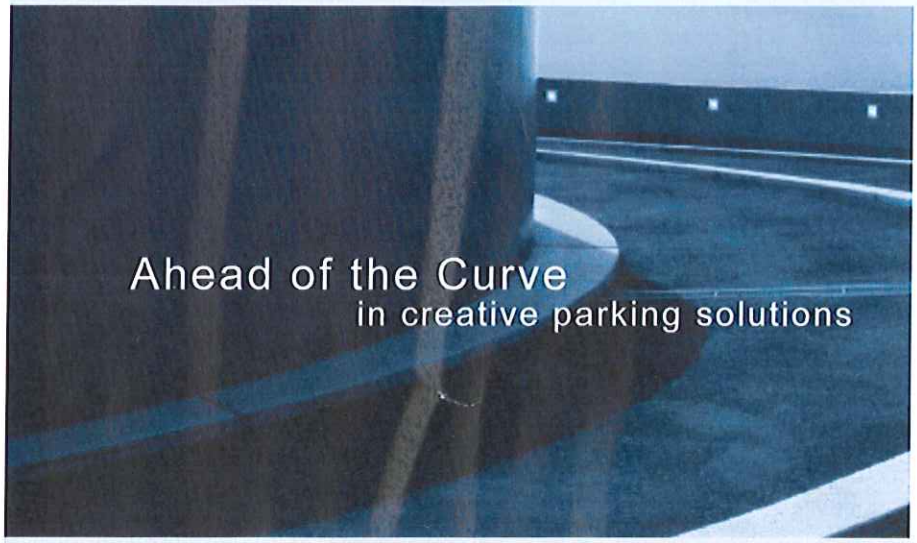


DOWNTOWN PARKING STUDY

CITY OF APPLETON

APPLETON, WISCONSIN

Prepared for:
DEPARTMENT OF PUBLIC WORKS

FEBRUARY 27, 2015

DRAFT WORKING DOCUMENT

WALKER
PARKING CONSULTANTS

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1-14

INTRODUCTION 1
- Scope of Services 1
- Study Area 1

STAKEHOLDER ENGAGEMENT 3

CURRENT PARKING CONDITIONS 5
- Parking Inventory 5
- Effective Parking Supply 6
- Parking Occupancy 7
- Parking Adequacy 12
- Zone Analysis 13
- Conclusion 14

FUTURE PARKING CONDITIONS 15
- Organic Market Growth 16
- Proposed New Public Library 16
  - Current Library Operating Data 17
  - Library Parking Planning 18
  - Conclusion 18
- Proposed Fox Cities Exhibition Center 19
  - Exhibition Center Parking Planning 20
  - Conclusion 20
- Proposed City Hall Relocation 21
  - Conclusion 21
- Outagamie County Building 21
  - Conclusion 22
- Anticipated Changes to Parking Supply 22
  - Blue Ramp (401 spaces) 22
  - Soldier Square Ramp (450 spaces) 22

POLICIES, PRACTICES AND OPPORTUNITIES FOR IMPROVEMENT 29
- Technology 29
- Parking Enforcement 33
  - Enforcement Equipment 34
  - New Enforcement Areas 35
- Demand Management 36
  - Employee and Student Parking Strategy 37
  - Valley Transit 38
  - Soldier Square Ramp (YMCA) Ramp 38
- Parking Planning 39
  - Continuous Improvement Model 40
  - Parking Planning Workshops 40

ALTERNATIVE SITE ANALYSIS 41
- Alternatives Analysis Conclusion 41

FINANCIAL CONSIDERATIONS 42
Conceptual Estimate of Probable Cost 42
Operating Costs 43
Breakeven Pricing 43
Annual Debt Service 44
Structural Repair Budget 44
Preliminary Budget Considerations and Timeline 45

Exhibit 1: Study Area 2
Exhibit 2: Summary of Stakeholder Feedback 3
Exhibit 3: Parking Supply Allocation 5
Exhibit 4: Effective Parking Supply 6
Exhibit 5: Parking Supply Adequacy 7
Exhibit 6: Weekday Parking Conditions - 8:00 am 8
Exhibit 7: Weekday Parking Conditions - 11:00 am 9
Exhibit 8: Weekday Parking Conditions - 2:00 pm 10
Exhibit 9: Weekday Evening Parking Conditions – 7:00 pm 11
Exhibit 10: Current Adequacy 12
Exhibit 11: Study Area – Zone Analysis 13
Exhibit 12: Parking Adequacy by Zone 14
Exhibit 13: Future Parking Planning Scenarios 15
Exhibit 14: Proposed Public Library Conceptual Site Layout 16
Exhibit 15: Current Appleton Public Library 17
Exhibit 16: Projected Library Demand 18
Exhibit 17: Proposed Exhibition Center Conceptual Site Layout 19
Exhibit 18: Projected Exhibition Center Parking Demand 20
Exhibit 19: Scenario 1 – Future Parking Adequacy by Zone 23
Exhibit 20: Scenario 2 – Future Parking Adequacy by Zone 24
Exhibit 21: Scenario 3 – Future Parking Adequacy by Zone 25
Exhibit 22: Scenario 4 – Future Parking Adequacy by Zone 26
Exhibit 23: Scenario 5 – Future Parking Adequacy by Zone 27
Exhibit 24: Summary of Future Parking Adequacy by Scenario 28
Exhibit 25: Community Approach to Parking Planning 39
Exhibit 26: Examples of Mixed-Use Parking Ramps 42
Exhibit 27: Breakeven Considerations – Monthly Income Required to Breakeven 43

EXECUTIVE SUMMARY

The City of Appleton, Wisconsin (the "City") engaged Walker Parking Consultants ("Walker") to prepare a comprehensive downtown parking analysis in anticipation of new development and changes to the Public Parking System. Downtown Appleton features unique characteristics that evolved from years of thoughtful and deliberate planning by residents, community leaders and planners. Once again, with civic pride and sense of obligation, the community is carefully considering plans to possibly build a new Public Library, an Exhibition Center, and possibly relocated City Hall. Equally, the City is carefully considering options to proactively address upcoming parking needs and improve upon the delivery of public parking services.

This report provides parking planning and operating strategies that embody the philosophy of managing public resources in a way that supports community well-being, community connection, and growing a sense of place. This report aims to address public parking in the context of the larger vision for downtown Appleton. Since parking is such a costly asset, the City is carefully considering the need for additional parking and opportunities to maximize use of current parking assets. In addition, the City is looking to implement new policies and practices that better align parking services with community expectations.

Public parking plans should not lead community development; rather the broader community goals for the downtown should be supported by any proposed parking strategy. With that in mind, the parking strategy should serve as a tool to help ensure downtown success and embody the following guiding principles:

- Maintain the small town, walkable form that has evolved over decades of purposeful planning.
- Support for a park once, pedestrian friendly vision that improves connectivity for visitors, residents and employees.
- Provide a customer-friendly experience for visitors, residents and employees centered on convenience, access and fairness.
- Continue to help facilitate and encourage a diverse economy.
- Maintain a responsibility to optimize public investment in parking infrastructure.

PROJECT APPROACH

Walker understands that public parking issues cut across various departments and policy fields and real solutions require collaboration. Our approach includes public engagement, plus the evaluation of current and future parking conditions, alternative development options, parking policies and practices, and financial considerations. While the technical parking analysis provides measurable decision points for City leaders to consider, public engagement can produce the collaboration and alignment required for effective policy design and implementation strategy. The project approach is further defined in the following exhibit.

Project Approach

Stakeholder Engagement & Data Analysis → **Current and Future Parking Conditions** → **Policies, Practices, and Opportunities for Improvement** → **Financial Plan & Implementation Schedule**

Stakeholder Engagement & Data Analysis

- Review current parking operations and market conditions
- Meet with stakeholders to more clearly understand the vision for downtown parking
- Listen to suggestions for improving parking
- Review previous planning reports
- Review most recent condition appraisals for all public ramps
- Review public parking financial documents
- Review proposed development concepts and plans for additional downtown growth

Current and Future Parking Conditions

- Review current parking operations and market conditions
- Document parking inventory for 56-block study area

  Document and evaluate peak weekday parking occupancy
- Determine current parking adequacy
- Evaluate proposed future developments and project parking needs
- Determine future parking adequacy
- Provide conceptual timeline for future parking needs

Policies, Practices, and Opportunities for Improvement

- Identify on- and off-street parking policy improvements
- Develop options and recommend location(s) for new parking
- Evaluate parking revenue and access control equipment (PARCS) and recommend opportunities for improvement
- Evaluate on-street parking meter equipment and opportunities for improvement
- Evaluate parking regulations and opportunities for market alignment
- Identify opportunities to enhance the delivery of parking services and support economic development

Financial Plan & Implementation Schedule

- Provide guidelines for optimizing system financial performance
- Estimate probable costs and annual debt service associated with system improvements
- Provide five-year pro forma for new parking ramp(s) and improvements

STAKEHOLDER ENGAGEMENT PROCESS AND FEEDBACK

The stakeholder process included four focus groups each consisting of eight to ten participants, plus one-on-one interviews and telephone conversations with downtown stakeholders identified by the City's Project Advisory Committee. The list of involved stakeholders included downtown business owners, residents, employees, employers, land owners, students, educators, community leaders, city staff, county staff, and elected officials.

Each stakeholder was asked to provide insight with regard to the effectiveness of the Parking System based on their professional and personal experiences. The following summary highlights common topics and reflects key comments received from stakeholders. Specific comments on potential developments or proprietary operating information are excluded from this written report, but considered by the project team when preparing the analysis. The following table briefly summarizes the highlights of these discussions.

Common Themes Shared by Stakeholders

1. *Be a good steward of current public assets.* Maximize the use of existing public (and private) parking resources before building more costly parking ramps.

2. *Change the parking equipment in the ramps.* Improve the configuration of parking access and revenue control equipment in all the public parking ramps.

3. *Make payment easier.* Offer multiple payment options for parking on-street and in the public parking ramps.

4. *Offer choices.* Do not mandate where people park. Instead, offer options and use price to manage demand.

5. *Market and brand public parking.* Improve the communication and marketing of public parking options. Improve the overall perception of the public parking system.

6. *Maintain consistent parking policies.* Simplify parking regulations for downtown patrons by maintaining clear enforcement time periods for core central business district and neighborhoods.

7. *Keep parking ramps and sidewalks safe.* Encourage use of parking ramps and lots by improving the ambiance of the parking ramps (ie. cleanliness, lighting, painting, etc.). Ensure public walkways are inviting and safe.

8. *Manage special event parking.* Offer the public clear and consistent parking options and directions for downtown special events.

9. *Do not overbuild public parking.* The current supply appears more than sufficient. Consider maintaining current levels of parking supply and only replacing parking spaces lost to new development.

10. *Add more than just parking to downtown.* New parking ramps should incorporate mixed uses and be architecturally interesting to enhance the downtown environment.

The ideas for improving the Public Parking System were overwhelmingly positive and constructive with considerations for the overall well-being of the downtown community. However, to the extent that concerns or issues were raised, we attempt to address these within this report.

