounded area of the parking utilization surveys is consistent with the area collected in 2018. Note, based on impacts from the COVID-19 Pandemic and resources available, on-street parking data and private lot parking data was utilized from the 2018 study provided by the City. The public lots within Downtown Watertown were newly collected as indicated above.

Results of the parking utilization surveys are detailed within Tables 1, 2, and 3 for the highest peak periods during the observation periods, which were the Saturday afternoon, weekday evening, and weekday afternoon, respectively. The full dataset is included within Appendix A.

As shown in Tables 1 through 3, the **peak parking period** is generally identified as the **Saturday afternoons** with a peak utilization of approximately 45 percent for all spaces in the downtown core. Reviewing just the public spaces, there is a peak parking demand of 53 percent of the public spaces available in Downtown. This leaves a public parking surplus of 597 spaces. Note, an effective surplus was not applied to these parking demand counts as to not overestimate the existing demand. While an effective surplus is an estimated five (5) to 15 percent inflation of the existing parking demand values, which has been previously used in parking studies as users found lots "effectively fully occupied" at 85 to 95 percent parked. However, as land values have increased and parking lot construction and maintenance costs of increased, overbuilding parking to accommodate the effective surplus is not as common as it used to be. While there can be added circulation for motorists, some agencies rely less on an effective surplus and focus more intently on the actual surplus as to not overbuild surface or structured parking.

A few other key observations during the peak timeframes:

- On-street parking ranges in all zones from 32 to 45 percent occupied, with the peak occurring on the Saturday afternoon timeframe.
- On-street parking in Zone A, where there are no public lots, is approximately 55 percent occupied during all peak timeframes.
- Public parking lots peaked with a 66 percent utilization on Saturday afternoon, which coincides with the peak recreational and shopping hours of Downtown. During the weekdays, the public parking lots were approximately 35 percent occupied in Downtown.
- During the weekdays, the public lots were higher utilized in Zone D, however, on Saturday, the public lots were similarly utilized in Zone C and D. Note, the public lots in Zone B were always less than 30 percent occupied.
- Private parking lots throughout Downtown were approximately 30 percent occupied during the peak hours, indicating an excess supply of private parking.

 Table 1. Parking Utilization Survey - Saturday Afternoon

	Zone A	Zone B	Zone C	Zone D	Total
Supply					
Total Public Supply	108	198	582	383	1,271
Total Supply (Public + Private)	249	296	740	692	1,977
On-Street	108	80	334	262	784
Off-Street (Public)	0	118	248	121	487
Off-Street (Private)	141	98	158	309	706
Demand					
Public Demand	59	82	301	232	674
Total Demand	119	117	324	326	886
On-Street	59	48	116	131	354
Off-Street (Public)	0	34	185	101	320
Off-Street (Private)	60	35	23	94	212
Surplus/(Deficit)					
Public Surplus	49	116	281	151	597
Total Surplus	130	179	416	366	1,091
On-Street	49	32	218	131	430
Off-Street (Public)	0	84	63	20	167
Off-Street (Private)	81	63	135	215	494
Utilization Percent					
Public Utilization	55%	41%	52%	61%	53%
Total Utilization	48%	40%	44%	47%	45%
On-Street	55%	60%	35%	50%	45%
Off-Street (Public)	N/A	29%	75%	83%	66%
Off-Street (Private)	43%	36%	15%	30%	30%

Table 2. Parking Utilization Survey - Weekday Evening

	Zone A	Zone B	Zone C	Zone D	Total
Supply			•	•	
Total Public Supply	108	198	582	383	1,271
Total Supply (Public + Private)	249	296	740	692	1,977
On-Street (Public)	108	80	334	262	784
Off-Street (Public)	0	118	248	121	487
Off-Street (Private)	141	98	158	309	706
Demand					
Public Demand	58	40	219	180	497
Total Demand	122	73	236	286	717
On-Street	58	26	143	101	328
Off-Street (Public)	0	14	76	79	169
Off-Street (Private)	64	33	17	106	220
Surplus/(Deficit)					
Public Surplus	50	158	363	203	774
Total Surplus	127	223	504	406	1,260
On-Street	50	54	191	161	456
Off-Street (Public)	0	104	172	42	318
Off-Street (Private)	77	65	141	203	486
Utilization Percent					
Public Utilization	54%	20%	38%	47%	39%
Total Utilization	49%	25%	32%	41%	36%
On-Street	54%	33%	43%	39%	42%
Off-Street (Public)	N/A	12%	31%	65%	35%
Off-Street (Private)	45%	34%	11%	34%	31%

 Table 3.
 Parking Utilization Survey – Weekday Afternoon

	Zone A	Zone B	Zone C	Zone D	Total
Supply		-			
Total Public Supply	108	198	582	383	1,271
Total Supply (Public + Private)	249	296	740	692	1,977
On-Street (Public)	108	80	334	262	784
Off-Street (Public)	0	118	248	121	487
Off-Street (Private)	141	98	158	309	706
Demand					
Public Demand	60	52	177	127	416
Total Demand	124	76	217	209	626
On-Street	60	24	102	63	249
Off-Street (Public)	0	28	75	64	167
Off-Street (Private)	64	24	40	82	210
Surplus/(Deficit)					
Public Surplus	48	146	405	256	855
Total Surplus	125	220	523	483	1,351
On-Street	48	56	232	199	535
Off-Street (Public)	0	90	173	57	320
Off-Street (Private)	77	74	118	227	496
Utilization Percent					
Public Utilization	56%	26%	30%	33%	33%
Total Utilization	50%	26%	29%	30%	32%
On-Street	56%	30%	31%	24%	32%
Off-Street (Public)	N/A	24%	30%	53%	34%
Off-Street (Private)	45%	24%	25%	27%	30%

Future Parking Demand

Although parking overall throughout Downtown indicates a significant capacity available, the majority is located east of the Rock River in Zones C and D. Currently, there are a number of partially and fully vacant buildings within the Downtown core, including upper level residential opportunities along Main Street. Using potential development assumptions and vacancy data provide by the City, an estimate of the future new development parking demand was completed. While a portion of these developments will be expected to self park (i.e. residential/hotel), there is another portion of the developments that will likely utilize the available public parking (i.e. retail). Additionally, some development is slated to replace current public surface lots, which will reduce the available supply. This includes the 66 space public lot in Zone B and approximately 40 spaces of the public lot along the river in Zone C.

Using the ITE Parking Generation Manual 5th Edition, a parking generation estimate was completed for the potential developments in each zone. Due to the private nature of the development information, specific land uses are not shown in the tables below, however, it includes a mix of residential, retail, institution, hotel, and a Town Square Amphitheater. The Town Square piece is located in Zone B. Note, the Town Square Amphitheater is expected to peak on Saturday evenings during the summer months with a peak demand of approximately 80 spaces. During the three (3) peak times identified, the usage of the space is expected to be less due to the expected minimal amount of programming during those time periods.

The future parking generation, and total public and overall parking surplus/deficit estimates are shown in Table 4, 5, and 6 for the Saturday afternoon, weekday evening, and weekday afternoon timeframes, respectively.

Table 4. Future Parking Utilization - Saturday Afternoon

	Zone A	Zone B	Zone C	Zone D
Surplus of Public Parking	+49	+116	+281	+151
On-Street	49	32	218	131
Off-Street (Public)	0	84	63	20
Increased Peak Demand	55	49	55	28
Removal of Public Parking	0	66	40	0
Forecasted Surplus of Public Parking	(-6)	+1	+186	+123
Surplus of Private Parking	+81	+63	+135	+215
Forecasted Surplus of Total Parking	+75	+64	+321	+338

	Zone A	Zone B	Zone C	Zone D
Surplus of Public Parking	50	158	363	203
On-Street	50	54	191	161
Off-Street (Public)	0	104	172	42
Increased Peak Demand	59	33	19	34
Removal of Public Parking	0	66	40	0
Forecasted Surplus of Public Parking	(-9)	+59	+304	+169
		1		
Surplus of Private Parking	+77	+65	+141	+203
Forecasted Surplus of Total Parking	+68	+124	+445	+372

Table 5. Future Parking Utilization - Weekday Evening

Table 6. Future Parking Utilization - Weekend Afternoon

	Zone A	Zone B	Zone C	Zone D
Surplus of Public Parking	48	146	405	256
On-Street	48	56	232	199
Off-Street (Public)	0	90	173	57
Increased Peak Demand	55	37	18	33
Removal of Public Parking	0	66	40	0
Forecasted Surplus of Public Parking	(-7)	+43	+347	+223
Surplus of Private Parking	+77	+74	+118	+227
Forecasted Surplus of Total Parking	+70	+117	+465	+450

The following key results were determined as part of the parking analysis:

- Zone A is expected to have a deficit of public parking between six (6) and nine (9) spaces during the time periods. Note, all available public parking in this zone is on-street parking.
- If the proposed retail developments in Zone A are able to provide off-street parking for a portion of the customers, the potential deficit could be reduced/eliminated. For purposed of this study to remain conservative, it is assumed that all parking will occur at public facilities.
- In Zone B during the Saturday afternoon peak time there is expected to be a public surplus of only one (1) parking space. This would be expected to become a deficit of approximately 60 spaces if full capacity events occurred at the Town Square Amphitheater during the Saturday afternoon timeframe. During the other timeframes, there is expected to be sufficient public parking supply.
- There are not expected to be any public parking supply issues in Zones C and D during the peak times.
- In addition to the public parking, there is an abundance of private parking spaces available during the peak times in all zones.
- Given the public parking supply issues expected in Zones A and B during the peak timeframes, parking mitigation strategies will be required to minimize impacts on visitors to Downtown.

 Strategies should focus on directing visitors to available parking lots on either side of the river while promoting multimodal opportunities to decrease vehicle circulation.

Other Considerations

The two (2) public lots located along the west side of S First Street between Jefferson Street and Main Street are potential locations of development. While not indicated by City staff at this time of any plans, if these lots were to be redeveloped they currently contain 39 public parking stalls. However, based on the peak surveys collected, they have a demand between 22 and 25 spaces. Given the peak demand of 25 stalls on the weekday evening, a review of the publicly available parking nearby was completed. Within approximately one (1) block of these lots, there are approximately 62 on-street parking stalls, of which only 28 were occupied during the peak timeframe, leaving 34 stalls available. Additionally, the public lot along Market Street had eight (8) available parking stalls. Based on these results of the parking survey, there is available capacity between on-street parking and the public lot to accommodate the development of these sites. Note, the public lots further south on S First Street have over 50 available spaces during the peak times. While they are approximately a four (4) block walk, they are within the downtown area and could accommodate excess demand from further north.

In addition to that potential development, the City may potentially acquire two (2) private parking lots in Zone C. If these lots become public parking, it is anticipated that up to 40 public parking stalls will be added. These lots are present an opportunity for the City to create additional overflow parking during upcoming Main Street construction during which on-street parking will be reduced during the construction season, potential permit spaces for businesses/landlords, and future redevelopment opportunities. By purchasing these lots, the City will control the function of the lot, which allows flexibility in future years to meet the needs of the community.

Mitigation/Implementation Plan

As a result of the expected parking deficit is Zone A and the potential deficits in Zone B, a list of parking mitigation strategies was developed. This list includes many items that are consistent with strategies identified within the 2018 parking study. Strategies were categorized into a low, medium, and high cost category. From an implementation perspective, the low cost strategies provide some of the easiest opportunities to make impacts on the potential parking deficits. The high cost strategies are likely not needed at this time or into the future unless major redevelopment plans are presented.

Low Cost

Shared Parking

Underutilized private parking lots throughout Downtown should be considered for shared parking opportunities, especially private lots that serve commercial buildings during the day. These lots could serve the proposed upper floor residential parking during the overnight and weekend timeframes to reduce reliance on on-street parking. Additionally, individual commercial businesses that have their own lot could consider sharing excess parking with new developments at a cost to both minimize cost to the new development (i.e. reduce the amount of new parking built) and receive a monetary gain for unused spaces. The sharing of parking may also be useful for employees to have a dedicated long-term parking space available while reducing employees relying on street parking. This street parking can become available for the visitors of businesses.

Shared parking opportunities have become increasingly popular in urban areas as ways to reduce building new parking are discovered. The high price of new parking lots can be discouraging to developers and the sharing of private parking lots can help new developments flourish, remove blighted properties, and provide for a well functioning downtown. Note, agreements would need to be made between private entities.

Potential locations to consider shared parking in Zone B include, but are not limited to, the following private parking locations:

- Lot located in the 300 block of S Water Street
- Lot directly north of 104 W Main Street
- Lot located at 301 W Main Street

Provide Short-Term Parking

Reduce parking time limits in front of certain businesses, as needed, to encourage high turnover for visitors and reduce employee parking on-street. Time limits could be reduced to 15 to 30 minutes to encourage short duration trips and have available parking for commercial business guests. This is especially important to small retail businesses that rely on take out ordering, quick dining, and order pick up. With the emergence of online retail for both businesses and restaurants, short-duration or pick-up zones have become popular in Downtown areas. These spaces provide guests the ability to get in/get out quickly without circulating around looking for a close parking space or stopping within a drive lane.

New Development Parking Requirements

Require off-street parking to be provided by new developments at agreed upon parking rates. This will require new developments to self park and reduce reliance on public facilities. Note, this type of requirement can increase the overall cost of new developments and reduce the amount of blighted properties that may be improved. Additionally, new developments may be able to work with private lot owners to share parking. A detailed parking study for each new development is recommended to be completed if a shared parking opportunity is desired.

Medium Cost

Communications Plan

Communications can be sent out to both residents and area businesses/chamber of commerce promoting the use of the available parking facilities. While not all visitors are residents of the City, these communications can provide helpful information to a portion of the Downtown users.

With the knowledge of the parking opportunities available to the general public, business owners can help provide guests alternative parking areas if the guests have concerns over parking availability.

This will be crucial if/when the Town Square development occurs and event parking scenarios begin to occur. Given that there is minimal public parking available near the Town Square, a detailed communications plan for guest of those events should be completed to provide them information on where to go. This can help encourage use of facilities east of the river.