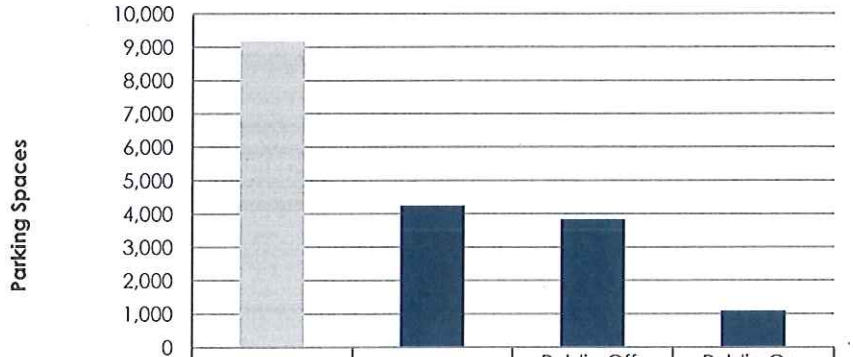
STUDY AREA

Current and future parking conditions are evaluated for the geographical area generally bound by Packard Street and North Street to the north; the Fox River, Prospect Avenue and 5th Street to the south; Lawe Street to the east; and Memorial Drive and Richmond Street to the west (map on page 2). This 56-block area represents the defined study area determined by the City of Appleton.

CURRENT PARKING CONDITION

- **9,178±** parking spaces are located within the 56-block study area
- **4,255±** parking spaces **(46%)** are privately owned and operated with limited public access
- **3,832±** parking spaces **(42%)** are publically owned and or operated with public access
- **1,091±** parking spaces **(12%)** are located on-street

Parking Supply Allocation



	Total Supply	Private	Public Off-Street	Public On-Street
Parking Supply	9,178	4,255	3,832	1,091
Percent of Total	100%	46%	42%	12%

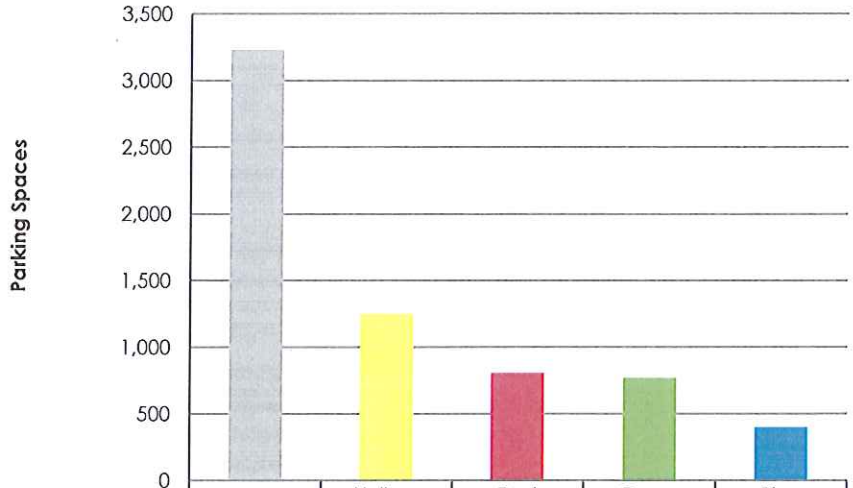
- The City owns and or operates 54% of the downtown parking supply (Public Off-Street + On-Street).
- All public, private and on-street parking shape perceptions of downtown parking adequacy, organization, and safety.
- The allocation of parking supply by accessibility (public vs. private) is within a normal range when compared to similar size cities.

Source: Walker Parking Consultants 2014
Note "Public "off-street parking includes all city-owned ramps, the Soldier Square Ramp, and public lots.

PUBLIC PARKING RAMPS

The City owns and operates four (4) public parking ramps (3,230 spaces) located in downtown Appleton. The capacity and general description of each city-owned parking ramp is provided in the following exhibit.

City-Owned Parking Ramps



	Total	Yellow Ramp	Red Ramp	Green Ramp	Blue Ramp
Parking Supply	3,230	1,250	808	771	401
Percent of Total	100%	39%	25%	24%	12%

- Yellow Ramp
  (Formerly East Ramp)
  Built in 1995
  7 Levels
  19 Years Old
  Good Condition
- Red Ramp
  (Formerly Midtown Ramp)
  Built in 1981
  5 Levels
  33 Years Old
  Good Condition
- Green Ramp
  (Formerly Washington Street Ramp)
  Built in 1994
  6 Levels
  20 Years Old
  Good Condition
- Blue Ramp
  (Formerly City Center Ramp)
  Built in 1963
  12 Levels
  51 Years Old
  Fair Condition – Useful Life 3-4 Years

Source: City of Appleton 2014; January 2014 Structural Condition Reviews prepared by GRāEF.

PARKING RAMP REMOVAL

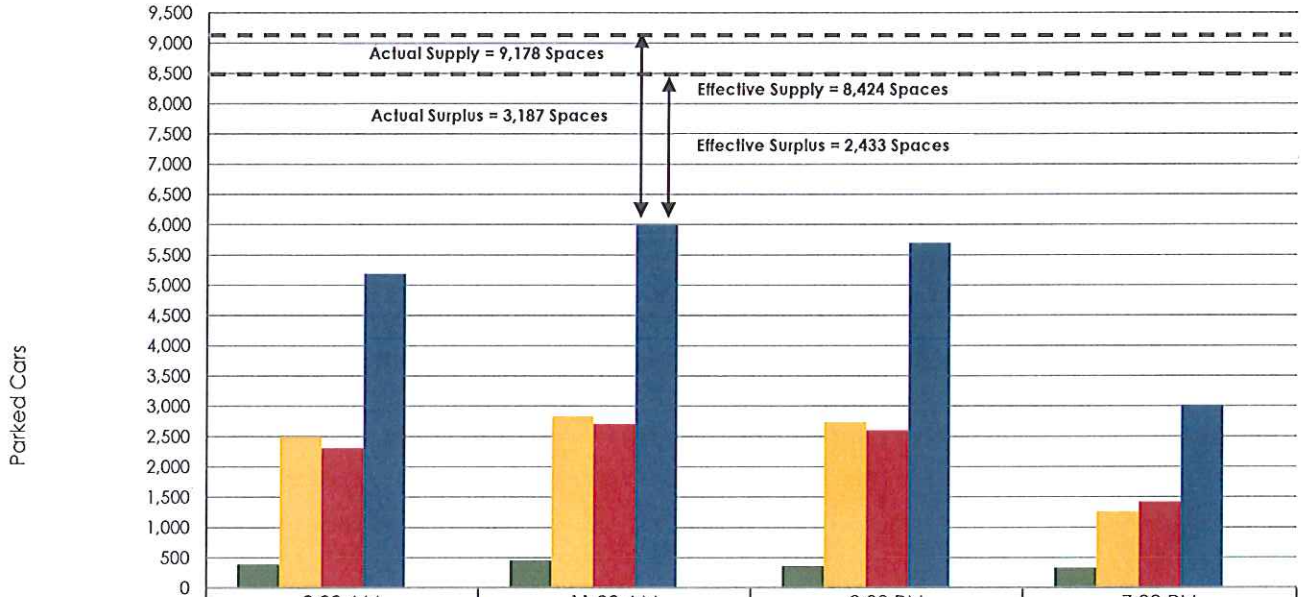
- The Blue Ramp will be removed from service in the next three to four years.
- While technically not a city-owned parking asset, the Soldier Square Ramp (450 spaces) is a publically accessible parking ramp owned and operated by the Appleton YMCA. Built in 1967 and formerly owned by the City, the 47 year old parking ramp is rapidly nearing the end of its useful life.

CURRENT PARKING ADEQUACY

- Weekday peak parking conditions at 11:00 am on Wednesday
  65% occupancy or **5,991± parked vehicles**
  3,187± unoccupied parking spaces
- Weekday evening parking conditions at 7:00 pm on Wednesday
  33% occupancy or **3,014± parked vehicles**
  6,164± unoccupied parking spaces
- **74%** peak Public Off-Street occupancy = **1,000±** unoccupied spaces
  64% peak Private Off-Street occupancy = **1,500±** unoccupied spaces
  42% peak On-street occupancy = **637±** unoccupied spaces

The documented parking occupancy is presented in the following exhibit.

Current Parking Supply Adequacy



	8:00 AM	11:00 AM	2:00 PM	7:00 PM
On-Street	387	454	363	329
Off-Street Public	2,491	2,833	2,735	1,263
Off-Street Private	2,308	2,704	2,598	1,422
Total	5,186	5,991	5,696	3,014
Occupancy (%)	57%	65%	62%	33%

Source: Walker Parking Consultants
Note: Weather conditions during the observation period were a high of 52°F and low of 47 °F, and generally overcast.
Definition: Effective Supply is the maximum number of parking spaces that can realistically be used within a given parking system.

FUTURE PARKING CONDITIONS

The methodology for assessing the future parking conditions in downtown Appleton incorporates assumptions relevant to future market conditions, local development plans, and public ramp deconstruction. At this time, there are several possible development options under consideration by the community. Therefore, the analysis of future parking conditions reflects five plausible scenarios for the City to consider. The purpose for evaluating future parking needs through the lens of multiple scenarios is to provide the City with a frame of reference for determining possible outcomes. A description of each scenario is presented in the following exhibit.

Future Parking Planning Scenarios

Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Base Conditions	**Base Conditions**	**Base Conditions**	**Base Conditions**	**Base Conditions**
• Current Parking Conditions (As Is)	• Current Parking Conditions (As Is)	• Current Parking Conditions (As Is)	• Current Parking Conditions (As Is)	• Current Parking Conditions (As Is)
• No organic market growth	• Organic market growth of 10%	• Organic market growth of 10%	• Organic market growth of 10%	• Organic market growth of 10%
Anticipated Loss of Parking Supply	**Anticipated Loss of Parking Supply**	**Anticipated Loss of Parking Supply**	**Anticipated Loss of Parking Supply**	**Anticipated Loss of Parking Supply**
• Blue Ramp Removal (401 Spaces)	• Blue Ramp Removal (401 Spaces)	• Blue Ramp Removal (401 Spaces)	• Blue Ramp Removal (401 Spaces)	• Blue Ramp Removal (401 Spaces)
• Soldier Square Ramp Removal (450 Spaces)	• Soldier Square Ramp Removal (450 Space)	• Soldier Square Ramp Removal (450 Spaces)	• Soldier Square Ramp Removal (450 Spaces)	• Soldier Square Ramp Removal (450 Spaces)
Potential New Sources of Demand	**Potential New Sources of Demand**	**Potential New Sources of Demand**	**Potential New Sources of Demand**	**Potential New Sources of Demand**
• No New Public Library	• No New Public Library	• Expansion of Public Library at Current Site (120,688 SF)	• New Public Library at Fox River Bluff Site (120,688 SF)	• New Public Library at Post Crescent Site (120,688 SF)
• No City Hall Relocation	• No City Hall Relocation	• No City Hall Relocation	• City Hall Relocation to Current Public Library Building	• Library Vacated Space Absorption – High Density Tenant (400 Employees)
• No Exhibition Center	• No Exhibition Center	• New Exhibition Center at County Lot Site (31,500 SF)	• City Hall Vacated Space Absorption – High Density Tenant (400 Employees)	• No City Hall Relocation
			• New Exhibition Center at County Lot Site (31,500 SF)	• New Exhibition Center at County Lot Site (31,500 SF)

Source: City of Appleton

A comparative summary of the future parking adequacy by scenario is presented in the following section.

FUTURE PARKING ADEQUACY

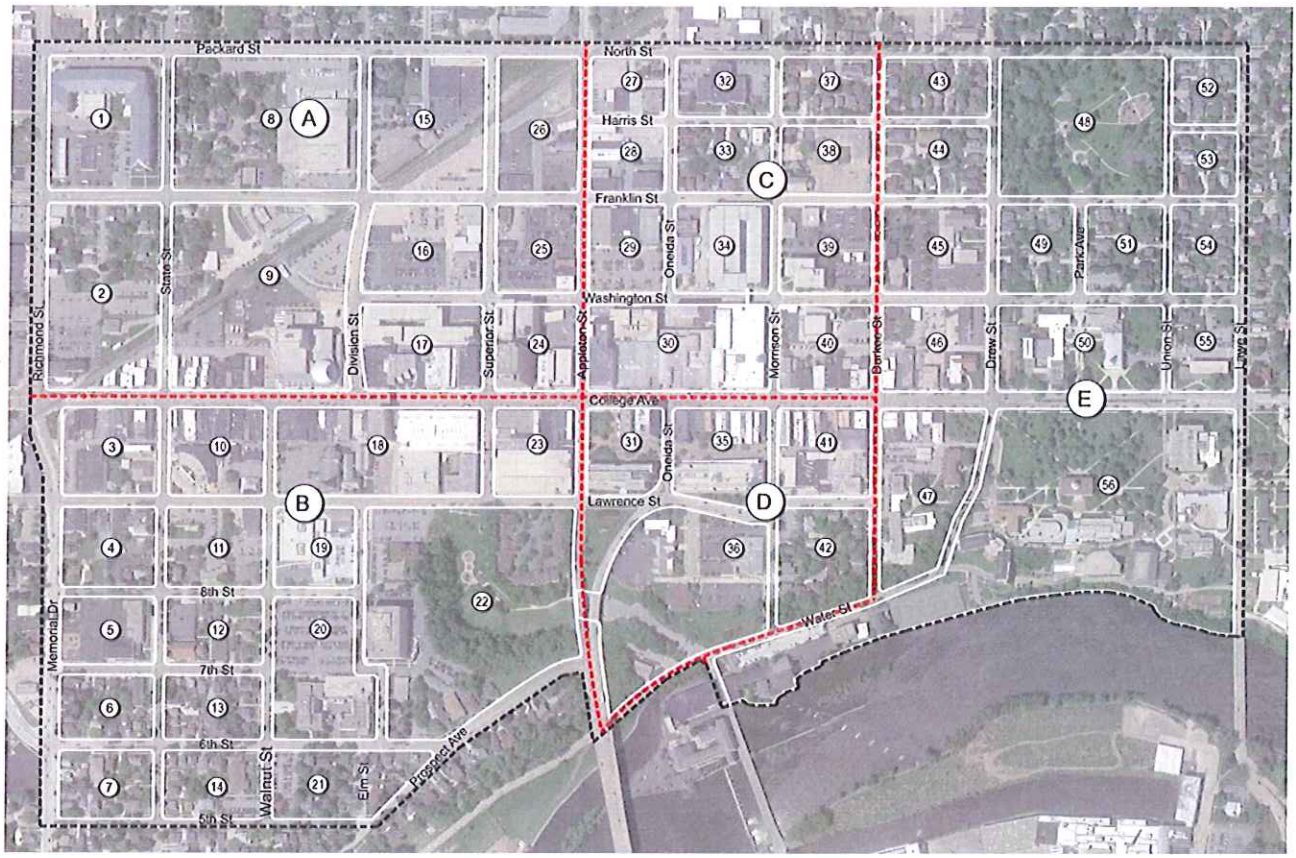
While an overall parking surplus in the study area is projected for each planning scenario, there are areas that will likely experience parking challenges. To assess parking adequacy in localized areas, the study area is divided into five (5) zones (A, B, C, D, and E). The results are presented in the following exhibit.

Summary of Future Parking Adequacy by Scenario

	Future Parking Planning Scenarios				
Future Parking Assumptions	**1**	**2**	**3**	**4**	**5**
BASE PARKING DEMAND					
Current Parking Conditions "As Is"	x	x	x	x	x
Organic Growth in Parking Demand (10%)		x	x	x	x
CHANGES TO CURRENT PARKING SUPPLY					
Blue Ramp Removal	x	x	x	x	x
Soldier Square Ramp Removal	x	x	x	x	x
Surface Parking Displacement for New Development			x	x	x
APPLETON PUBLIC LIBRARY					
Appleton Public Library - Existing Site (No Change)	x	x			
Appleton Public Library - Existing Site Expansion			x		
New Appleton Public Library - Fox River Bluffs Site				x	
New Appleton Public Library – Post Crescent Site					x
High Density Absorption of Vacated Library Space					x
APPLETON CITY HALL					
City Hall – Existing Site (No Change)	x	x	x		x
New City Hall – Relocation to Current Library Site				x	
High Density Absorption of Vacated City Hall Space				x	
New Exhibition Center					
New Exhibition Center - County Lot			x	x	x
PROJECTED PARKING ADEQUACY					
Zone A	1,061	917	917	917	657
Zone B	882	716	554	554	554
Zone C	369	207	37	(193)	(143)
Zone D	(122)	(173)	(173)	(432)	(173)
Zone E	186	116	116	116	116
TOTAL SURPLUS (DEFICIT)	**2,376**	**1,783**	**1,554**	**962**	**1,011**

In the following exhibit, a map of the study area with zones is provided to help illustrate future parking adequacy.

Future Parking Adequacy by Zone



Legend - Occupancy

- Study Area
- Block Numbers
- Zones Borders
- Zones

NORTH

PROJECTED PARKING ADEQUACY

Scenario	1	2	3	4	5
Zone A	1,061	917	917	917	657
Zone B	882	716	554	554	554
Zone C	369	207	37	(193)	(143)
Zone D	(122)	(173)	(173)	(432)	(173)
Zone E	186	116	116	116	116
TOTAL SURPLUS (DEFICIT)	**2,376**	**1,783**	**1,554**	**962**	**1,011**

Source: Walker Parking Consultants

FUTURE PARKING IMPROVEMENTS

As new developments enter the downtown market, the public parking needs will change and the City should be prepared to address how best to accommodate this additional growth - spatially, operationally and financially. The future parking improvements should focus on enhancing the overall delivery of parking services to the downtown community. Key recommendations for the City to consider include the following.

1. Install new Parking Access and Revenue Control Systems (PARCS) at each public off-street parking ramp. Convert entry lanes to Ticket Dispensing entry devices (barcode or mag-stripe). Convert exit lanes to Credit Card Exit Verifiers that accept paid tickets, validations, and credit card payments (no cash option for in-lane automated devices).

2. Change off-street ramp pricing from flat rate of $2.00 to time-based fee schedule. Recommended daily parking fee schedule:

   $1.00 for <2 hours

   $2.00 for 2-3 hours

   $3.00 for 3-4 hours

   $5.00 for 4+ hours

   Lost ticket = minimum of $5.00

   Offer a lower evening and weekend rate. For example: $2.00 from 6:00 pm to 6:00 am Monday – Thursday; $2.00 from Fri 6:00 pm to Saturday 6:00 am

   Maintain free parking on Sunday

3. Offer hotel key card access and PAC prepaid parking equipment integration.

   Provide hotel guests with the option to purchase overnight parking at one of the public ramps with in/out access via hotel key card.

   Provide PAC event attendees the option to prepay for parking when purchasing an event ticket.

4. Offer validations to local businesses. Enable downtown merchants to offer free parking to their customers, and help promote off-street parking options.

   Recommend pre-paid validations only, avoiding pay for use options. Limit the types of validation offered. Maintain a simple validation program to avoid confusion and audit challenges. For example: Only offer the purchase of full day (at $4.00 each) validations and first two hour free validations (at a $1.00 price point that reduces the final transient ticket price by $1.00).

5. Provide on-street single-space meters with coin and credit card processing capabilities (Smart Meters). Utilize as much of the existing single-space meter hardware as possible, but replace the meter heads.

   The Parking Utility will benefit from real-time back-end system connectivity for daily operational management, maintenance, and reporting. The community will benefit from increased meter convenience and multiple payment options.

   Enforce on-street meters from 9:00 am – 6:00 pm, Monday – Saturday; free on Sunday.

   Walker recommends the City consider implementing a one year Smart Meter Pilot Program with meters placed on the north and south side of College Avenue. The program would evaluate the equipment options, track financial performance, and measure customer feedback.

   Walker recommends the City consider offering longer on-street time limits, up to eight hours, along select roadways to the north and south of College Avenue that have underutilized parking meters. The hourly rate should be lower than the hourly rate to park on College Avenue. This policy would offer an economic incentive to patrons, mitigate the risk of receiving a parking citation, and redistribute on-street demand away from congested areas.

6. Offer Mobile Payment Application. Implement a mobile payment option for downtown Appleton on-street parking that includes website, custom app, phone, and sms options. Mobile payment applications offer a fast and inexpensive way to implement credit card option in the field prior to a complete on-street hardware infrastructure replacement.

7. Implement Public Parking Utility Website Improvements.
   a. Improve the interactive parking map to display all public parking locations, hours of operation, costs to park, and citation fees - consider occupancy counts and availability as part of the interactive map.
   b. Integrate online citation payment and appeals option (offered now)
   c. Offer online permit purchasing.
   d. Offer the ability to report broken meters online.
   e. Leverage social media presence to announce special event parking plans, policy changes, marketing promotions, and gather feedback from the public – connect Appleton Public Parking with downtown stakeholders

8. Prepare and provide online access to *Annual Public Parking Report* that communicates the Public Parking Utility's 1) mission, 2) goals, 3) operating and financial figures, 4) current policies, and 5) future plans.

9. Market and Brand the Public Parking System. Communicate how easy it is to find parking in downtown Appleton and highlight free on-street parking is offered nights and Sundays. Partner with downtown businesses and advocacy groups to share a unified message with public.