Parking Surveys

Perform a business owner survey in the future for the entirety of downtown to understand current communications plans, employee parking behaviors, and opinion on the changes in work habits.

Survey results can help inform and target where improvement strategies are most important and have the highest benefit/cost. A similar survey could be sent to residents of the City. A survey can help identify current issues, how far people may walk/bike, what improvements are needed, and additional non-quantitative information that is not obtainable via parking utilization surveys.

Improved Parking Signing

Installing improved, high visibility signs at entrances to public parking facilities. Signs at the entrances can help promote and advertise the locations. This will be critical for guests who arrive and are not familiar with the area.



Potential Parking Lot Sign. Source: SRF Consulting Group

Promoting Walking/Biking Downtown

To encourage higher usage of public parking lots on the fringe of the Downtown core, the City can encourage walking through the core and encourage residents who live withing a bikeable distance (typically within 1 to 2 miles) to bike to Downtown to reduce reliance on automobiles. These strategies can improve visibility of multimodal options and help walkers/bikers feel welcome and safe in the area. Ways to encourage walking/biking include:

- Installing bike racks/bike lanes where feasible. Designate a bike route.
- Ensuring sidewalks are a proper width (minimum of 4 feet) and are in good condition (i.e. fixing broken panels and heaved panels).
- Ensure sidewalks are clear of ice/snow during winter months.
- Provide benches and landscape/streetscape enhancements to improve the visual feel and provide opportunities for visitors to rest.
- Ensure areas are well lit and safe. When visitors feel safe, they are encouraged to stay longer and visit more often.
- Install wayfinding signing with estimated walk times/distance. These signs provide helpful
 notes to visitors to explore the area while understanding the walk times. Public parking lots
 could be included or these signs can be installed near public lots.





Wayfinding Sign. Photo Courtesy of City of Northfield, MN

Example of Information Kiosk. Source: Behance

- Information kiosks, either static or interactive (higher cost) can help visitors find local establishments, find parking locations, and understand distances. Similar to wayfinding signing, these types of installations provide visitors with a greater understanding of the Downton core. These can be located near key intersections or bridges.
 - O Detailed information such a restaurants, civic destinations, churches, or landmarks can be included.
 - o Interactive displays provide a wealth of information but come with a high cost.
 - A static display could include a QR code which can help update with real time information.
 - o Kiosks should be placed in a way that they do not impact travel paths along the sidewalk network and still maintain ADA compliance.

High Cost-

Acquiring Additional Public Lots

Find private lots that are underutilized or not utilized and purchase the blighted properties. While the cost can be high, structured parking cost is likely higher. Several lots throughout downtown with minimal private parking present opportunities. Another possibility would be a private/public agreement could be put in place to allow public parking but without the City purchasing the lot.

Note, an opportunity currently exists for the City to purchase a private lot that is available for sale in Zone C. This lot could be utilized for employee permit parking if desired. While there is not currently a parking issue, having a safe, dedicated lot for employee permit parking can free up spaces closer to businesses for guests.

Parking Structure

Although not expected to be needed now, a parking structure constructed on the site of an existing public surface lot can increase parking supply. However, structed parking is often estimated at \$25,000 to \$35,000 per space. Unless the structure is expected to be paid for through a paid parking program, it represents a significant cost burden to the City and is likely not feasible. Given the high amount of publicly available parking and the excess of private parking in the Downtown core, a parking structure is not recommended.

Parking Meters

Parking meters have not been specifically requested by users or business owners of Downtown, but they are a potential future option. Note, parking meters are intended to increase turnover of parking if it is determined that on-street spaces are being utilized for long periods of times. Metered parking can be divisive amongst business owners and visitors and will require a high installation and ongoing maintenance cost.

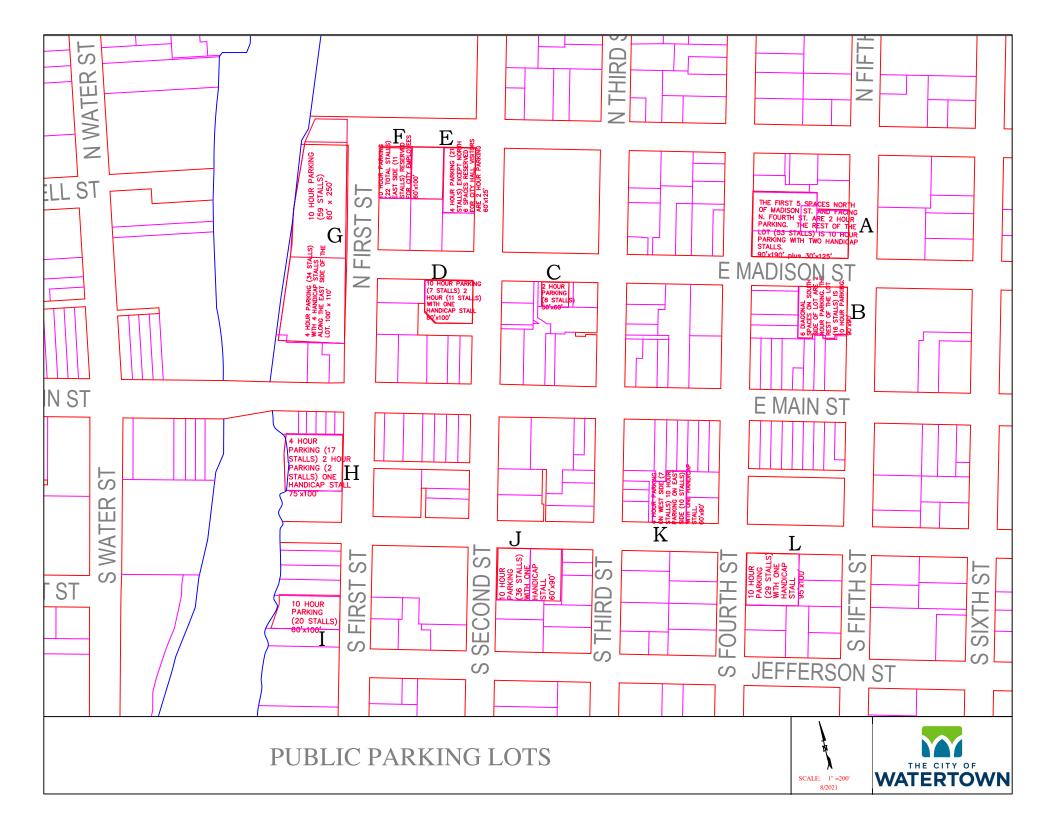
Parking Permits

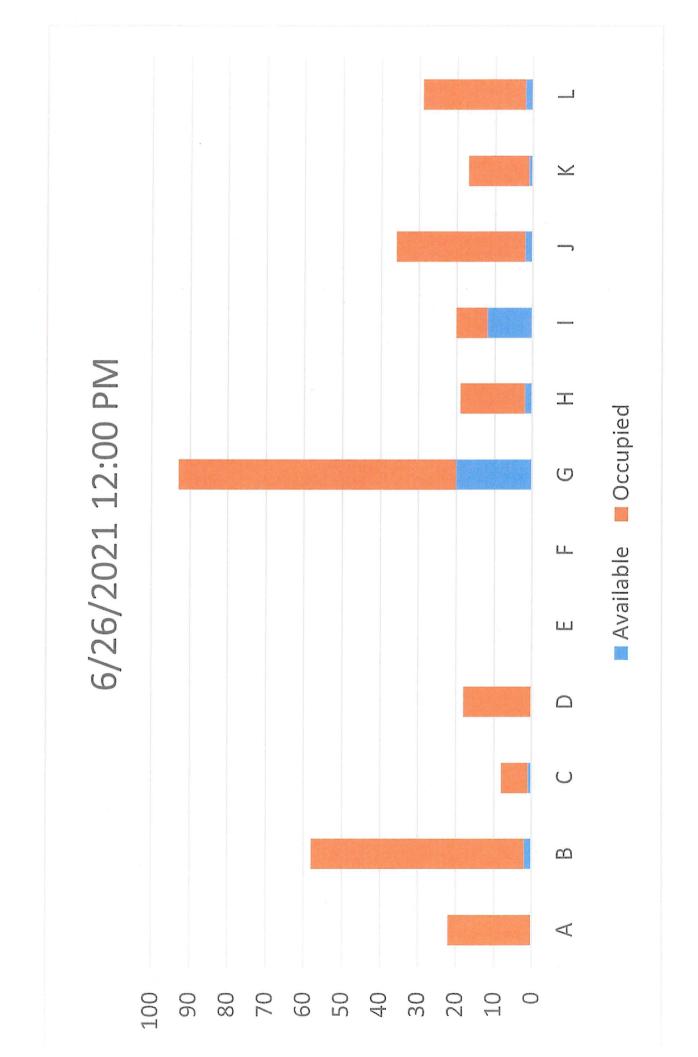
Both a residential or employee parking permit program could be instituted to help reduce circulation and clearly identify who can park where. While a permit process can help clearly define who can park where, may not be received well by residents due to cost implications, guest passes, and which streets or parking lots are permitted. Additionally, the only way a program like this becomes useful is if it is enforced. Enforcement can have added cost implications and if it is not done, compliance would be expected to be ignored.

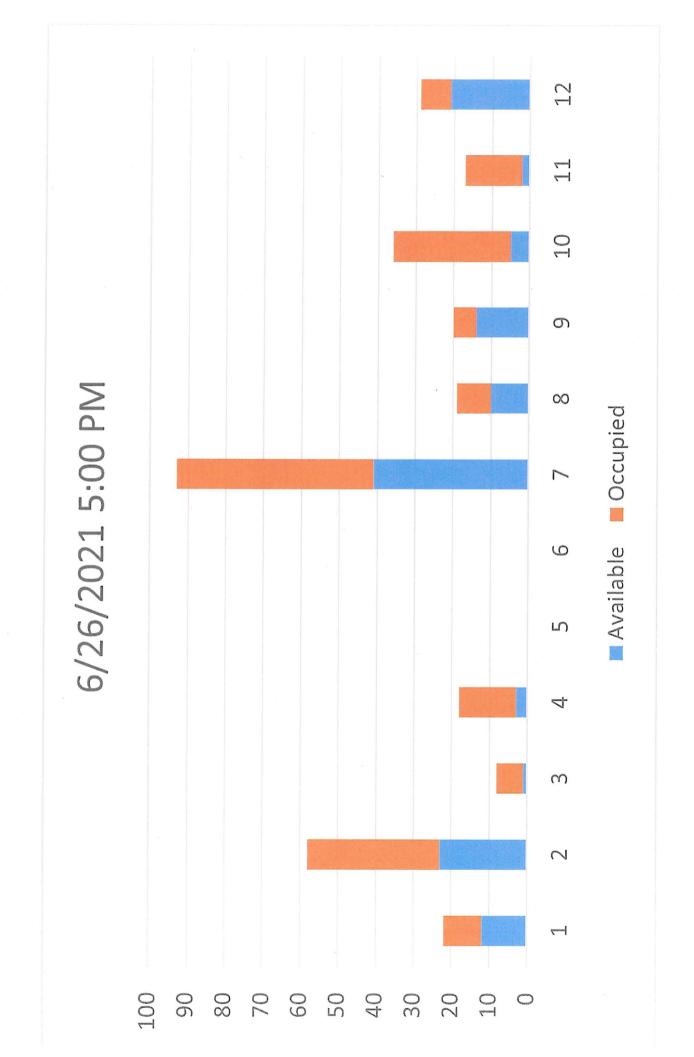
Implementation Plan

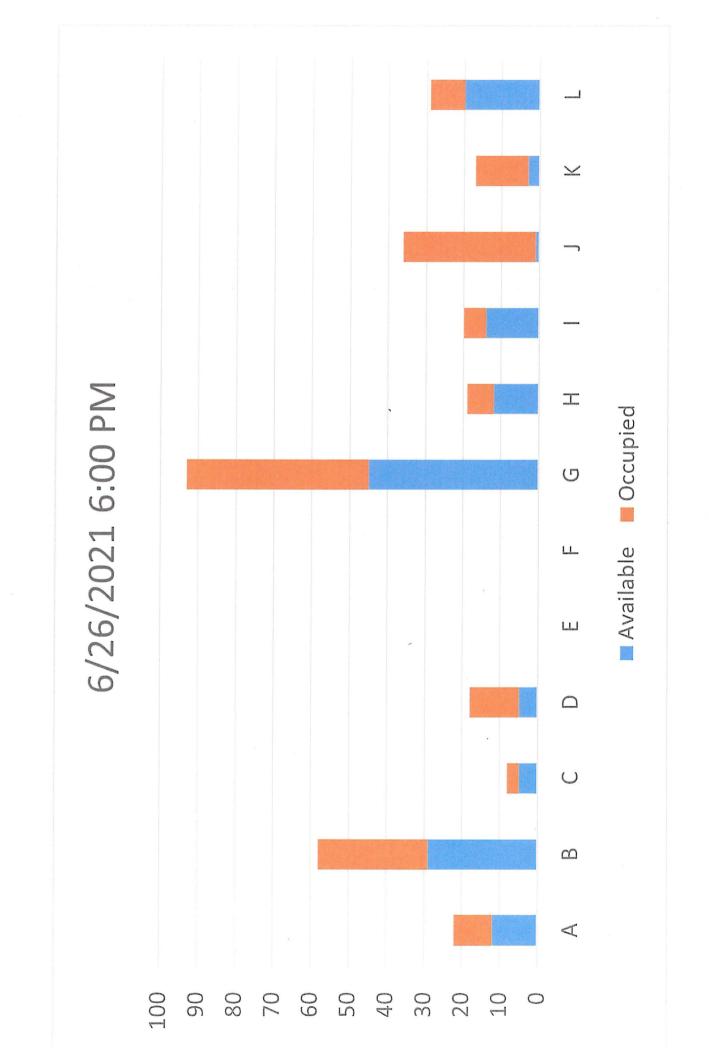
Using information provided within the study and the 2018 study, The City is recommended to prioritize the low cost improvements. As development occurs within Downtown, the medium cost improvement strategies can begin to be implemented, pending funding. Wayfinding signing provides one of the best benefit/cost of the listed strategies, as it can help both long-time residents and new visitors to their destinations. The multi-modal improvements listed can be implemented on a low cost basis or as roadway reconstruction occurs. These improvements will help facilitate alternative modes of transportation and reduce reliance on parking automobiles right outside the front door of the destination. At this time, the high cost opportunities of parking structures and parking meters are not expected to be necessary. If development assumptions change and a large influx of public parking is necessary, those strategies should be reviewed. Under the current plans, the low, medium, and remaining high cost strategies should be sufficient to help accommodate the future parking demand.