10. Make the mission of Parking Enforcement *to provide hospitality, tourism and public safety services to local citizens, businesses and visitors, in addition to enforcing parking regulations.*

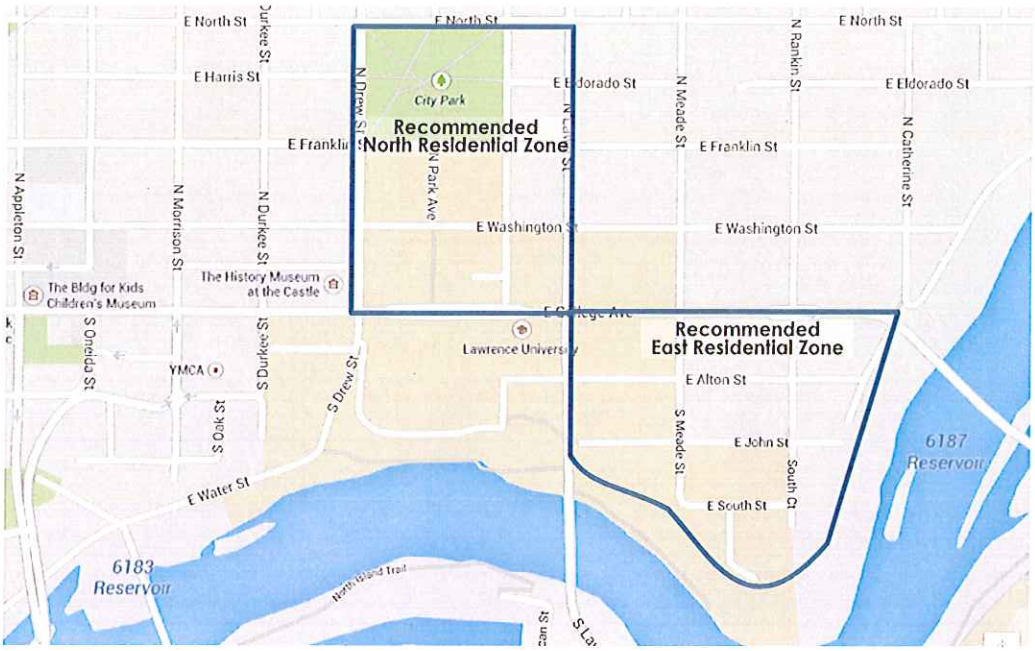
11. Upgrade parking enforcement equipment to support compliance with public parking regulations and reduce the time and costs associated with the process. Use electronic tire chalking in time zones.

12. Implement a neighborhood parking zone that limits on-street parking to 2-hours, from 9:00 am – 6:00 pm, Monday – Friday.

    Two enforcement zones are recommended

    North Residential Zone: Inside study area - bounded by North Street to the north, College Avenue to the south, Lawe Street to the east, and Durkee Street to the west.

    East Residential Zone: Outside study area - generally bounded by College Avenue to the north, Fox River to the south and east, and Lawe Street to the west.



13. In addition to implementing a 2-hour on-street neighborhood parking enforcement zone, the City should encourage Lawrence University to expand the Chapel Parking Lot to support student, faculty and staff parking needs. Preliminary layouts identify an opportunity to add up to 50 parking spaces. This added supply will serve as a quality alternative to on-street parking and help relieve long-term on-street parking in surrounding neighborhood.

14. If the new Appleton Public Library is to be built on Block 36, Walker recommends the City consider collaborating with the YMCA to replace the 450-space Soldier Square Ramp with **a minimum 500-space mixed-use parking facility**. While there are several viable locations to build structured parking near the proposed library site, Walker recommends replacing the Soldier Square Ramp at the same location. Community plans for the Soldier Square area envision a mixed use, walkable area with street level retail stores, office and restaurants. The recommended parking facility aligns with the community's vision for Soldier Square and supports existing businesses, the YMCA, and future library parking needs.

    The new parking facility should precede the library development.

    The conceptual estimate of probable cost for the project is **approximately $10,062,500.** This figure includes construction costs plus soft costs related to design, project management, contingencies, and public financing.

15. Current parking data and future projections for scenarios 1 and 2 indicate that the Blue Ramp (401 spaces) could be removed from service and the Yellow Ramp could absorb any displaced parking demand. However, projections for scenarios 3, 4 and 5 indicate that new public parking supply would be needed to serve Zone C, if all assumptions come to fruition.

PRELIMINARY BUDGET CONSIDERATIONS AND TIMELINE

2015 – $250,000 (PHASE 1)

- Prepare Specifications, the RFP and obtain bids for parking access and revenue control equipment in the Green, Yellow and Red ramps (ready to implement in 2016)
- Develop Public Parking Marketing Program, Parking Information Signage / Branding / Website Enhancements (improve community perception and awareness of public parking options and services).
- Improve Pedestrian Walkability and Connectivity near the PAC, along West Johnston Street and Green Ramp (sidewalk repairs, crosswalk, lighting, landscape, etc.)

2016 – $1,000,000 (PHASE 2A)

- Implement Parking Access and Revenue Controls Upgrade in three (3) Ramps (Pay-on-Exit, Pay by CC/Debit/Cash, Hotel Key Card Compatibility, etc.)
- Implement) Pay-by-Cell Application for downtown on-street meters. Pay-by-Cell can be implemented without upgrading the current parking meters.
- Implement Single Space Digital Smart Meters w/ Credit Card/Debit Card/Coin Payment Options along College Avenue.

2016 –BUDGET $4,000,000 (PHASE 2B)

- Soldier Square Replacement Design
- Surface Parking Lot Improvements
- Phase 3 On-Street Meter Upgrade along Peripheral Streets

2017 – BUDGET $500,000 (PHASE 3)

- Planning and Site Preparation for Soldier Square Replacement
- Signage and Potential Parker Relocation Costs
- Consulting / Professional Service Fees

2018 - $10,000,000 (PHASE 4)

- Construction of 500-space parking ramp in Zone D

2019 – BUDGET $3,000,000 (PHASE 5)

- Blue Ramp Demolition
- Costs for demo and site improvements = $3,000,000 based on 2014 Blue Ramp Deconstruction Study by Hoffman

INTRODUCTION

In anticipation of continued growth in its downtown, the City of Appleton desires to proactively plan to meet its parking needs in support of economic development. There are a number of proposed development projects, including a new Public Library, a potential relocated City Hall, and an Exhibition Center along with anticipated future unknown development projects. These projects are expected to redistribute existing demand and generate new demand for public parking. In addition, the proposed projects are anticipated to stimulate the development of businesses that would create their own additional demand for parking.

The City's Blue Ramp and the privately-owned Soldier Square Ramp (YMCA Ramp) are reaching the end of their useful lives and will be removed from service within the next five years. The City is anticipating the need to replace all or some of the lost parking capacity in a way that is rational, economical, and financially sustainable. This report provides an informed analysis of the current and future parking needs along with recommendations for improving the overall delivery of public parking services.

SCOPE OF SERVICES

Walker's methodology and scope of services for developing recommendations include five key tasks.

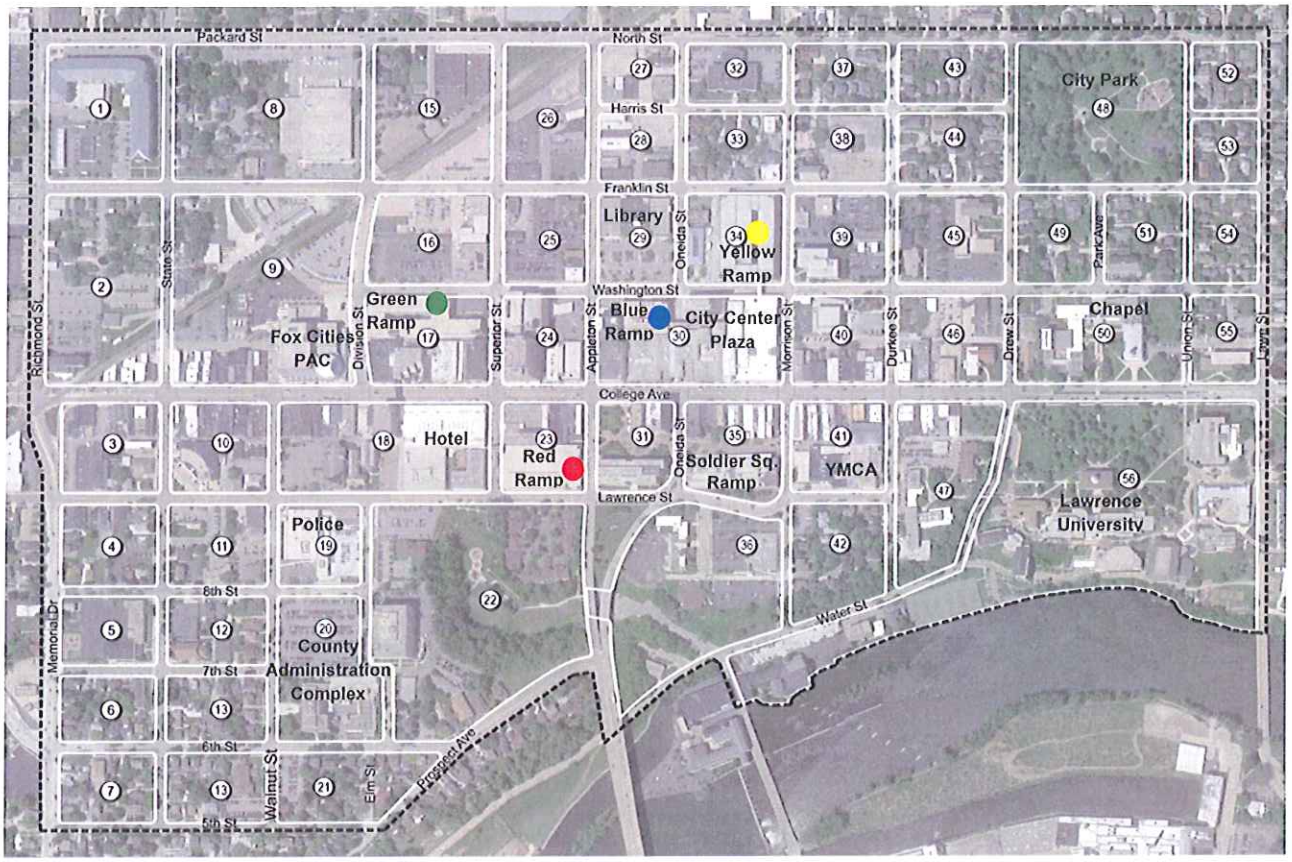
1. Stakeholder Meetings
2. Parking Supply/Demand Analysis
3. Parking Alternatives Analysis
4. Review of Parking Policies and Practices
5. Financial Plan

STUDY AREA

The study area is defined for the purpose of this analysis as the geographical area generally bound by Packard Street and North Street to the north; the Fox River, Prospect Avenue and 5th Street to the south; Lawe Street to the east; and Memorial Drive and Richmond Street to the west. The 56-block study area represents two market components, one from which the majority of existing and potential parking patrons will be drawn, and another in which the primary parking resources are located. This purposeful configuration encompasses the wide variety of land uses and captures the unique parking characteristics within downtown Appleton.

The study area is presented in the following exhibit.