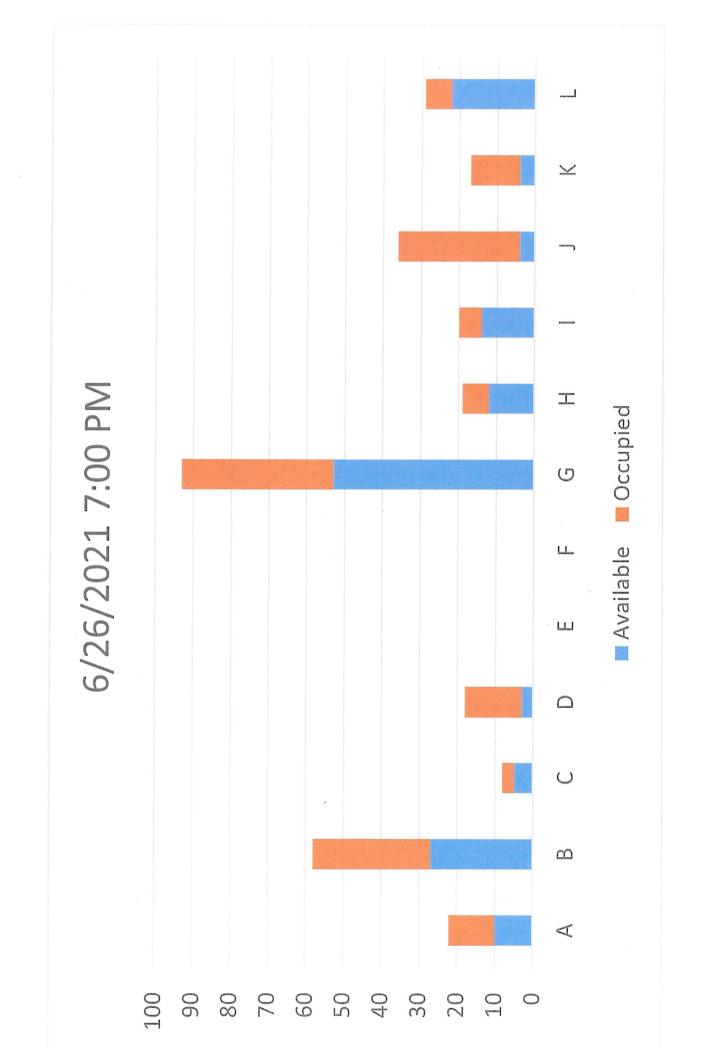


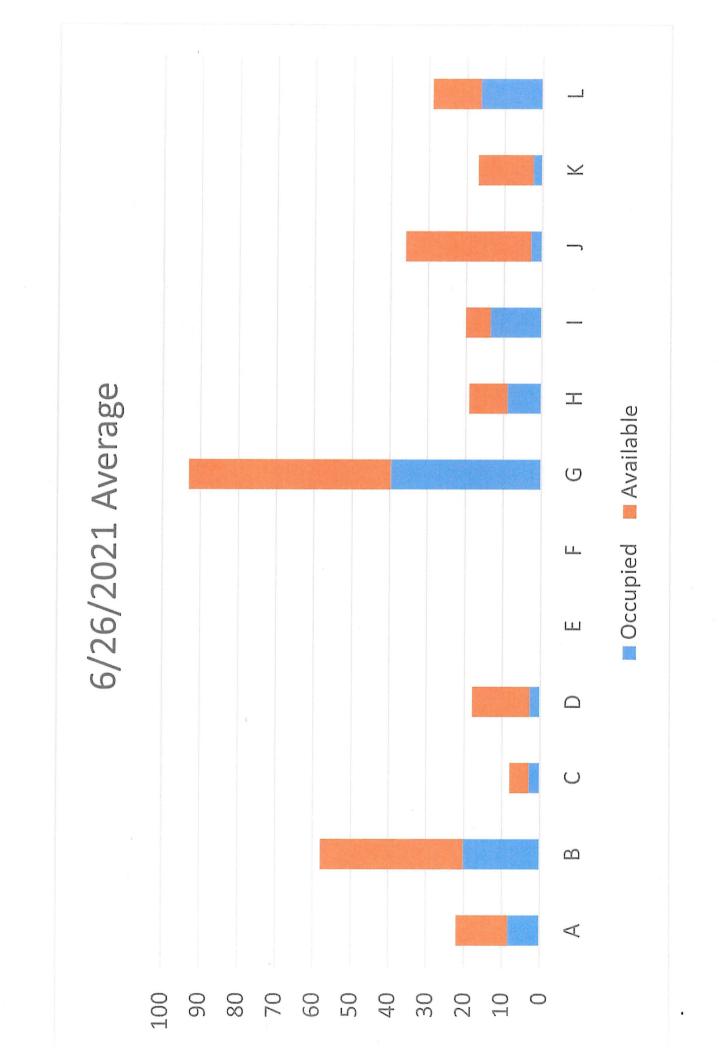




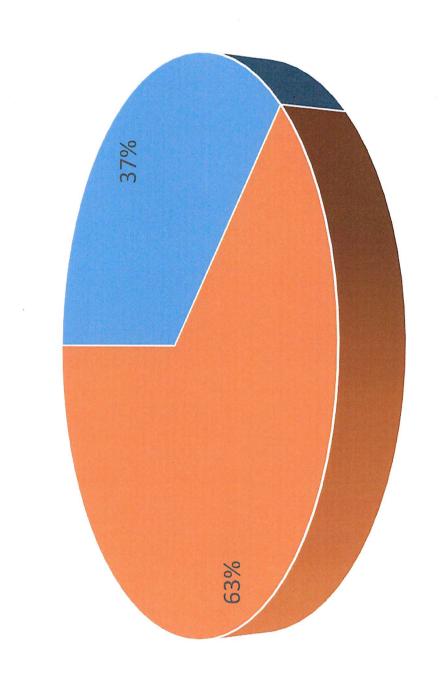




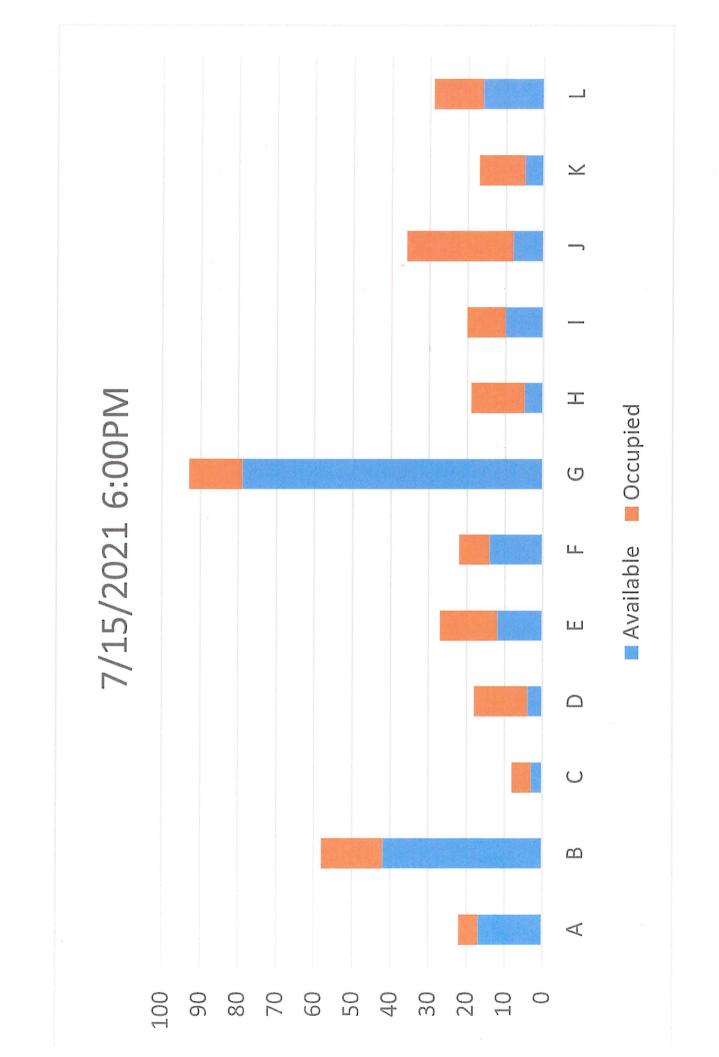


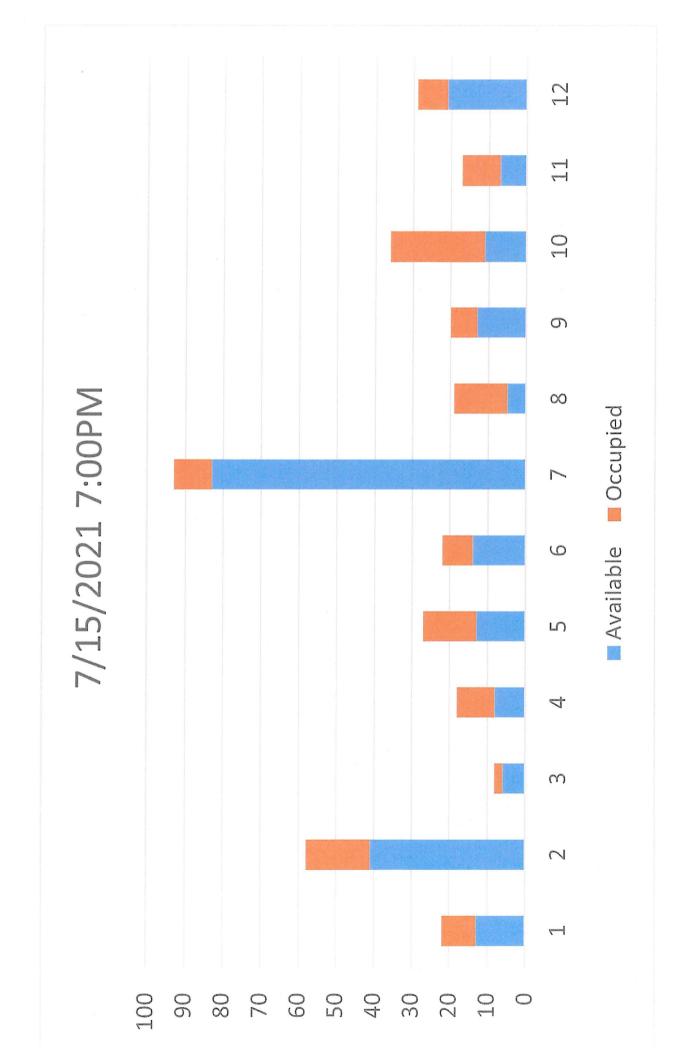


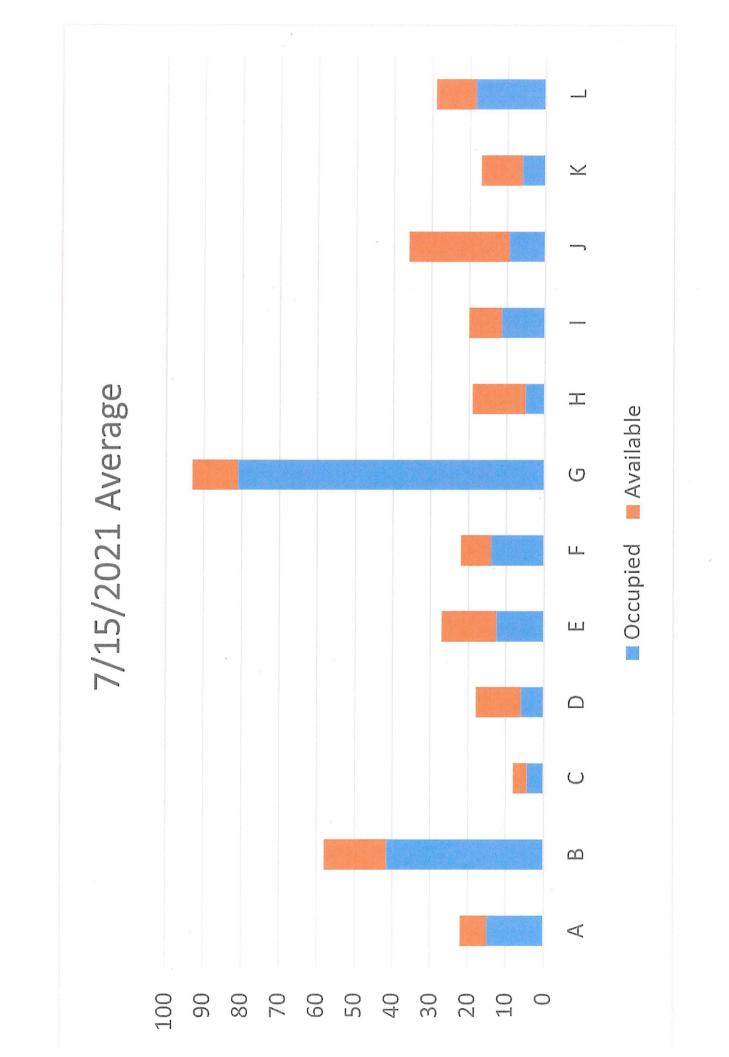
6/26/2021 Downtown Overview



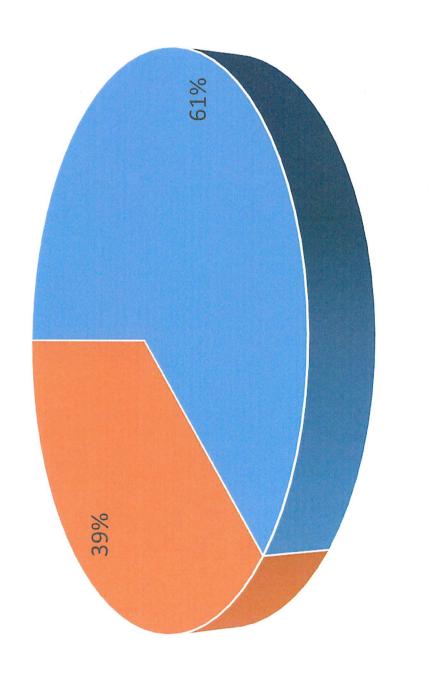
Occupied
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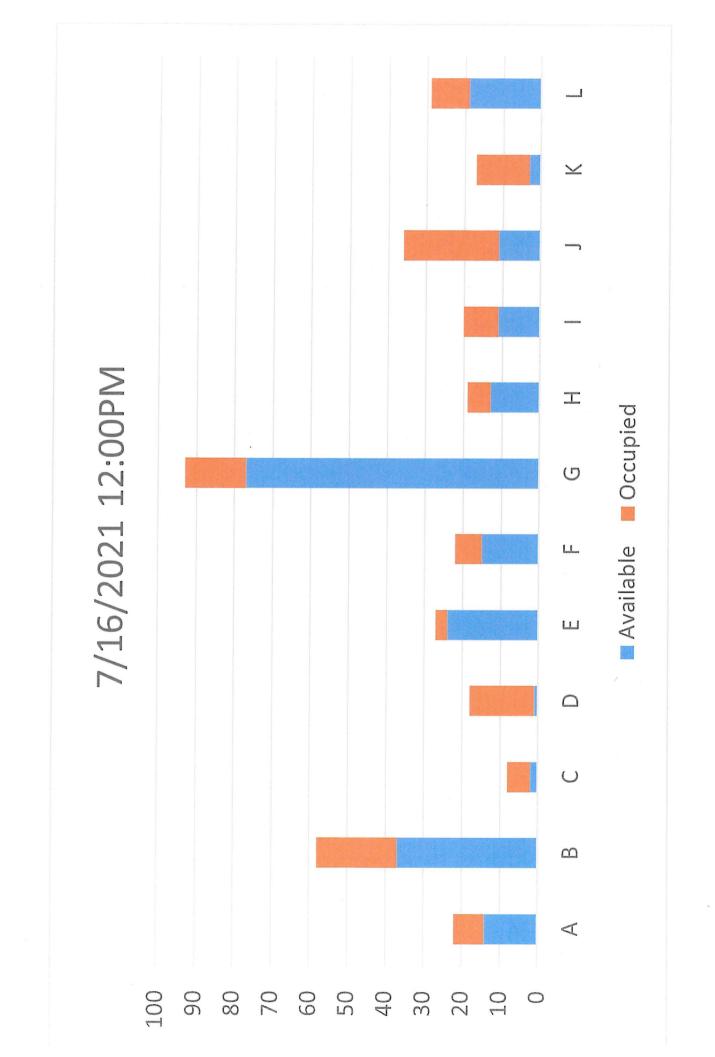


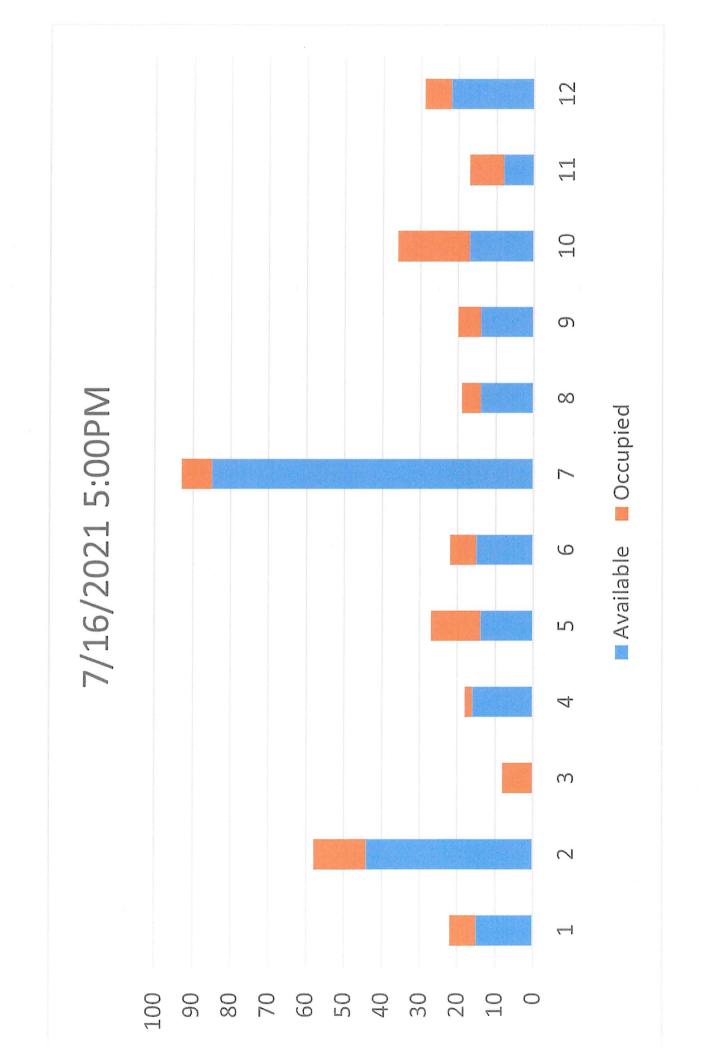


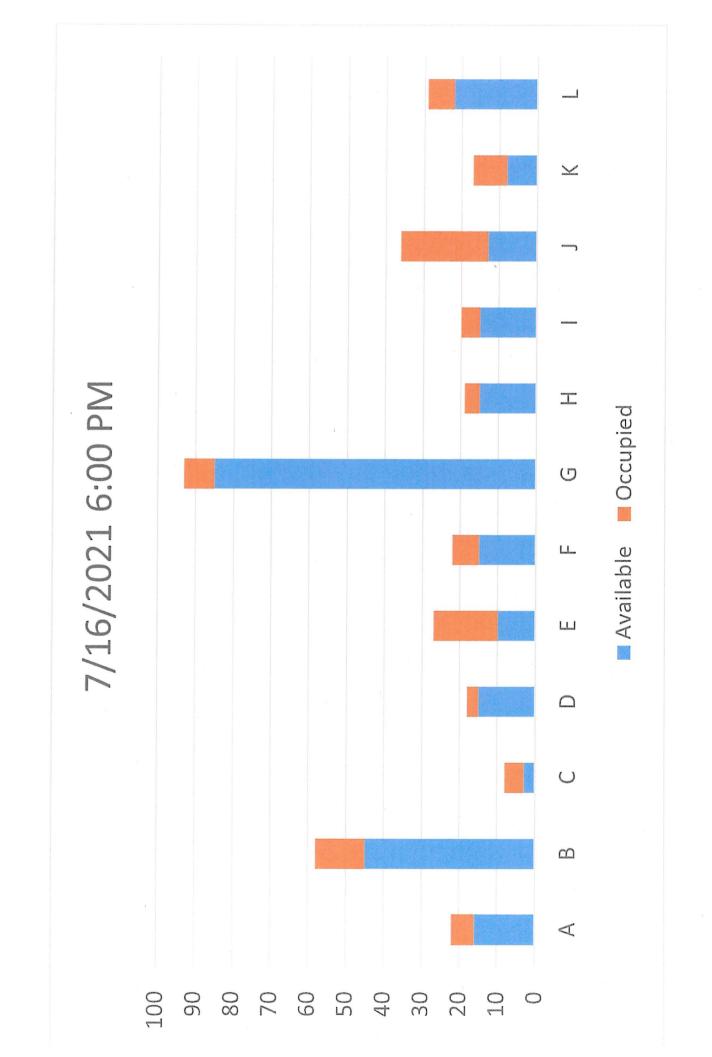
7/15/2021 Downtown Overview

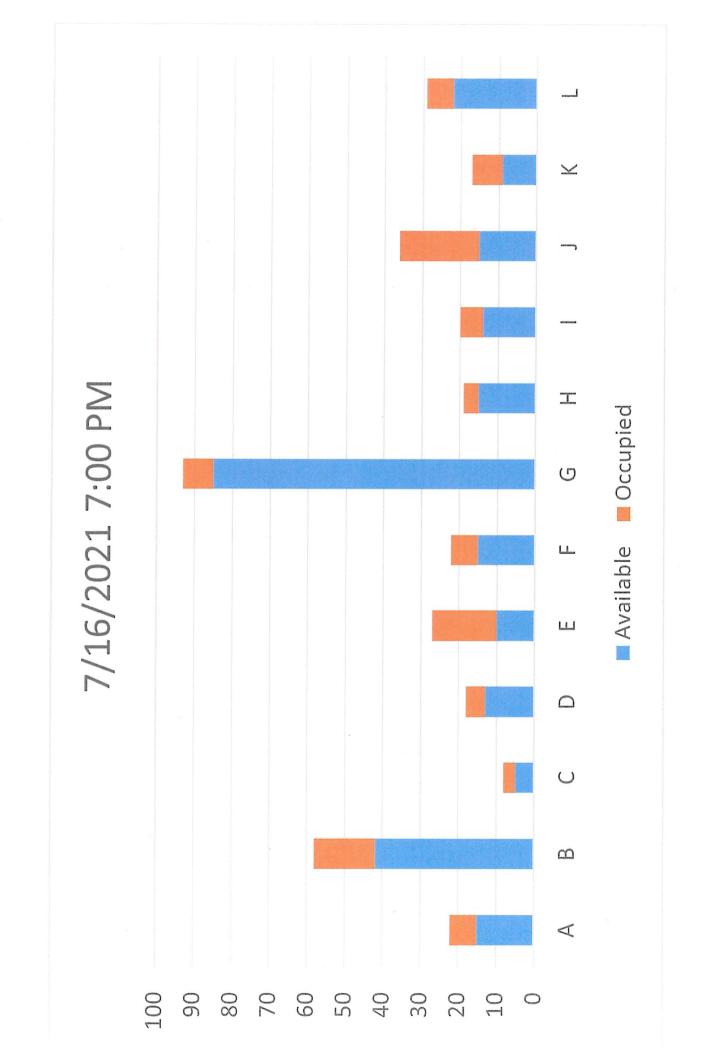


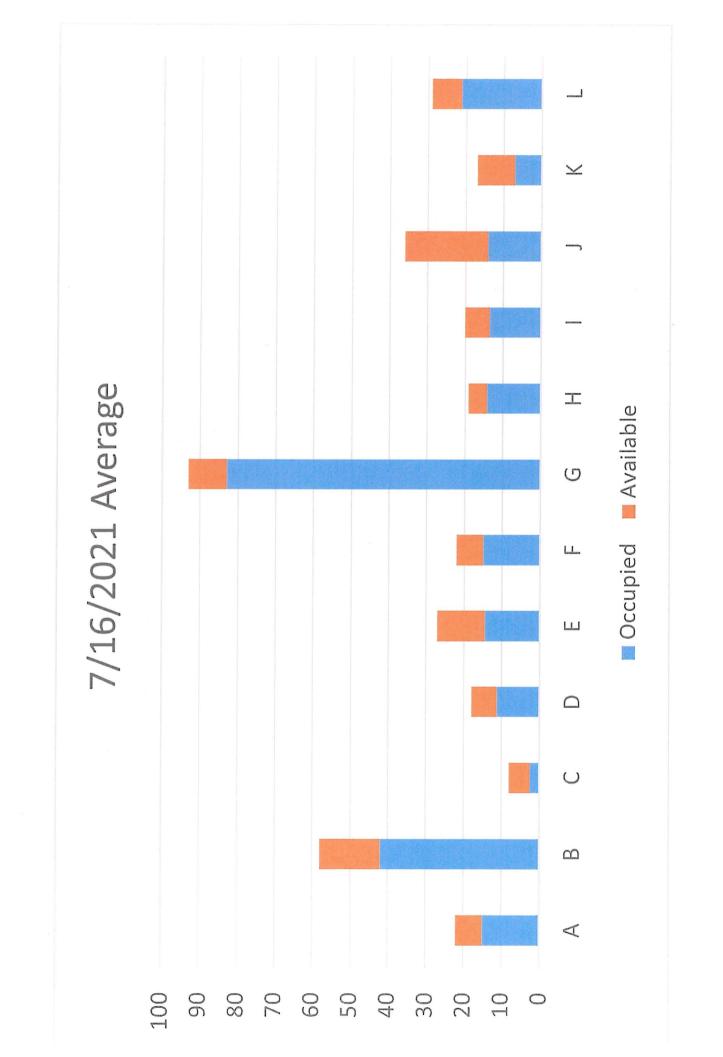
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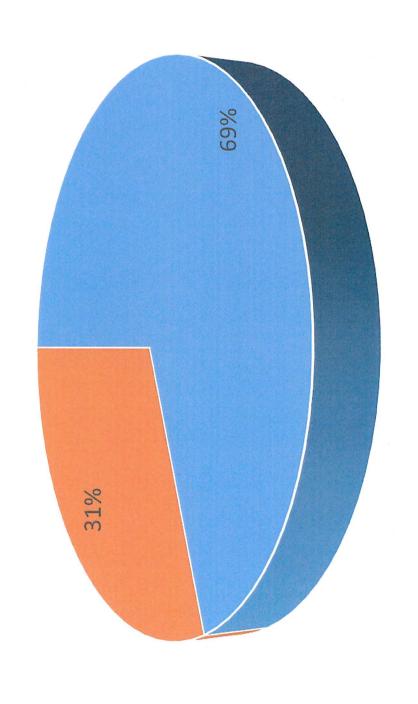