Exhibit 1: Study Area



Legend - Base Map
- Study Area
- Block Numbers

NORTH

Source: Study Area provided by the City of Appleton; exhibit prepared by Walker Parking Consultants

STAKEHOLDER ENGAGEMENT

Walker representatives facilitated four focus groups over a two-day period in August 2014 and held individual meetings with twenty local stakeholders. In total, Walker met with forty-five informed stakeholders to discuss ideas and recommendations for enhancing the public parking system. The meetings included a diverse representation of downtown stakeholders with unique interest and perceptions. The common themes shared by the stakeholders are summarized in the following exhibit, by subject and not in any priority order.

Exhibit 2: Summary of Stakeholder Feedback

	Subject	Comment
1	Connectivity / Walkability	Downtown Appleton, by design, is a walkable environment with many on-street, surface lot and ramp parking options. Any future parking plans should leverage the current pedestrian connectors and walkability of Downtown Appleton.
2	Connectivity / Walkability	Sidewalks, street lighting, security phones, security presence, and on-street time limits all impact where people are willing to park in downtown Appleton.
3	Public Investment	Any downtown parking plan should maximize the use of existing parking resources before investing in new and costly parking ramps.
4	Public Investment	The City should explore opportunities for public/private partnerships and the integration of mixed uses when building new parking ramps.
5	Parking Adequacy	People often form perceptions that parking is inadequate based on special event conditions or on-street parking conditions in a limited geographic area (1 block). These perceptions do not align with actual parking availability in the downtown area.
6	Parking Adequacy	Appleton does not have a shortage of parking spaces. The real challenge is to improve the factors that impact user perceptions such as lighting, walkways, security, and payment options.
7	Parking Adequacy	Parking is adequate north of College Avenue. If the new Public Library and Exhibition Center are built south of College Avenue, and the YMCA Ramp is removed, then replacement parking will likely be required to adequately serve the existing and new land uses in that area.
8	Off-Street Ramps	Ramp cleanliness, lighting, and security impact perceptions and the wiliness to park in a public ramp. Paint ramp interiors white to help illuminate the facilities and upgrade the lighting.
9	Off-Street Ramps	Increase the payment options to improve the customer service at all public parking ramps.
10	Off-Street Ramps	Change the pay-on-entry system to a pay-on-exit system and offer cash/ credit card / debit card payment options.
11	Off-Street Ramps	Use pricing to encourage long-term parking off-street and short-term parking on-street. Offer discounted rates for rooftop parking to offer more economic choices for downtown employees.
12	Off-Street Ramps	If the Blue Ramp supply is replaced, consider building two smaller ramps to serve a larger area of downtown, rather than one larger ramp that may only benefit a limited area.
13	Off-Street Ramps	Eliminate reserved parking spaces in all public parking ramps. Promote equal access to the general public. The public parking system should model sustainable practices.
14	On-Street	On-street Meter Technology – Offer credit card capable meters in downtown.
15	On-Street	Maintain consistent enforcement hours for all on-street meters. 9:00am – 6:00pm, Mon.-Sat.
16	On-Street	Consider increasing the on-street meter time limits from 2 hours to 3 hours. Let patrons decide how long they want to stay.

	Subject	Comment
17	On-Street	Parking meters are needed in downtown to promote turnover and keep employees out of on-street spaces that are intended for visitors.
18	On-Street	The multi-space meters pilot program, in Soldiers Square, should be discontinued and replaced with meters that offer credit card payment options.
19	Enforcement	Offer an initial courtesy ticket, especially for out-of-town visitors then escalate the fines as additional tickets are issued to the same person. Same as current city citation policy.
20	Enforcement	Implement a downtown parking ambassador program that focuses more on customer service and education, and less on citation enforcement.
21	Enforcement	Provide consistent on-street enforcement presence in the neighborhoods surrounding Lawrence University.
22	Enforcement	Parking enforcement is necessary to maintain downtown public access.
23	Programs	Businesses would like the opportunity to offer parking validations to customers. Some businesses currently offer to pay meters for patrons and visitors, or $5 tickets.
24	Programs	Market and brand the public parking system to educate and communicate the available parking options on-street and in the ramps.
25	Programs	Offer a local mobile application with an interactive parking map. May use a third-party parking mobile application provider or could partner with Lawrence University students to develop a local mobile interface.
26	Programs	Offer lodging guests the ability to pay for parking upon check-in and use room key card to access the public parking ramps. The $2 daily fee is not a barrier for guests; rather the inability to prepay or pay with credit card is a challenge. Guest also expect in/out privileges if they can prepay upon check-in.
27	Programs	Develop special event parking strategies for small, medium and large events. Communicate these strategies with the community and coordinate implementation with downtown businesses, venues and government agencies.
28	Programs	Offer electric vehicle charging stations in all public parking ramps to encourage more environmentally sustainable practices in the community.
29	Planning	Plan future parking policies and development to support a park once strategy for downtown visitors, residence and employees. Park their car once and walk to different destinations.
30	Planning	The City should always consider building structured parking instead of surface parking in the downtown area to promote high density development. Build underground parking, if feasible.
31	Planning	The City should consider connecting any new parking ramps to buildings using elevated pedestrian walkways.
32	Planning	Implement a bike share program, offer bike storage in parking ramps, and support other alternatives to driving and parking in downtown Appleton.
33	Planning	Adding more parking downtown encourages more people to drive and not walk, bike or ride-share. Consider only replacing the parking ramps that are removed.
34	Planning	Ensure that all new parking improvements are ADA compliant.
35	Planning	Any new parking ramps should be architecturally interesting and enhance the downtown landscape. The antithesis of all current parking ramps in downtown Appleton.

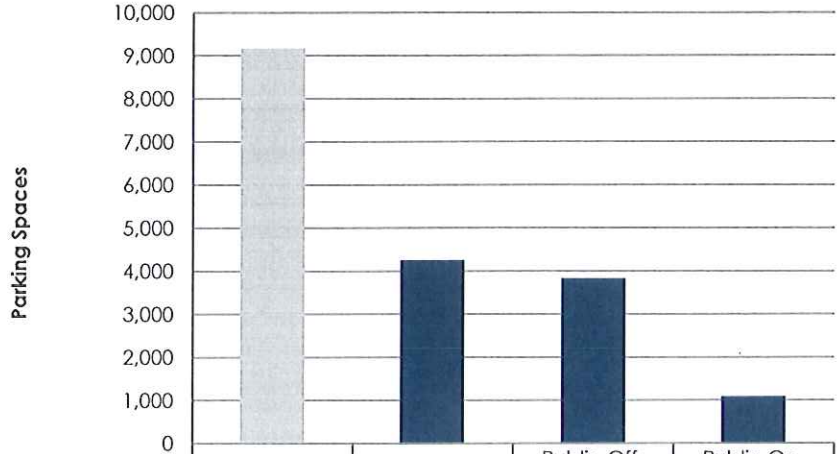
CURRENT PARKING CONDITIONS

Parking occupancy conditions were recorded Wednesday, October 15th, with parking demand recorded at 8:00 am, 11:00 am (the late morning peak), 2:00 pm (the early afternoon peak), and 7:00 pm. Additional observation periods included Wednesday, October 22nd and Wednesday, October 29th. The days and times were selected based on our experience with typical peak parking patterns in a busy government, commercial retail, office and academic center. In our experience the late morning and early afternoons typically represent peak demand due to the significant presence of downtown employees overlapping with the beginning or end of lunch time, when downtowns typically receive an influx of diners and others coming into downtown for business or shopping during their lunch time break.

PARKING INVENTORY

A total parking inventory of **9,178± parking spaces** are located within the 56-block study area. The allocation of parking supply is important to understand when considering long-term strategies that aim to improve access to downtown. Approximately 8,087± or 88% of spaces are located off-street and 1,091± or 12% of spaces are located on-street in time restricted or metered areas. Approximately 4,923± or 54% of the total supply is designated as public and open to all user groups, while the remaining 4,255± or 46% of all parking supply is designated for private use with limited or restricted general public access. In locations where parking spaces were unmarked on-street and in surface lots, the estimated capacities were determined based on industry standard parking space measurements.

Exhibit 3: Parking Supply Allocation



	Total Supply	Private	Public Off-Street	Public On-Street
Parking Supply	9,178	4,255	3,832	1,091
Percent of Total	100%	46%	42%	12%

- The City controls 54% of the downtown parking supply (Public Off-Street + On-Street).
- The distribution of parking supply by accessibility (public vs. private) is within normal standards when compared to similar size cities.
- Perceptions of downtown parking adequacy, organization, and safety are based on both public and private parking facilities.

Source: Walker Parking Consultants 2014

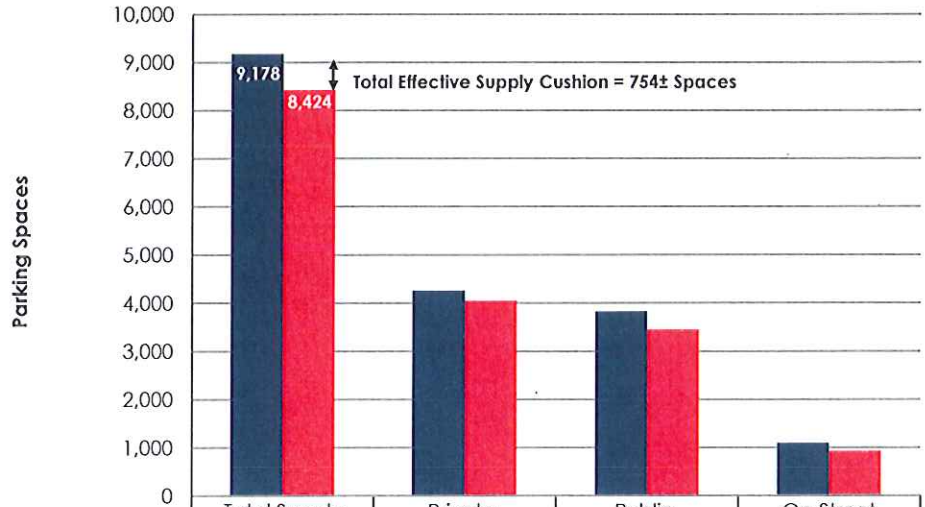
EFFECTIVE PARKING SUPPLY

When discussing the utilization of a parking system, it is important to consider the concept of *effective* supply. Effective supply is the maximum number of parking spaces that can realistically be used within a given parking system. An effective supply cushion helps to protect against the inevitable loss of spaces resulting from temporary disturbances such as construction, incorrectly parked cars, snow removal, etc. This cushion also helps to decrease traffic congestion by minimizing the amount of time visitors must spend looking for an empty space.

For on-street parking, Walker generally recommends an effective supply equal to 85% of the total capacity. This allows a sizable cushion of spaces so that traffic does not back up on surface streets. Off-street parking requires less of a cushion, generally 90% to 95% of the actual supply, depending on the type of facility and the anticipated user group. Smaller cushions are calculated for long-term parking locations because long-term parkers (ex: downtown employees) tend to be familiar with the facilities and spaces. These locations are not as subject to frequent turn over or unfamiliar parkers.