7/16/2021 Downtown Overview



Occupied
 Available

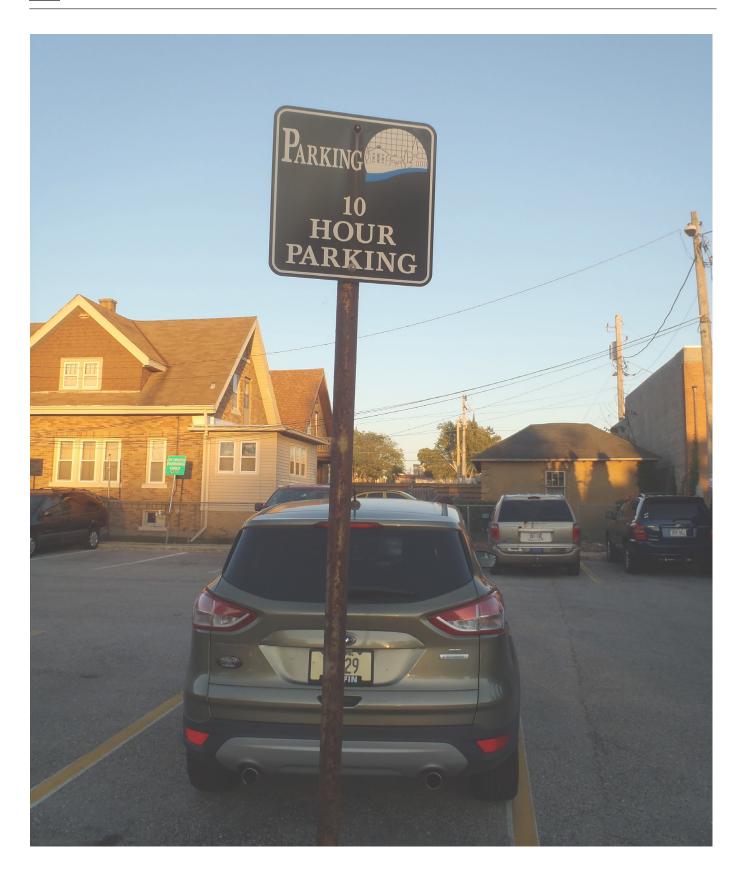


City of Watertown, WI

Parking Study JANUARY 29, 2018







REVIEW & FINDINGS

EXECUTIVE SUMMARY

The purpose of this report is to provide an inventory of the existing parking supply in the downtown district. The report provides a count of on-street and off-street parking spaces, an estimate for the demand on these spaces, and provides a discussion and recommendations for parking supply within the downtown, particularly in relation to potential additional development as conceived in the Watetown Riverfront/Downtown Plan (2014).

STUDY AREA

This Plan's parking strategies will cover Main Street from Washington Street to College Avenue, plus areas as far north as Cady Street and as far south as Milwaukee Street.

PARKING INVENTORY

PARKING NETWORK - The downtown parking network has 2,560 parking spaces available, plus existing underground garage spaces and residential driveways and garages. Of these parking spaces, 1,563 are public (61% of the parking network) with 991 spaces on the street and 572 spaces in off-street lots. The remaining 997 spaces (39%) are in private off-street parking lots.

Parking Network - Supply Map



SIGNAGE - The City has developed a parking signage system that is well represented at the parking lot entry points, specifying the parking hour limits. There is also some public parking directional signage on Main Street; however, it is separate from the City's wayfinding signage system.

ZONING - The Central Business (CB) District does not require onsite parking. Any private parking lots that exist in this zoning district have been built per the business/property owner's desire to provide dedicated parking for their tenants, employees and/or customers. The remaining properties count on public on-street and off-street parking facilities.

PARKING INVENTORY

Of the three peak occupancy surveys conducted, Friday evening provided the greatest demand for parking in the downtown core. During this Friday field survey, the parking network was only 36% filled, leaving 1,230 parking spaces available. If you factor in the 15% cushion (or 289 space reserve), the current network still has a surplus of 941 spaces in the downtown core. Should the density of development increase this effective supply would be reduced.

NEW DEMAND ANALYSIS

The Citv's 2014 Watertown Riverfront/Downtown Redevelopment Plan established several guiding principles for revitalizing the downtown, including eliminating blighting influences, re-purposing waterfront land uses, and ensuring the highest and best uses of property. These principles coupled with several actions within the plan lead to additional density within the downtown, which will directly impact parking demand.

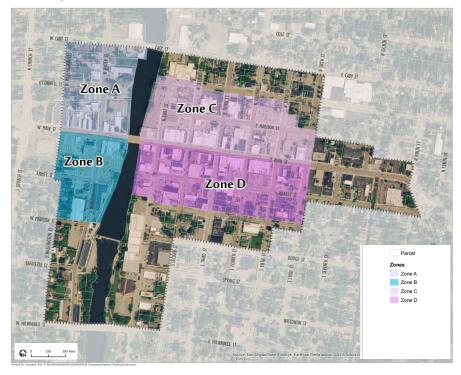
This section looks at the proposed land use recommendations and their impacts on parking demand as compared to the current (observed) parking surplus. For the purpose of this analysis, the downtown was broken into quadrants using Main Street and the Rock River as the dividing lines (as shown on the map on the right).

See the table on the next page for the potential parking surplus should areas redevelop as noted in the 2014 Downtown Plan.

Occupancy Survey #2 - Weekday Evening (Sept. 30, 6-7PM)



Parking Focus Zones Map



Public Parking Surplus, By Zone

Source: MSA Professional Services

	Zone A	Zone B	Zone C	Zone D
	Northwest	Southwest	Northeast	Southeast
Total Spaces	108	198	461	355
On-street	99	80	214	246
Off-street	9	118	247	109
Peak Demand	60	30	242	136
On-Street	54	12	105	96
Off-Street	6	18	137	40
Reserve (15%)	15	30	69	53
On-Street	15	12	32	37
Off-Street	0	18	37	16
Surplus	33	138	150	166
On-Street	30	56	77	113
Off-Street	3	82	73	53

RECOMMENDATIONS

At present there are no off-street parking requirements in the Central Business District, the zoning district that encompasses most of the downtown area. Some downtown property owners have opted to provide off-street parking for customers in the interest of convenience and to be on a level playing field with competitors that are required to provide off-street parking. But for many downtown uses, especially historic Main Street properties, the responsibility to meet and manage parking demand falls to the City. This section features strategies the City should consider to manage downtown parking demand.

LOW COST STRATEGIES

- 1.1: Provide Short-Term Parking
- 1.2: Use Parking Areas Efficiently
- **1.3:** Require Off-Street Parking with New Development
- **1.4:** Review and Update Time Limits

MODERATE COST STRATEGIES

- **2.1:** Encourage Alternative Transportation Options
- 2.2: Improved Parking Signage
- **2.3:** Ongoing Employee Education
- 2.4: Parking Literature
- 2.5: Charge for (some) Parking
- **2.6:** Ensure nighttime safety

HIGH COST STRATEGIES

3.1: Create More Parking

OTHER STRATEGIES

- Resident Parking Permit
- Employee Parking Permit



Acknowledgements

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- Brad Kuenzi
- Bill Maron
- Ken Berg
- Kristen Fish, Executive Director

Watertown Main Street Program

• Melissa Lampe, Executive Director

With assistance from MSA Professional Services, Inc.

- Steve Tremlett, AICP, CNU-A
- Jason Valerius, AICP

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INTRODUCTION

BACKGROUND

The City of Watertown retained MSA Professional Services to conduct a downtown parking study. The work was conducted from September 2017 to December 2017, and is intended to help inform the City of Watertown's assessment of the need to provide additional off-street parking to accommodate existing development and future growth.

PURPOSE OF THE STUDY

Parking is one of the first experiences that people have when traveling to a destination. Convenient and affordable parking is considered a sign of welcome. Parking that is difficult to find, inadequate, or inconvenient will frustrate users and can contribute to spillover parking problems in adjacent, often residential, areas.

An excessive supply of parking can also create problems. Parking facilities are expensive to construct, imposing financial costs on developers, building users and municipalities. In addition, parking facilities can impose environmental costs, contradict community development objectives for more livable and walkable communities, and abundant, un-priced parking tends to increase driving and discourage walking and bicycling.

The purpose of this report is to provide an inventory of the existing parking supply in the downtown district that features a mix of public and private surface lots and on-street parking spaces. The report provides a count of on-street and off-street parking spaces, an estimate for the demand on these spaces, and provides a discussion and recommendations for parking supply within the downtown, particularly in relation to potential additional development as conceived in the

Watertown Riverfront/Downtown Redevelopment Plan (2014).

STUDY AREA

This Plan's parking strategies will cover Main Street from Washington Street to College Avenue, plus areas as far north as Cady Street and as far south as Milwaukee Street. Yet, the parking occupancy analysis will be focused on the downtown "core", which has the greatest development density and parking demand. See the map below for both extents.

Parking Study Area

Source: MSA Professional Services, Jefferson County, ESRI Aerial



PARKING RESOURCES

BACKGROUND

The Downtown Watertown parking network has **2,560** parking spaces available, plus existing underground garage spaces¹ and residential driveways and garages. Of these parking spaces, 1,563 are public (61% of the parking network) with 991 spaces on the street and 572 spaces in off-street lots. The remaining 997 spaces (39%) are in private off-street parking lots. See the summary table on the next page.

ON-STREET PARKING

In the Downtown core (purple dash line in the map), on-street spaces are marked, while the majority of spaces in the remaining study area are unmarked. The marked spaces vary in length from 19 feet to 23 feet, and sometimes more. While variability in parallel parking length can help maximize the parking supply, the shorter spaces are not marked for "small vehicles only". The unmarked spaces were assumed to be a standard length, which is typically a minimum of 23 feet long.

The areas where street parking is prohibited due to vehicular

visibility and access issues (i.e., street corners, fire hydrants and driveways), space limitations and loading zones are marked by a yellow painted curb and/or by signage. However, in some cases the buffer distance is significantly less than ideal for visibility at intersections and driveways. Efforts to improve these conditions will need to weigh parking supply loss against safety improvement in the downtown.

On most streets within the study area, parking is restricted to twohour parking between the hours of 9am-5pm, except on Fridays it is extended to 9am-9pm. As shown in the lower right, there are two signs identifying these time limits (the right example is a less effective design that may confuse some users). In other areas, including within the downtown core, there are street segments that lack signage altogether. This would suggest no limits, which may be the case; however, some segments are surrounded by blocks with hour restrictions.



Madison & Sixth - northeast corner



Hourly Parking Restriction Signs

¹ The Globe Apartments (201 Water Street) and River Mill Senior Residences (317 Water Street)

Parking Inventory, Study Area Source: MSA Professional Services

	#	9	6
PUBLIC	1,563	61%	
On-Street		991	63%
Off-Street		572	37%
PRIVATE	997	39%	
TOTAL SPACES	2,560		

Network Supply Comparison Source: MSA Professional Services



Parking Network - Supply Map



OFF-STREET PARKING

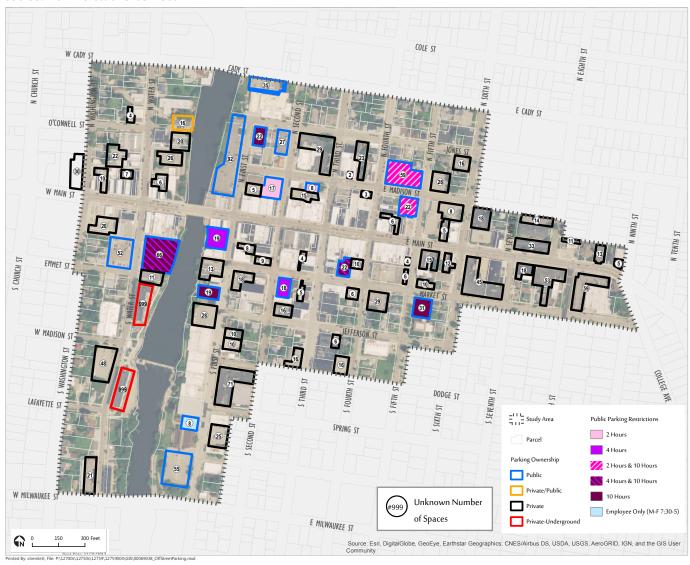
The majority of the downtown parking network is off-street (61%, or 1,569 spaces). These spaces are controlled by a variety of off-street regulations, including public with time limit(s), customers (or church members) only, and employee only. The majority of the lots are paved, while a few have unpaved gravel surface. In general, the

gravel lots are maintained, but lack space markings. The lack of markings generally reduces the efficiency of parking, as vehicles do not park in straight rows or follow traditional drive aisles. Gravel lots can also be a bit less safe for pedestrians due to the lack of pavement markings. For these reasons, City Ordinances require all off-street parking lots to be paved with a

Parking Lot Sizes, Study Area Source: MSA Professional Services

Lot Size	No. of Lots
5 Spaces or Less	9
10-15 Spaces	24
16-30 Spaces	28
31-60 Spaces	10
More than 60 Spaces	3
TOTAL	74

Off-Street Parking Summary Map



hard, all-weather surface (to the satisfaction of the Director of Public Works) and, if having six or more spaces, those spaces must be marked.

See the map on previous page for parking lot locations, ownership (public/private) and their current restrictions.

Public Lots

The seventeen public lots provide 572 parking spaces (22% of the parking network). Parking limits vary by location and in some cases vary by parking rows within a particular lot (see table below and the map on the previous page). The hourly limits vary between 2, 4, and 10 hours. Many of the 10 hour time limits were established in 2014 to provide downtown employees with the opportunity to park in a lot during their shift, freeing up street parking for visitors and customers. This change has successfully shifted more employee parking to the off-street public lots, though it has not attracted downtown residents, many of whom still prefer to park in the street.

Private Lots

Private lots make up the majority of off-street parking (64%). In general, there are no defined hour limitations placed in private lots, but it is assumed that parking usage extends only to business hours.