The study area includes an actual total of 9,178± parking spaces before any adjustments are made to account for an effective supply. After the effective supply factors are applied, the study area's effective supply is 8,424± spaces, as shown in the following exhibit.

Exhibit 4: Effective Parking Supply



	Total Supply	Private	Public	On-Street
Actual Supply	9,178	4,255	3,832	1,091
Effective Supply	8,424	4,045	3,449	930

Source: Walker Parking Consultants 2014
Private (Off-Street) Effective Supply Factor = 95%
Public (Off-Street) Effective Supply Factor = 90%
On-Street Effective Supply Factor = 85%
Weighted Average Effective Supply Factor = 92%

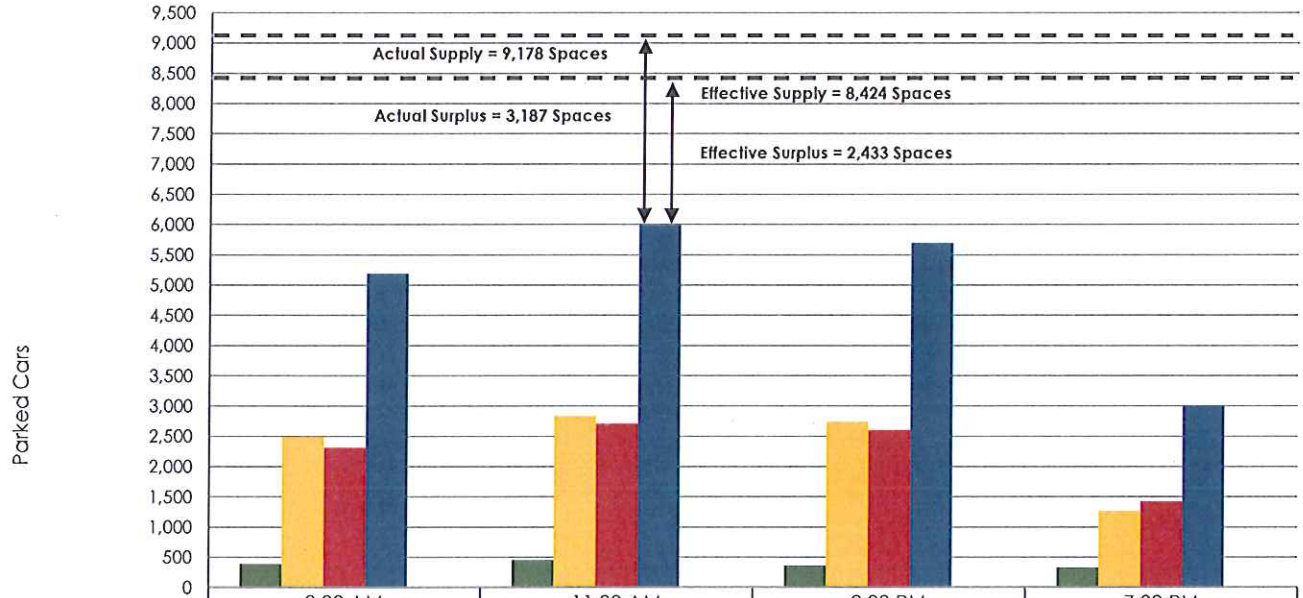
PARKING OCCUPANCY

The analysis of current parking conditions indicates that peak occupancy of **5,991± vehicles (65%)** occurs near the hour of 11:00 am on a typical Wednesday. Conversely, there are approximately **3,187± unoccupied parking spaces** in the study area during peak conditions.

Evening parking conditions are measurably lower with **3,014± parked vehicles (33%)** near the hour of 7:00 pm. Conversely, there are approximately **6,164± unoccupied parking spaces** in the study area during typical weekday evening conditions.

The documented parking occupancy is presented in the following exhibit.

Exhibit 5: Parking Supply Adequacy

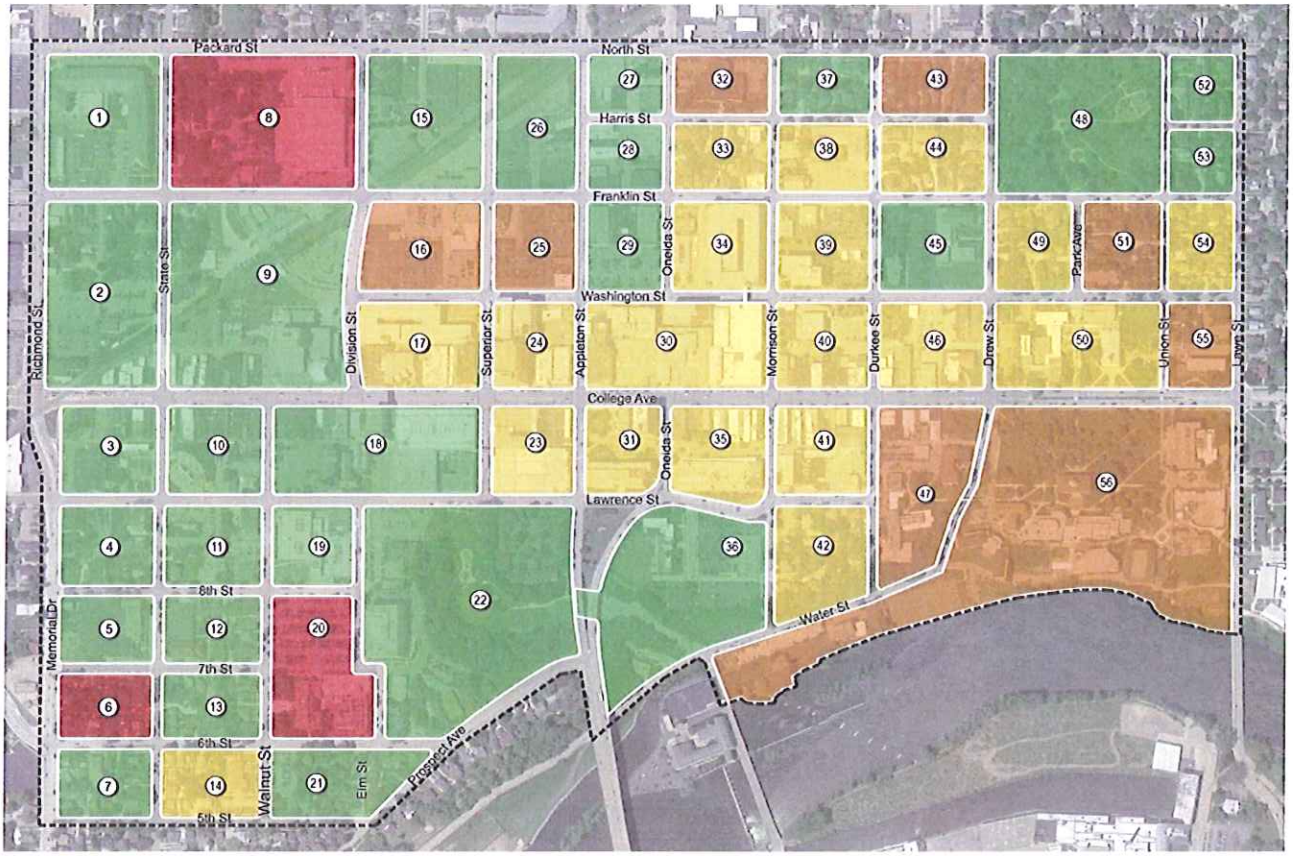


	8:00 AM	11:00 AM	2:00 PM	7:00 PM
On-Street	387	454	363	329
Off-Street Public	2,491	2,833	2,735	1,263
Off-Street Private	2,308	2,704	2,598	1,422
Total	5,186	5,991	5,696	3,014
Occupancy (%)	57%	65%	62%	33%

Source: Walker Parking Consultants
Note: Weather conditions during the observation period were a high of 52°F and low of 47 °F, and generally overcast.

Although the overall parking conditions indicate adequate supply exists, there are specific city blocks and streets that routinely exhibit more intense parking utilization patterns. The areas with more intense parking demand can shape overall perceptions of parking adequacy for the entire study area. Heat maps indicating the observed parking occupancy levels by block and at the designated intervals are presented in the next four exhibits. This information is intended to help communicate the local parking characteristics during a typical weekday.

Exhibit 6: Weekday Parking Conditions - 8:00 am



Legend - Occupancy

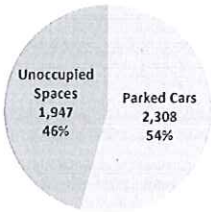
- Study Area
- Block Numbers
- NORTH
- ≤ 59%
- 60-69%
- 70-84%
- ≥ 85%

Observations

Total Parking Supply

Public Off-Street Supply

Private Off-Street Supply



On-Street Supply

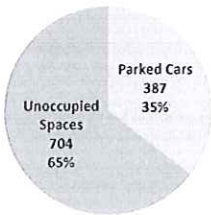
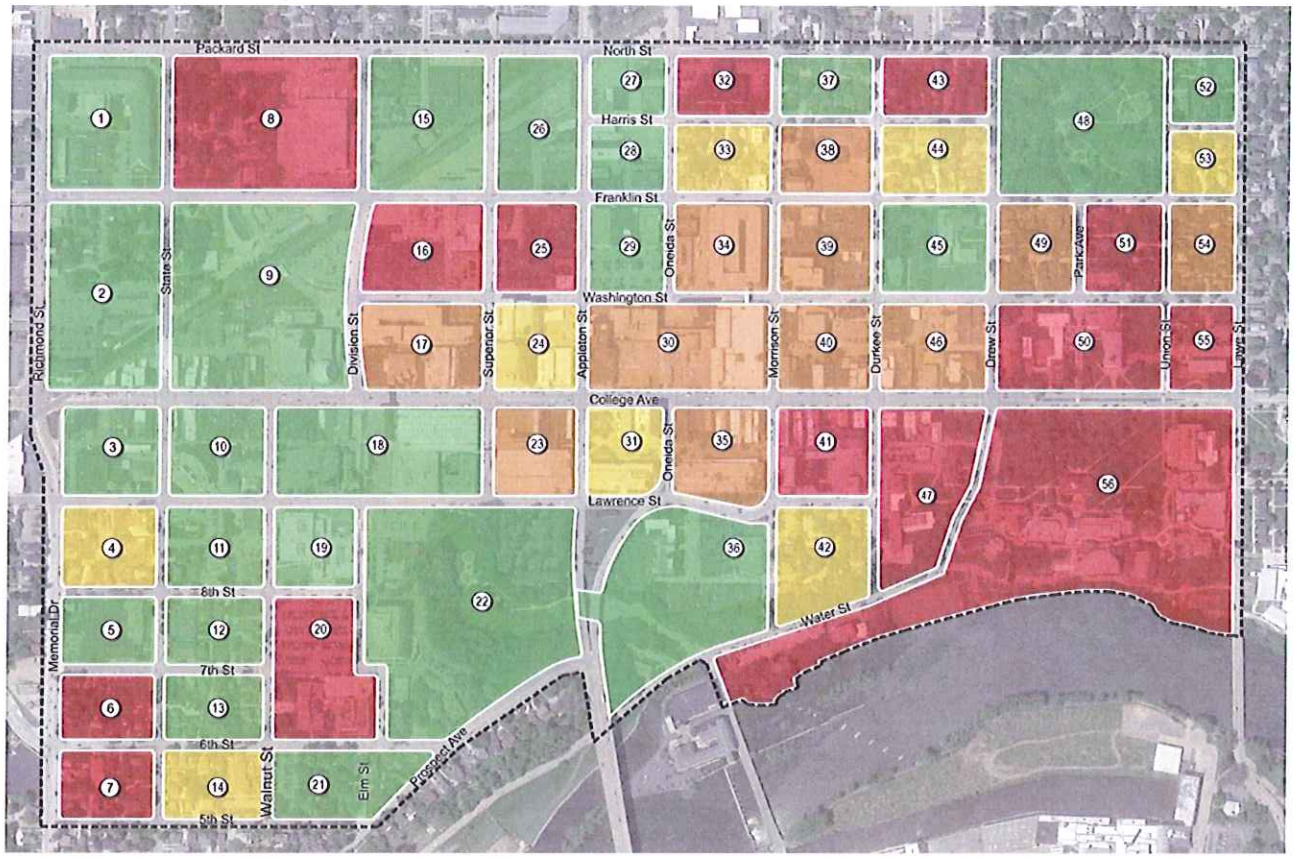