Not included in the percentage of, or count of, private offstreet parking lots are the two underground parking facilities

Public Parking Lot Identification Map

Source: MSA Professional Services



Public Parking Lot Summary Table

000100.	1110711101033101101100111003				
ID	Name	Total Spaces	Paved	Marked	Restrictions
0	O'Connell Street Lot	9	Υ	Y/N	
1	Library Parking Lot	52	N	N	
2	S. Water St & Rock River Lot	66	Υ	Υ	4 HRS & 10 HRS, Plus Restricted+
9	N. Fourth Street Lot	59	Υ	Υ	2 HRS (6) & 10 HRS (53)
8	North Fifth Street Lot	22	Υ	Υ	2 HRS (6) & 10 HRS (16)
7	E. Madison Street Lot	8	Υ	Υ	2 HRS
6	N. Second Street and Madison Lot	17	Υ	Υ	2 HRS
5	N. Second Street Lot	27	Υ	Υ	4 HRS (21) & 2 HRS (6)
4	Jones Street Lot	22	Υ	Υ	10HRS, Plus Restricted*
3	N. First Street Lot	92	Υ	Υ	2HRS, 4HRS, & 10HRS
10	S. First Street & Market Stree Lot	19	Υ	Υ	10 HRS
11	S. First Street Lot	19	Υ	Υ	4 HRS
12	S. Second Street Lot	18	Υ	Υ	10 HRS
13	Market Street Lot	22	Υ	Υ	4 HRS & 10 HRS
14	S. Fourth Street Lot	29	Υ	Υ	10 HRS
15	Senior & Community Center Lot	55	Υ	Υ	
16	Watertown Park & Rec Lot	8	Υ	Υ	EMPLOYEE M-F 7:30-5

^{* 12} Spaces reserved for City Employees

^{+ 11} Spaces reserved for Library Employees, from 7am-6pm Mon-Sat

dedicated to the Globe Apartments (201 S Water Street) and the River Mill Senior Residences (317 S Water Street).

PARKING SIGNAGE

The City has developed a parking signage system that is well represented at the parking lot entry points, specifying the parking hour limits. There is also some public parking directional signage on Main Street; however, it is separate from the City's wayfinding signage system. In cases where there are multiple signs on a post, information can get lost. This is evident as shown in the middle image on the right. The size of lettering and sign also impacts how effective the signage will be for parkers that are not familiar with the downtown and the available public parking lots. See the Recommendations section for more detail.

ZONING REQUIREMENTS

The Central Business (CB) District does not require on-site parking. Any private parking lots that exist in this zoning district have been built per the business/property owner's desire to provide dedicated parking for their tenants, employees and/or customers. The remaining properties count on public on-street and off-street parking facilities.

Existing Street Signage, Downtown Core

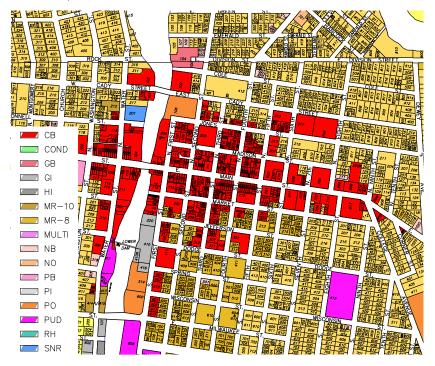






City Zoning, Downtown Inset

Source: City of Watertown



METHODOLOGY

PARKING UTILIZATION

There are two steps in evaluating a parking network: 1) inventory the parking network, and, 2) document the demand for parking. MSA conducted field surveys to collect this information, as discussed below.

Parking Inventory

Parking inventories are intended to gather information on existing parking supply and its use. The inventories include observations on the number of parking spaces, their location, any related time-ofday restrictions, and their use during a peak period of observation.

The number of on-street parking spaces within the study area were determined by observation of marked spaces or, in the case of unmarked spaces, identifying the potential spaces by measuring the curb distance and excluding curb areas that are/should be restricted due to close proximity to intersections, driveways, and fire hydrants.

Off-street parking spaces were counted using aerial photographs and verified on-site. Where there were no marked spaces, aerial photography was used to measure apparent parking rows.

Parking Occupancy Field Surveys

The occupancy of parking spaces was documented by observing the number and proportion of occupied parking spaces during what is considered peak periods of demand within the study area.

For the purposes of this project, the parking occupancy surveys cover only the downtown "core", and not the entire parking study boundary (see the Study Area Map on page 1). Parking pressure is largely related to densities and uses within this core area, and includes all existing public parking lots. The larger study area will be considered when reviewing and administering goals and policies to effectively manage the downtown parking network.

The peak period was determined through conversation with the Executive Director of the Watertown Main Street Program and the Executive Director of the Watertown Redevelopment Authority. Per this feedback, MSA conducted three peak parking occupancy field surveys: 1) a weekday late lunch period; 2) Friday evening; and, 3) Saturday day.

"Effective" Parking Capacity

Parking occupancy refers to the accumulation of parking over the course of the day. Occupancy during peak periods is the primary measure of parking usage and the need for additional parking. Occupancy rates at or close to 100 percent are generally considered undesirable because motorists must hunt for available parking and/or may be tempted to park illegally or not stop at all. Thus, when evaluating parking the "effective" supply is preferred to full supply. The effective supply is the maximum number of parking spaces that can realistically be used within a given district. An effective supply "cushion" (or reserve) can help to protect against the inevitable loss of spaces resulting from temporary disturbances such as construction, mis-parked cars, etc. Parking supply is considered "effective" when approximately 85% of the parking spaces are occupied. This amounts to having at least one on-street space available per block at all times.

Demand for parking will vary block by block, because different uses have different peak demand periods (see the table on the next page). For example, a block with a popular bar may experience a peak parking period during Friday or Saturday evenings, when the rest of the planning area has relatively low occupancy rates. This results in different facilities (e.g., on-street parking segments, offstreet lot) being more active during varying times in the day. Yet, the primary concern of this study is to provide enough parking within a reasonable distance to all uses within a downtown "shared parking" environment.

The "reasonable distance" can vary depending on the use; however, in general parking should be within one to two blocks from the user's destination(s). Overflow parking can be a bit further, but no more than three to four blocks.

Definitions of Terms

A key to understanding the parking methodology is the definition of terms and assumptions inherent in the use of those terms.

Parking ratio is the number of parking spaces that should be provided per unit of land use, if parking serves only that land use. The ratios recommended herein are based on the expected peak

accumulation of vehicles at the peak hour on a design day.

Parking accumulation is the number of parked vehicles observed at a site.

Parking supply is the total number of spaces available to serve a destination.

Parking facility is a series of contiguous spaces dedicated to parking vehicles (e.g., on-street parking along a block, off-street parking lot).

Effective parking supply is the number of occupied spaces at optimum operating efficiency. A parking facility will be perceived as full at somewhat less than its actual capacity, generally in the range of 85-95 percent occupancy.

A *design day or design hour* is one that recurs frequently enough to justify providing space for the level of parking activity. One does not build for an average day, nor is it appropriate to design for the peak accumulation of vehicles ever observed at any site with that land use. Generally, the 85th percentile of observed traffic volumes

during peak hours on average days is used for design.

Shared Parking is the use of parking space to serve two or more individual land uses without encroachment or conflict. Shared parking can work for two reasons:

- variations in the timing of different uses, by hour, day or season reduces competition; and,
- people are able to park once and visit multiple sites.

Mode adjustment is employed to adjust the base parking ratios for local transportation availability, parking fees, ride sharing programs, etc.

Noncaptive ratio is the percentage of users who create no incremental parking demand when visiting more than one land use on the same trip. (For example, the office building employee who walks to a retailer during lunch.) The use of the non-captive ratio factor ensures that patrons are not counted twice in the overall parking demand estimate for the study area.

Peak Parking Demand

Source: Victorian Transport Policy Institute 2007: Parking Management Strategies, Evaluation and Planning

Weekday	Evening	Weekend
Banks and public services	Auditoriums	Religious institutions
Professional offices	Bars and meeting halls	Parks
Park and ride facilities	Hotels	Shops and malls
Schools, daycare centers	Restaurants	
Factories/distribution centers	Theaters	

FIELD SURVEY RESULTS

PARKING UTILIZATION

To determine availability of parking in downtown Watertown, MSA conducted three parking occupancy field surveys in September 2017 and October 2017. All field surveys counts started along the eastern edge of the downtown core and proceeded westward. Each field survey took 1-2 hours to complete, depending on the number of staffers present.

The occupancy surveys were conducted while the weather was fair and dry. Due to a busy community schedule in the fall, all three surveys were affected in some way by special events that generally increased parking demand and impacted how the network was used. For example, Main Street was closed for the Homecoming Parade so more people parked on the side streets. More detail is provided in the individual parking survey summaries to follow.

Field Survey #1

Friday, September 29 (2-3 PM)

This field survey was conducted prior to the 4pm Watertown High School Homecoming Parade. In preparation for the parade, onstreet parking was temporarily restricted on Main Street (east of the river) and along S. Third Street from 2-6pm.

As shown in the map on the next page, the temporary restrictions impacted parking demand around these street, especially on side streets north and south of Main Street, on Madison Street and on Market Street. Similarly, several off-street parking lots near Main Street had elevated parking demand. Yet, only 36% (or 249 of 683) of the available on-street parking spaces in the downtown core were occupied with 34% (or 426 of 1,245) off-street parking lot spaces filled (40% occupied in public lots vs. 30% in private lots). In total, 35% of the spaces were occupied (675 of 1,928).



Occupancy Survey #1 - Weekday Late Afternoon (Friday, September 30, 2-3PM)

Source: MSA Professional Services



Field Survey #2

Friday, September 29 (6-7 PM)

This field survey was conducted following the 4pm Watertown High School Homecoming Parade. The special event parking restrictions ended at 6pm, but the signs remained during the duration of this field survey. During this time period many retail and office uses were closed or closing, while res-

taurants and bars were starting to see increased activity.

As shown in the map on the next page, parking demand increased between 1st Street and 5th Street east of the river, especially along E. Madison Street. Most of the parking demand during this time period is near restaurant and bar locations.

In total, 36% of the spaces were occupied in the downtown core (698 occupied). 41% (or 283 of 683) of the available on-street parking spaces were occupied, while only 33% (415 of 1,245) off-street parking lot spaces were filled. In total, 37% of the public parking lot spaces were occupied, as compared to only 31% of spaces in private lots.

Occupancy Survey #2 - Weekday Evening (Friday, September 30, 6-7PM)

Source: MSA Professional Services



Field Survey #3 Saturday, Oct. 28 (12-2 PM)

This field survey was conducted during downtown Watertown's Main Street Business Trick or Treat. This likely increased pedestrian and parking activity, especially for parents with small children, and did not require any parking or street closures.

As shown in the map on the next page, there was elevated parking demand along Main Street and Market Street; however, the majority of the parking lots were only moderately filled.

In total, 33% of the spaces were occupied in the downtown core (628 occupied). 38% (or 260 of 683) of the available on-street

parking spaces were occupied, while only 30% (368 of 1,245) of off-street parking lot spaces were filled. Private and public off-street parking were comparable in their usage (i.e., 30% occupied in public parking lot and 29% occupied in private lots).

Occupancy Survey #3 - Weekend Afternoon (Saturday, October 21, 12-2PM)

Source: MSA Professional Services



Field Surveys Summary

Friday evening provided the greatest demand for parking in the downtown core, even though the other two field surveys were conducted prior to, or during, a special event which generally increases vehicle and parking activity. During the Friday field survey, the parking network was only 36% filled, leaving 1,230 parking spaces available. If you factor in the 15% cushion (or 289 space reserve), the current network still has a surplus of 941 spaces in the downtown core. Should the density of development increase this effective supply would be reduced (see the next section for more details).

Occupancy Summary Table, Downtown Core

DOWNTOWN CORE PARKING FACILITIES		FIEI SURVE		FIE SURVI		FIELD SURVEY #3		
FACILITY	TOTAL	#	%	#	%	#	%	
on-street	683	249	36%	283	41%	260	38%	
off-street	1,245	426	34%	415	33%	368	30%	
public	537	216	40%	198	37%	160	30%	
private	708	210	30%	217	31%	208	29%	
TOTAL	1,928	675	35%	698	36%	628	33%	

The City has added to the parking network over the years with the additions of new or expanded public off-street lots. The noted healthy downtown parking surplus (based on the current demand) is evident when looking at the occupancy of the public parking lots. As the table below illustrates, most of the public lots were less than 50% filled in all three surveys, including the Library Parking Lot (ID #1), S. Water Street & Rock River Lot (ID #2), N. Fourth Street Lot (ID #9), S. First Street & Market Street Lot (ID #10), and the Park & Rec Lot (ID #16). Contrary to the peak period of the entire parking network (i.e., on Friday evenings), most of the lots see the highest demand during the weekdays (due to general office and retail use).