Exhibit 7: Weekday Parking Conditions - 11:00 am

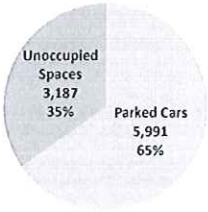


Legend - Occupancy

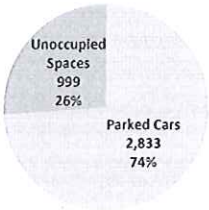
- Study Area
- Block Numbers
- NORTH
- ≤ 59%
- 60-69%
- 70-84%
- ≥ 85%

Observations

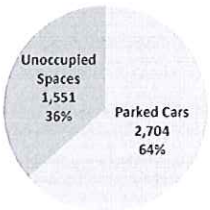
Total Parking Supply



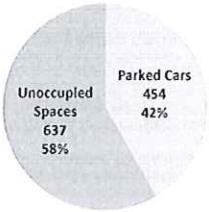
Public Off-Street Supply



Private Off-Street Supply

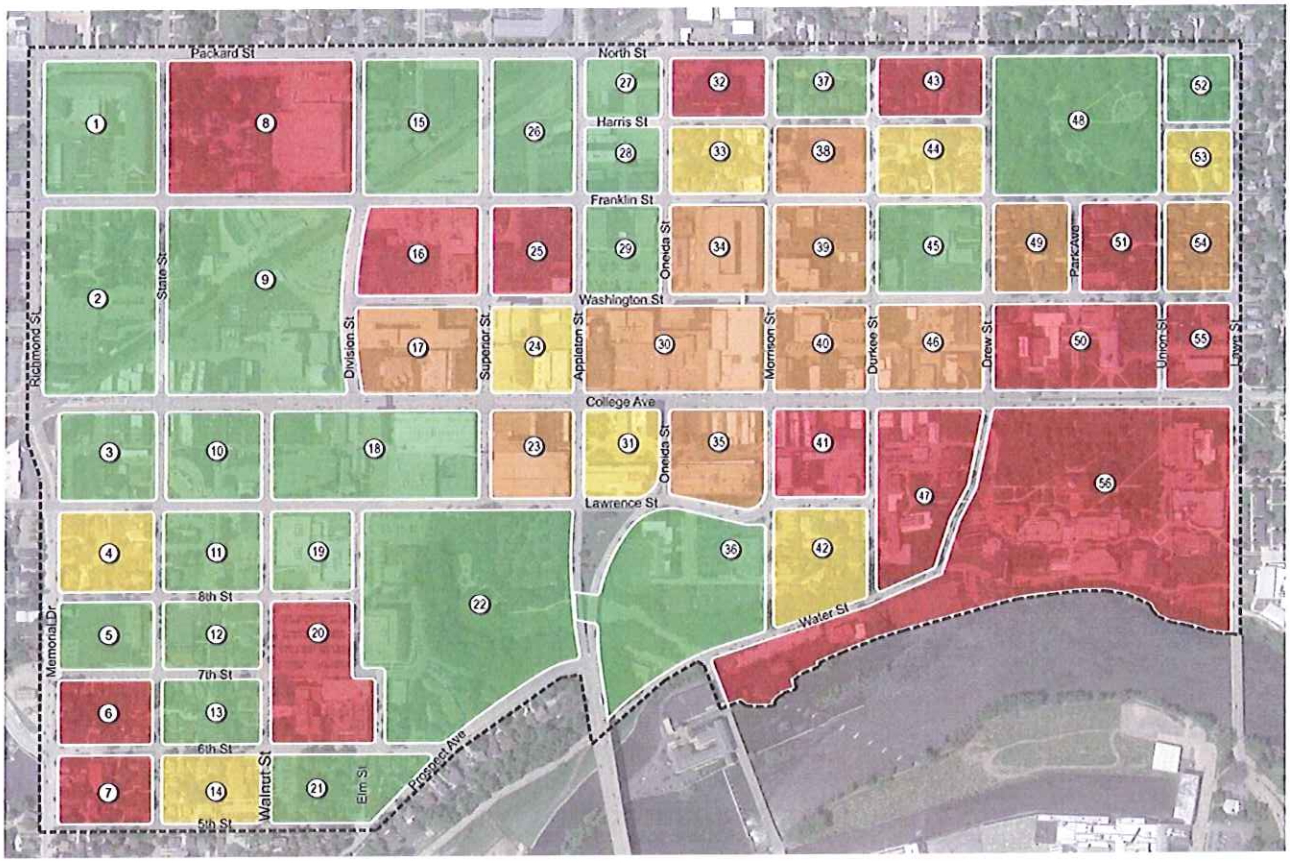


On-Street Supply



- Peak parking demand patterns coincide with office, restaurant and university demand characteristics

Exhibit 8: Weekday Parking Conditions - 2:00 pm

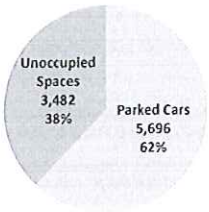


Legend - Occupancy

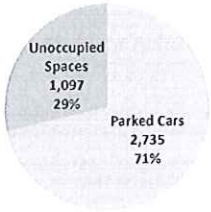
- Study Area
- Block Numbers
- NORTH
- ≤ 59%
- 60-69%
- 70-84%
- ≥ 85%

Observations

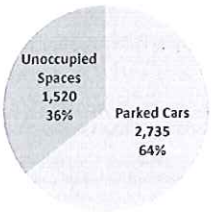
Total Parking Supply



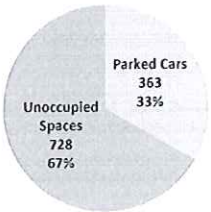
Public Off-Street Supply



Private Off-Street Supply



On-Street Supply



- Marginal decrease in total demand from peak conditions at 11:00 am
- Similar demand allocation as peak conditions at 11:00 am

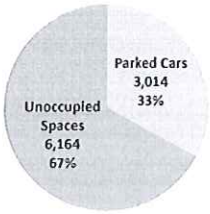
Exhibit 9: Weekday Evening Parking Conditions – 7:00 pm

Legend - Occupancy

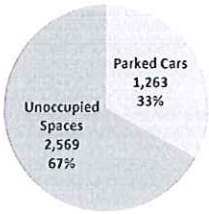
- Study Area
- Block Numbers
- NORTH
- ≤ 59%
- 60-69%
- 70-84%
- ≥ 85%

Observations

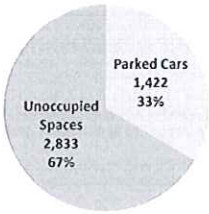
Total Parking Supply



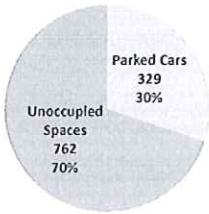
Public Off-Street Supply



Private Off-Street Supply



On-Street Supply



- On-street parking demand - shift from central to west College Avenue
- Lawrence University parking demand remained above 85%
- Public parking ramps decreased below 50% occupancy
- YMCA evening activity was reflected in the surrounding parking demand

PARKING ADEQUACY

The observed peak parking occupancy was compared to the actual and effective supply calculations to determine the current parking adequacy during typical weekday conditions.

The parking adequacy for the total study area is summarized and presented in the following exhibit.

Exhibit 10: Current Adequacy

Type	Actual Supply	Effective Supply Factor	Effective Supply	Peak Weekday Occupancy 11:00 AM	Occupancy (%)	Actual Surplus	Effective Surplus
Public Off-Street	3,832	90%	3,449	2,833	74%	999	616
Private Off-Street	4,255	95%	4,045	2,704	64%	1,551	1,341
On-Street	1,091	85%	930	454	42%	637	476
Total	9,178	92%	8,424	5,991	65%	3,187	2,433