Public Parking Lot Identification Map

Source: MSA Professional Services



Public Lot Field Survey Table

ID	Name	Total Spaces	Paved	Marked	Restrictions	FIELD SURVEY #1	FIELD SURVEY #2	FIELD SURVEY #3		
	ZONE A									
0	O'Connell Street Lot	9	Υ	Y/N		67%	78%	67%		
	ZONE B									
1	Library Parking Lot	52	N	N		19%	6%	33%		
2	S. Water St & Rock River Lot	66	Υ	Υ	4 HRS & 10 HRS, Plus Restricted+	27%	17%	26%		
				ZO	NE C					
9	N. Fourth Street Lot	59	Υ	Υ	2 HRS (6) & 10 HRS (53)	39%	32%	37%		
8	North Fifth Street Lot	22	Υ	Υ	2 HRS (6) & 10 HRS (16)	73%	50%	59%		
7	E. Madison Street Lot	8	Υ	Υ	2 HRS	63%	50%	25%		
6	N. Second Street and Madison Lot	17	Υ	Υ	2 HRS	53%	94%	65%		
5	N. Second Street Lot	27	Υ	Υ	4 HRS (21) & 2 HRS (6)	41%	89%	4%		
4	Jones Street Lot	22	Υ	Υ	10HRS, Plus Restricted*	100%	64%	41%		
3	N. First Street Lot	92	Υ	Υ	2HRS, 4HRS, & 10HRS	22%	53%	15%		
				ZOI	NE D					
10	S. First Street & Market Stree Lot	19	Υ	Υ	10 HRS	0%	11%	16%		
11	S. First Street Lot	19	Υ	Υ	4 HRS	32%	16%	53%		
12	S. Second Street Lot	18	Υ	Υ	10 HRS	100%	67%	72%		
13	Market Street Lot	22	Υ	Υ	4 HRS & 10 HRS	77%	91%	64%		
14	S. Fourth Street Lot	29	Υ	Υ	10 HRS	24%	17%	45%		
			SC	OUTH OF F	OCUS AREAS					
15	Senior & Community Center Lot	55	Υ	Υ		64%	13%	20%		
16	Watertown Park & Rec Lot	8	Υ	Υ	EMPLOYEE M-F 7:30-5	38%	0%	0%		

^{* 12} Spaces reserved for City Employees

^{+ 11} Spaces reserved for Library Employees, from 7am-6pm Mon-Sat

NEW DEMAND ANALYSIS

PARKING UTILIZATION

The City's 2014 Watertown R i v e r f r o n t / D o w n t o w n Redevelopment Plan established several guiding principles for revitalizing the downtown, including eliminating blighting influences, re-purposing waterfront land uses, and ensuring the highest and best uses of property. These principles coupled with several actions within the plan will lead to additional density within the downtown, which will directly impact parking demand.

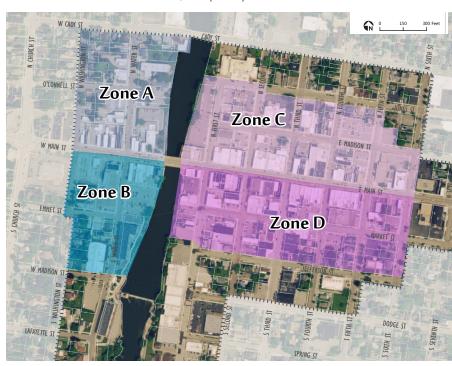
This section looks at the proposed land use recommendations and their impacts on parking demand as compared to the current (observed) parking surplus. For the purpose of this analysis, the downtown was broken into quadrants using Main Street and the Rock River as the dividing lines.

Focus Zone "A" North of Main / West of River

The Watertown Riverfront/ Downtown Plan discusses redeveloping low value uses along the riverfront, specifically low-valued parking lots. There are 111 offstreet spaces in this zone with 46%

Parking Zones

Source: MSA Professional Services, ESRI (aerial)



of the spaces filled at the peak period (Friday evening). Nearly all off-street parking is private; there are only nine public spaces (within the O'Connell Street right-of-way from Water Street to Rock River). There are 99 on-street spaces that were 54% filled during the peak period. **If you reserve 15% of**

available spaces, you still have a surplus of 73 available spaces during the peak period.

Should the riverfront redevelop this surplus could likely accommodate the increased development density; however, this assumes no loss of the current off-street lots (public or private) in this zone. If the private lots are removed in the redevelopment project, the surplus will only be 33 spaces (including a 15% reserve).

The Watertown Riverfront/ Downtown Plan also noted actions to remove blight and rehab commercial properties. Both opportunities exist within this zone, especially in redeveloping the riverfront and rehabbing and occupying 118 N. Water Street. Should these areas redevelop at a greater density, this would increase parking demand along West Main Street, Water Street and O'Connell Street. Off-street parking will most likely be needed to supplement the remaining surplus on-street. Should the 13,000 square foot building at 118 N. Water Street be rehabbed for a commercial use, it would likely need access to 25-40 spaces during its peak period.

The mix of uses will have significant impact on the amount of parking necessary to support new or rehabbed sites. For instance, ground-floor retail generally needs less parking than a high-turnover sit-down restaurant (depending on the retailer size/draw), while upper-story residential needs less vehicle storage than would be necessary for office. Also, should the uses have different peak parking characteristics during a typical day, the total parking necessary to support the developments could be reduced. A mix of retail/office (weekday peak demand) and residential (evening peak demand) is a common example (see peak parking demand table on page 8).

Public Parking Surplus, By Zone

Source: MSA Professional Services

	Zone A	Zone B	Zone C	Zone D	
	Northwest	Southwest	Northeast	Southeast	
Total Spaces	108	198	461	355	
On-street	99	80	214	246	
Off-street	9	118	247	109	
Peak Demand	60	30	242	136	
On-Street	54	12	105	96	
Off-Street	6	18	137	40	
Reserve (15%)	15	30	69	53	
On-Street	15	12	32	37	
Off-Street	0	18	37	16	
Surplus	33	138	150	166	
On-Street	30	56	77	113	
Off-Street	3	82	73	53	

Focus Zone "B" South of Main / West of River

The Watertown Riverfront/ Downtown Plan describes transforming the 100 south block of West Main Street into a Town Square, removing roughly 24,000 square feet of existing development. The proposed Square would host events, festivals, fairs, concerts, weddings, parades, and programming space for almost all community activities. The other

major project in the 100 south block is the proposed 75-room boutique hotel with a 3,500 square foot banquet hall and potential restaurant on the ground floor (see the vision concept on the next page).

Based on Urban Land Institutes' Shared Parking, the proposed mix of uses (i.e., amphitheater, hotel, banquet hall and restaurant) would see peak parking demand in the evening (8-9pm) in the month of June. At this peak design hour, the combined uses would need approximately **289 spaces** available (see Appendix A for more detail). If you add a 15% "cushion" reserve spaces to provide the perception of available spaces, this number would jump to **340 parking spaces**.

The redevelopment projects, would remove two public parking lots, totaling 118 spaces (i.e., a

Vision Parking Needs, Zone B

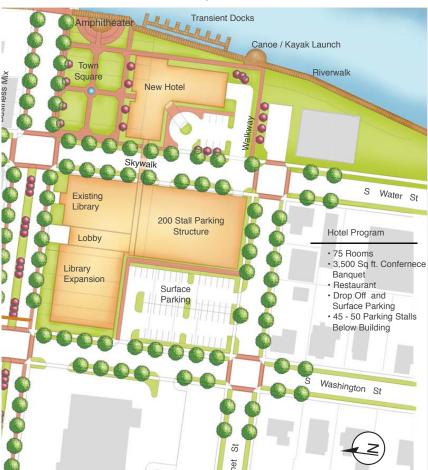
Redevelopment Parking Need	340
Peak Demand	289
15% Reserve	51
Proposed Parking Addition	252
Hotel On-Site Parking	52
Parking Garage	200
New Surplus	32
Current Public Parking Surplus	150
Public Parking Removal	118
New Surplus (+) / Deficit (-)	-56

66-space public lot and 52-space public lot). However, the vision proposes 52-58 total spaces on site (i.e., 45-50 spaces underground and 7-8 surface spaces at the drop-off location), and a 200-space parking structure across the street. When factoring in the net change in parking proposed in this vision concept (plus 15% reserve), the parking network in Zone B would be short by 56 parking **spaces.** Again the reserve spaces provide the 85% effective capacity with the additional spaces providing cushion for potentially mis-parked vehicles, construction, etc. and to maintain a positive parking experience (i.e., minimizes frustration looking for an available space). If the reserve spaces were removed from the equation, the currently proposed 200-space structure would be sufficient. However, there are financial implications related to the size of the parking structure, which are discussed in the Recommendations section.

This proposed parking structure would serve the Square, hotel and support uses (i.e., banquet and restaurant), as well as library patrons. However, for the purpose of this analysis, library user and employee parking has been omitted as these uses each have daytime peak periods (while all other uses peak in the evening). Additionally, the level of demand for the library does not exceed the parking storage capacity of the other uses combined. Should the library expand (as depicted in the vision concept), the parking structure should provide enough parking

Proposed Vision for Zone B

Source: Riverfront/Downtown Redevelopment Initiative



for the library events outside the peak periods for the hotel and Sqaure uses. For this reason, the 60-space surface lot shown along Washington Street behind the library extension would not be needed for the foreseeable future - even with a library expansion.

Focus Zone "C" North of Main / East of River

There are 387 off-street spaces in this zone with 38% of the spaces filled at the peak period. There

are 214 on-street spaces that were 49% filled during the peak period. If you reserve 15% of the available spaces, this leaves a surplus of 258 spaces inclusive of private and public parking facilities. As shown in the table on previous page, the surplus would be drastically lower if you only factor in public on- and off-street facilities. This difference is largely due to the number of businesses in this zone that have empty private lots during non-business evening hours (i.e, banks and

church facilities). If these private lots are unavailable to parkers during non-business hours, the surplus would be 150 spaces. See Strategies and Concepts section for more details.

Again, the Watertown Riverfront/ Downtown Plan discusses redeveloping low value uses along the riverfront, specifically low-valued parking lots. This suggests the potential redevelopment of all, or a portion of, the 92-space public parking lot along N. First Street and the riverfront. If you look specifically at this lot, the lot was 53% filled (meaning, 43 spaces available) at the peak period.

Any development on this lot will increase the demand for parking in the parking network, while also reducing the available spaces in the network. Land use(s) will dictate the total impact to the parking network. Currently there are two restaurants across the street from this lot which are major parking generators during the peak period (Friday evenings). Office and retail uses would have less of an impact on the demand of the restaurant business, as their peak demand is during weekdays. Conversely, new residential in this location will increase the demand for evening parking storage.

The Watertown Riverfront/ Downtown Plan also noted actions to remove blight and rehab commercial properties. Both opportunities exist within this zone. Should there be an increase density, it would increase parking demand along East Main Street, Madison Street and several north/south cross streets. Off-street parking will most likely be needed to supplement the remaining on-street surplus. See the Recommendations section for opportunities to allow for this increase in density.

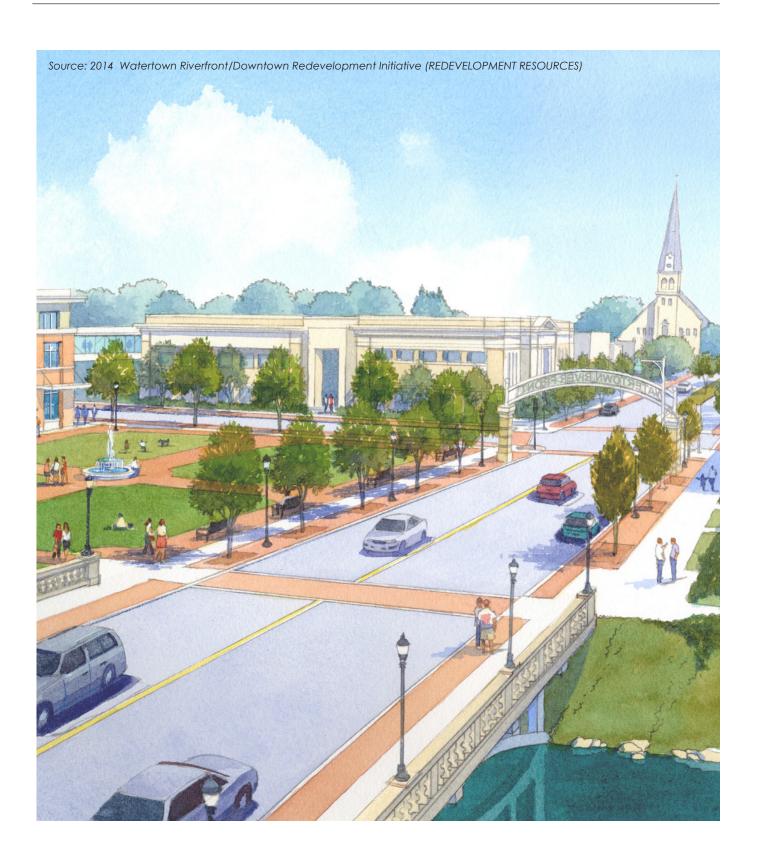
Focus Zone "D" South of Main / East of River

This zone has many opportunities to increase usage of the existing upper stories that are mostly vacant (or used for storage). Historically, upper stories remained underutilized due to weak demand, strict code enforcement and cost-prohibitive updates to comply with those codes. However, as noted in the Watertown Riverfront/Downtown Plan, reuse of these upper stories should be a top priority.

Along Market Street, the major opportunity is for residential units, while vacant upper stories along Main Street could be either residential or office space dependent upon current and near future market conditions. One of the largest upper story reuse opportunities is within the 207-209 Main Street (approximately 12,000 square feet). Beyond the potential reuse of the upper stories, there are also several opportunities for blight clearance. However, the more imminent impact to the parking network will be in the increase in upper story use, requiring additional parking primarily in the evenings and weekends (by new residential units).

Based on the occupancy survey, there are 274 off-street spaces in this zone with 34% of the spaces filled at the peak period. There are 246 on-street spaces that were 39% filled during the peak period. If you reserve 15% of the available spaces, this leaves a surplus of 254 spaces inclusive of private and public parking **facilities.** As shown in the table on page 15, the surplus would be drastically lower if you only factor in public on- and off-street facilities. This difference is largely due to the funeral home businesses in this zone that have empty private lots during non-business evening hours. If these private lots are unavailable to parkers during non-business hours, the surplus would be 166 spaces. See the Recommendations section for more details.

This surplus will offset reuse of upper stories and/or redevelopment in the short term. For planning purposes, residential in a downtown setting requires approximately 1.65 parking spaces per unit. Therefore, a surplus of 166 public parking facility spaces can support up to 274 units. An addition of uses with peak weekday demand (e.g., retail and office) will not impact the potential expansion of residential units in this zone; however, uses with the same peak period (e.g., restaurants, bars and entertainment venues) will compete for parking spaces, resulting in a reduction of potential residential units being supported without expansion of the parking network.



STRATEGIES & CONCEPTS

RECOMMENDATIONS

At present there are no offstreet parking requirements in the Central Business District, the zoning district that encompasses most of the downtown area. Some downtown property owners have opted to provide off-street parking for customers in the interest of convenience and to be on a level playing field with competitors that are required to provide off-street parking. But for many downtown uses, especially historic Main Street properties, the responsibility to meet and manage parking demand falls to the City. This section features strategies the City should consider to manage downtown parking demand.

LOW COST STRATEGIES

Strategy 1.1:

Provide Short-Term Parking

Main Street should include a few short-term parking stalls (e.g. 15-minute limit), preferably near corners. Coffee shops, florists, and markets all have customers that want to get in and out quickly, but this change should be made only in consultation with business owners to confirm interest.

Strategy 1.2:

Use Parking Areas Efficiently

As fuel efficiency has become a priority, many people are driving cars less than 16 feet in length. Look for opportunities to gain additional spaces by designating some rows for compact cars only. These spaces are also appropriate for most electric vehicles. The provision of public charging stations (or utilities to accommodate future installation) should be considered when building new parking lots or structures.





Strategy 1.3:

Require Off-Street Parking with New Development

At present there are no off-street parking requirements in the Central Business District. When non-historic sites are redeveloped, that new development should be required to provide offstreet parking, though not necessarily on the same site. The best scenario is a limited amount of on-site parking, possibly including an underground garage, and payment of a fee in lieu of on-site parking for the balance of the projected parking demand. The City can then use those fees to cover the capital costs of new lots or ramps to accommodate the new demand. This arrangement is better than requiring all development to meet all projected demand onsite, because shared lots can meet the shifting parking needs of multiple sites more efficiently.

Strategy 1.4:

Review and Update Time Limits

The City updated the time limit restrictions in the off-street public lots to promote and allow downtown employees to utilize the off-street lots, freeing up the onstreet parking spaces for visitors and patrons. Should the business and resident density increase (e.g., redevelopment, reuse of upper floors), the nearby public parking lot's time restrictions should be re-evaluated. At a minimum, this review should happen every other year.

MODERATE COST STRATEGIES

Strategy 2.1:

Encourage Alternative Transportation Options

Automobiles will be the dominant form of travel in Watertown for the foreseeable future, but there are some people willing to travel by bike and by foot. The City and property owners can mitigate car parking demand by encouraging biking and walking.

Walking can be encouraged with a continued commitment to safe sidewalks and crosswalks. A good example of pedestrian-friendly street design is a minimum of 4 feet of clear path (no obstructions) on side streets, and a minimum of 6 feet on Main Street. The common obstructions are fire hydrants, light/electric poles, benches, etc., which should be in designated zones close the the building or the curb.

Biking can be encouraged with better designation of bike routes and lanes, and with designated bike parking at apartments and businesses. At present there are no bike lanes anywhere in the downtown. In cases where a proposed bike route has little room to add bike-only lanes (and traffic counts and speeds are low), the City should consider marking and signing shared lanes that indicate to bikers and drivers that bikes have the right to ride in the street.

Regarding bike parking, the City should consider installing a limited number of bike racks along Main Street, and monitor and evaluate their use during the summer months. If frequently full, or if bikes are also locked to other features, more bike racks should be added.

Strategy 2.2:

Improved Parking Signage

Public parking should be easy to find. The current parking signage is separate from the downtown wayfinding signage system. Should these signage types remain separate, it suggested nationally recognized blue and white "P" signs (as shown below) should be posted along Main Street, 3rd Street and 4th Street to guide visitors to the public lots. The current signage with the unique logo/ decal can continue to be used to display the time restrictions at the lot entrances and within the lots, However, a blue and white "P" signage should be included at the main entrances simply by adding them to the existing posts with time restrictions.



Strategy 2.3:

Ongoing Employee Education

Downtown employees should not be parking on a public street or lot within a block of Main Street. Employee turnover necessitates an educational effort on a regular schedule (semi-annual preferred) to identify the most appropriate places for employees to park.

Strategy 2.4:

Parking Literature

Promoting parking includes establishing a public relations and communications plan to provide information on key events impacting downtown parking access issues. This plan should be designed to increase public awareness of downtown parking through events, activities, publications, press releases, maps and other literature.

We recommend adding a dedicated page on the City's website. The site should be comprehensive in nature, inform potential visitors where and how to park in downtown, including hours of operation, rates (if any), and how to purchase a monthly parking pass (should a system be created). We recommend that the City include "Downtown Parking" under the list of departments and establish several web pages to educate the public on downtown parking. This site should be linked to other sites. that need to promote parking to visitors, such as the Chambers website.

This information should be promoted in the following media locations.

- 1. A "Downtown Parking" page on the city website.
- A quarterly newsletter for the downtown parking community with news of developments in parking, (re)development and road construction projects, upcoming downtown events, and profiles of downtown newsmakers.
- 3. Newspaper items or articles and media releases.

- 4. Brochures and maps, both distributed and posted.
- 5. Direct mailings when needed.

Strategy 2.5:

Charge for (some) Parking

All parking has a cost, including the value of the land required, the opportunity cost of not using that land for development, and the paving and maintenance of each parking space. In a dense urban environment these costs are high, and drivers should be expected to cover at least a portion of these costs. However, in most communities like Watertown (and many larger, more urban cities too), the City and merchants are doing everything possible to attract customers and visitors to the downtown area and are reluctant to charge for parking.

While it may not be possible to charge for all parking, the City should consider charging for the best parking, especially as demand for spaces increases on Main Street. Price influences behavior. Many people will choose to park further away to avoid paying the fee, and this will make more stalls available for those that are willing to pay for convenience. The target limit for parking occupancy is 85%. If more than 85% of the Main Street spaces are often occupied, prices should be raised until occupancy during busy periods drops below 85%.

Strategy 2.6:

Ensure nighttime safety

All downtown users should feel safe walking to or from their cars after dark. Adequate lighting should be provided along pedestrian routes, especially near parking lots. New lighting should be full cut-off, dark-sky compliant, to eliminate unnecessary glare.

HIGH COST STRATEGIES

Strategy 3.1:

Create More Parking

One answer to a parking shortage (real or perceived) is to create more parking. Removing taxable development to add low-density surface parking is undesirable - it reduces revenues and damages the urban character of the downtown area. The alternative is to concentrate parking in multi-story structures.

Structured parking is a costly solution that should be pursued only if there is also a revenue stream from permits and meters to offset (in part, at least) the borrowing and maintenance costs for such facilities. However, that revenue does not necessarily need to be generated in the parking structure itself. The City should charge for convenience and offer less convenient parking at less cost. All downtown public parking is part

of a system, and the costs and revenues should be distributed however necessary to optimize performance.

A review of recent parking structure costs and studies reveals an average capital cost of about \$25,000 per parking space, including about \$15,000-20,000 per space construction cost and 30-40% soft costs (planning, design, permitting, financing). Annual operating costs average \$100 per space for enforcement and \$500 per space for lighting and maintenance.

Watertown is unlikely to cover parking structure costs with user fees – there will need to be some sort of subsidy, certainly for the capital costs and possibly for the operating costs.

Structured parking typically becomes cost effective when land prices exceed \$1 million per acre (from "Parking Matters", 2006). Land prices in Downtown Watertown is currently around \$167,500 per acre. It may still not be the right time for public structured parking, though private



structured parking as part of redevelopment projects may be both feasible and necessary to the viability of those projects. For example, the recommended development of a hotel with banquet and restaurant space.

There are several variables and options to consider when selecting the type of structure, including the desired traffic flow (one way or two way), additional use within the structure (such as retail on the bottom level), the Level of Service (LOS), and height restrictions. The minimum parking structure dimensions may be useful when considering sites for adding a parking structure. We recommend building a structure with at least 300 spaces in order to hold down the overall cost per added space. Smaller garages result in fewer spaces per square foot and higher construction costs per space. The ideal size is 120 feet by 284 feet, which provides 132 parking spaces per floor.

Proposed Zone "B" Structure

As discussed on pages 15-16, the Watertown Riverfront/Downtown Plan suggests a 200-space parking structure to support the development of a recommended hotel and Town Square, as well as the existing library. This size of parking structure would meet the peak parking demand, excluding the typical reserve spaces, but it is potentially problematic for two reasons, described below.

 Only 50 Spaces per floor due to the lot size. The site is 132 feet by 165, and ideally would include a five foot building setback from adjacent properties lines (back and side) and a minimum of two foot setback from the public sidewalks. Therefore, a 125 feet by 155 feet footprint is realistically the largest that can fit the site. To provide a minimum of 200 spaces, there would need to be four levels of parking.

2. The design for the parking structure will have higher than normal construction costs. The ideal size for structure is 300-500 spaces to reduce the cost per square foot. Also the lot size would require four levels (to just supply 200 spaces), which will increase cost as well.

The recommendation will be to consider purchasing four singlefamily homes directly west of the proposed structure lot (i.e., 115-121 Washington Street and 210 Emmet Street). This will provide a site measuring 264 feet by 165 feet. These site dimensions would allow for a 3-story parking structure providing approximately 270 spaces (or 90 spaces per floor). This structure would supply enough parking for all potential uses described in the Watertown Riverfront/Downtown Plan, including the standard 15% reserve spaces. The structure would only need to be 120-125 feet wide running north/south, so 30+ feet could be used as service alley along the back portion of the existing library.

Proposed Zone "C" Structure

The Watertown Riverfront/ Downtown Plan discussed the opportunity to build a parking structure on the North Fifth Street Lot (between Fourth and Fifth Streets). Currently the demand is not suggesting a need for this project in the foreseeable future. Should development pressure result in increased parking demand in the vicinity, the ideal parking structure footprint would require acquiring 208 N. Fifth Street.

Surface Lots

As an interim step until structured public parking becomes feasible, it may be necessary to create more off-street surface parking. The ideal properties to consider for low-value surface lots are properties adjacent to existing lots that can efficiently expand the parking supply, especially those that are blighted. Blighted properties detract from an area, and they generally have lower overall value (reducing the cost to implement the project).

Potential locations for new offstreet surface parking include:

- 1. Convert 109-113 Jones Street to a public parking lot. This will add roughly 18-22 net spaces, depending on how it links with the existing parking lots flanking these properties.
- 2. Purchase and convert 209-211 Market Street to public parking, and reconfigure with the adjacent public lot and alleyway. This project will net an increase of roughly 15-19 parking spaces.
- 3. Purchase or establish a lease agreement to use the existing private parking lot at 201 N. Fifth Street. During all three occupancy field surveys the bank parking lot never had more than one vehicle

parked in it. This lot is not necessary to meet the current demand, but can remain on the radar should demand increase in the near vicinity.

4. Purchase 114 S. 4th Street and adjacent parking lot (110 S. 4th Street). At a minimum the parking lot could be purchased to reconstruct, mark and utilize for general public use. The building at 114 S. 4th Street is not contributing significantly to the downtown character, nor does it hold the corner. Should this property and adjacent lot be purchased, the building could be leased in the short term until demand requires an increase in parking. If this direction is taken, some minor improvements to the building could be made to improve its curb appeal (e.g., restore in larger windows, remove pitched roof, remove aged asphalt around foundation and replace with landscaping).

ing streets, and negative public opinions.

Yet, if parking becomes strained in existing or planned residential areas, residential permit parking is a potential strategy to consider. The residential permits provides preferential parking to those who live on a crowded street either throughout the day, or during the evening/over night hours. This can help maintain and/or increase the marketability for more residential units in the downtown.

Employee Parking Permit

The City could establish a permit system for downtown employees. This system could be used to help direct employee parking to designated areas that do not conflict with customer parking. For this system to be successful, time limits will need to be enforced on streets and lots intended for customer parking - otherwise employees will ignore the permit system.

OTHER STRATEGIES

Resident Parking Permit

With the current interest is promoting conversion of upper floors to residential, the City may consider establishing a residential parking permit system. However, there are drawbacks to such as system, including the cost to adminster the system (and who pays for that cost - renters, property owners, City, etc.), cost and hassle to get guest passes, increase in parking congestion on neighbor-



DEVELOPMENT REVIEW

DOWNTOWN SQUARE & HOTEL PARKING DEMAND

WEEKDAY DEMAND SUMMARY: Peak Month (June), Peak Period (9PM)

	Quantity	Unit	Base Rate	Mode Adj	Non- Captive Rate	Project Rate	Unit	Peak Hr Adj (9 PM)	Peak Mo Adj (June)	Estimated Parking Demand
Town Square Ampitheater										67
Visitors	200	Seats	0.30	1.00	1.00	0.30 /	' seat	1.00	0.90	54
Employees		Seats	0.07	1.00	1.00	0.07 /	' seat	1.00	0.90	13
Hotel-Business, Plus Amenities										222
Rooms	75	Rooms	1.25	1.00	1.00	1.25 /	Room	0.85	1.00	80
Banquet Space	3,500	SF	30	1.00	1.00	30.00 /	k SF GLA	1.00	0.95	100
Restaurant/Lobby	8,000	SF	10	1.00	0.80	8.00 /	k SF GLA	0.67	1.00	43
TOTAL	, and the second		,			,		,		289

WEEKEND DEMAND SUMMARY: Peak Month (June), Peak Period (9PM)

	Quantity	Unit	Base Rate	Mode Adj	Non- Captive Rate	Project Rate	Unit	Peak Hr Adj (9 PM)	Peak Mo Adj (June)	Estimated Parking Demand
Town Square Ampitheater										73
Visitors	200	Seats	0.33	1.00	1.00	0.33	/k SF GLA	1.00	0.90	59
Employees	200	seats	0.07	1.00	1.00	0.07	/k SF GLA	1.00	1.00	14
Hotel-Business, Plus Amenities										211
Rooms	75	Rooms	1.08	1.00	1.00	1.08	/ Room	0.85	1.00	69
Banquet Space	3,500	SF	30	1.00	1.00	30.00	/ k SF GLA	1.00	0.95	100
Restaurant/Lobby	8,000	SF	10	1.00	0.80	8.00	/ k SF GLA	0.67	1.00	43
TOTAL										285