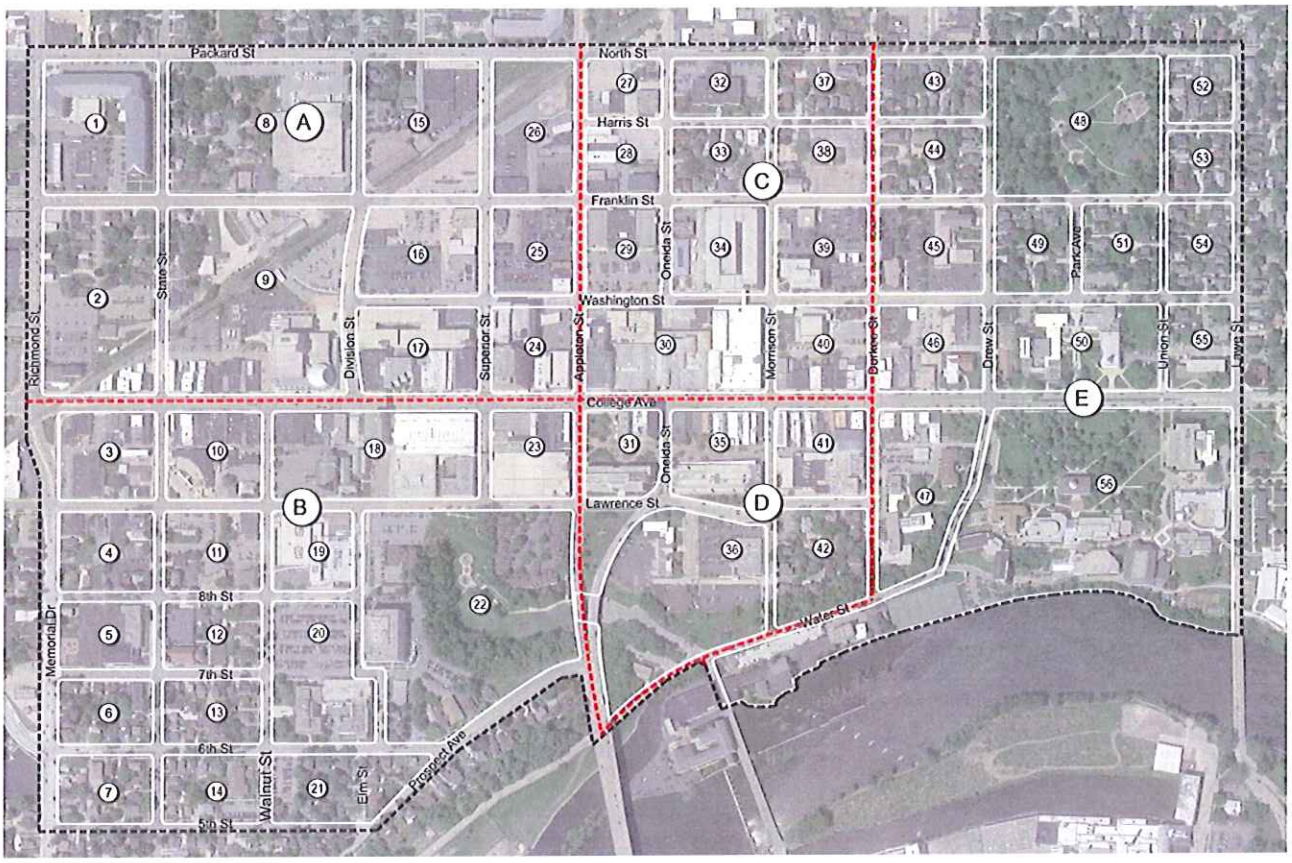
Source: Walker Parking Consultants 2014

The data indicates a need for strategic management of public on- and off-street parking that starts with modifications to current parking policies and practices. The challenge before the City is to encourage a change in parking behavior by providing choices, clear policies, and improved delivery of parking services. Parking is experiential and everyone forms individual perceptions of parking conditions based on their unique expectations and experiences. It is our professional opinion that the lack of supply is not the real parking issue; rather the real issue is a lack of access to acceptable proximate supply and knowledge of parking options in downtown Appleton. Recommendations for improving access to supply and improving the overall delivery of parking services will be addressed in the following sections of this report.

ZONE ANALYSIS

The previous section of this report provided an overview of the current parking conditions in downtown Appleton. The data shows an operating surplus during peak weekday conditions in public off-street, private off-street and on-street supply. To further analyze the local market conditions and assess adequacy, the study area is divided into five zones (A, B, C, D and E). The study area zones are provided in the following exhibit.

Exhibit 11: Study Area – Zone Analysis



Legend - Occupancy
- Study Area
- Block Numbers
- Zones Borders
- Zones

NORTH

Source: Walker Parking Consultants 2014

Exhibit 12: Parking Adequacy by Zone

ZONE A

Type	Actual Supply	Effective Supply Factor	Effective Supply	Peak Weekday Occupancy 11:00 AM	Occupancy (%)	Actual Surplus	Effective Surplus
Public Off-Street	808	90%	727	647	80%	161	80
Private Off-Street	1,505	95%	1,430	749	50%	756	681
On-Street	185	85%	157	41	22%	144	116
Total	2,498	93%	2,314	1,437	58%	1,061	877

ZONE B

Type	Actual Supply	Effective Supply Factor	Effective Supply	Peak Weekday Occupancy 11:00 AM	Occupancy (%)	Actual Surplus	Effective Surplus
Public Off-Street	793	90%	714	563	71%	230	151
Private Off-Street	1,387	95%	1,319	1,007	73%	380	312
On-Street	364	85%	311	92	25%	272	219
Total	2,544	92%	2,344	1,662	65%	882	682

ZONE C

Type	Actual Supply	Effective Supply Factor	Effective Supply	Peak Weekday Occupancy 11:00 AM	Occupancy (%)	Actual Surplus	Effective Surplus
Public Off-Street	1,745	90%	1,571	1,276	73%	469	295
Private Off-Street	422	95%	401	286	68%	136	115
On-Street	219	85%	188	104	47%	115	84
Total	2,386	91%	2,160	1,666	70%	720	494

ZONE D

Type	Actual Supply	Effective Supply Factor	Effective Supply	Peak Weekday Occupancy 11:00 AM	Occupancy (%)	Actual Surplus	Effective Surplus
Public Off-Street	486	90%	437	347	71%	139	90
Private Off-Street	238	95%	226	92	39%	146	134
On-Street	113	85%	96	70	62%	43	26
Total	837	91%	759	509	61%	328	250

ZONE E

Type	Actual Supply	Effective Supply Factor	Effective Supply	Peak Weekday Occupancy 11:00 AM	Occupancy (%)	Actual Surplus	Effective Surplus
Public Off-Street	0	90%	0	0	0%	0	0
Private Off-Street	678	95%	645	561	83%	117	84
On-Street	210	85%	178	141	67%	69	37
Total	888	93%	823	702	79%	186	121

CONCLUSION

- While each zone exhibits unique parking demand patterns and levels of adequacy, all zones have unoccupied parking supply with peak occupancy rates that range from 58 percent (Zone A) to 79 percent (Zone E). All zones have a parking surplus.

FUTURE PARKING CONDITIONS

The methodology for assessing the future parking conditions in downtown Appleton incorporates assumptions with regard to future market conditions, local development plans, and public ramp deconstruction. At this time, there are several possible development options under consideration by the Appleton community. While public parking is an important consideration for all the future development options, public parking plans should not lead community development decisions. Rather, the broader community goals and plans for downtown should be supported by any proposed parking strategy. Therefore, to prepare the City with information on parking options that respond to possible future development, this planning study includes future market assumptions organized into five (5) scenarios. The purpose for evaluating future parking needs through the lens of multiple scenarios is to provide the City with a frame of reference for determining possible outcomes. A description of each scenario is presented in the following exhibit.

Exhibit 13: Future Parking Planning Scenarios

Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Base Conditions • Current Parking Conditions (As Is) • No organic market growth	**Base Conditions** • Current Parking Conditions (As Is) • Organic market growth of 10%	**Base Conditions** • Current Parking Conditions (As Is) • Organic market growth of 10%	**Base Conditions** • Current Parking Conditions (As Is) • Organic market growth of 10%	**Base Conditions** • Current Parking Conditions (As Is) • Organic market growth of 10%
Anticipated Loss of Parking Supply • Blue Ramp Removal (401 Spaces) • Soldier Square Ramp Removal (450 Spaces)	**Anticipated Loss of Parking Supply** • Blue Ramp Removal (401 Spaces) • Soldier Square Ramp Removal (450 Space)	**Anticipated Loss of Parking Supply** • Blue Ramp Removal (401 Spaces) • Soldier Square Ramp Removal (450 Spaces)	**Anticipated Loss of Parking Supply** • Blue Ramp Removal (401 Spaces) • Soldier Square Ramp Removal (450 Spaces)	**Anticipated Loss of Parking Supply** • Blue Ramp Removal (401 Spaces) • Soldier Square Ramp Removal (450 Spaces)
Potential New Sources of Demand • No New Public Library • No City Hall Relocation • No Exhibition Center	**Potential New Sources of Demand** • No New Public Library • No City Hall Relocation • No Exhibition Center	**Potential New Sources of Demand** • Expansion of Public Library at Current Site (120,688 SF) • No City Hall Relocation • New Exhibition Center at County Lot Site (31,500 SF)	**Potential New Sources of Demand** • New Public Library at Fox River Bluff Site (120,688 SF) • City Hall Relocation to Current Public Library Building • City Hall Vacated Space Absorption – High Density Tenant (400 Employees) • New Exhibition Center at County Lot Site (31,500 SF)	**Potential New Sources of Demand** • New Public Library at Post Crescent Site (120,688 SF) • Library Vacated Space Absorption – High Density Tenant (400 Employees) • No City Hall Relocation • New Exhibition Center at County Lot Site (31,500 SF)

Source: City of Appleton

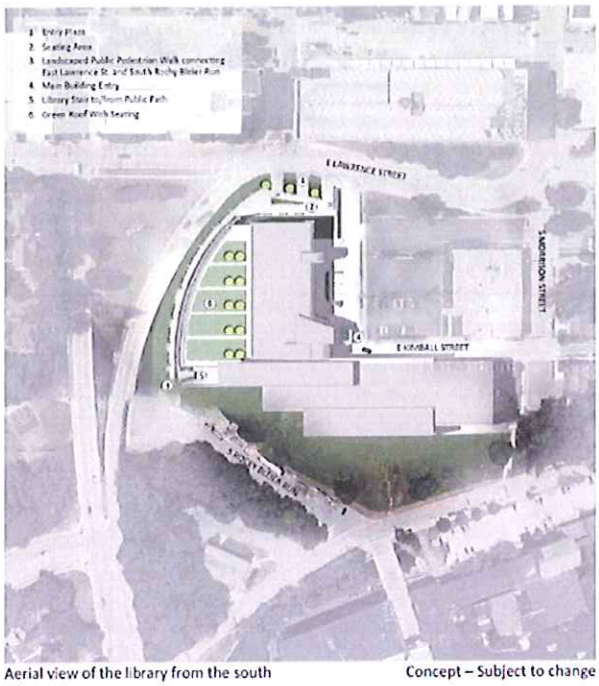
ORGANIC MARKET GROWTH

For the purpose of this analysis, organic market growth refers to the growth in demand for existing land uses or business services. Expressed another way, organic market growth is the internal growth or the growth from existing businesses—not from new businesses entering the market or new development of vacant land or absorption of vacant commercial building space. In scenarios 2, 3 and 4, Walker applies a 10% organic growth factor. The assumption of a 10% increase in parked cars during peak weekday conditions represents possible growth from existing businesses.

PROPOSED NEW PUBLIC LIBRARY

The proposed site for the new Appleton Public Library forms an "L" shape that fits within the curve of Oneida Street as it enters from the South, and borders the bluff that overlooks the riverfront below[1]. Current conceptual plans include 120,688 square feet of library and program space. The conceptual site layout for the proposed project is presented in the following exhibit.

Exhibit 14: Proposed Public Library Conceptual Site Layout



Aerial view of the library from the south — Concept – Subject to change

Considerations

- Library programming impacts parking needs
- Peak library activity typically occurs on Sundays
- Peak coincides with Sunday free parking
- Diverse population of library patrons and parking needs
- Proximate parking options are required
- Library is a "third place" for community gathering
- Plans include a 300 seat lecture hall and community meeting rooms
- Site is proximate to YMCA – Similar market
- Site proximate to Soldier Square Ramp (YMCA Ramp)
- Site proximate to Lawrence University
- 33 percent larger than current library facility
- Current library peak parking demand is 50± spaces

Source(S): City of Appleton; Walker Parking Consultants

[1] Engberg Anderson; August 25, 2014, Appleton Public Library - Library Needs Assessment, Site Evaluation and Prefunding Schematic Design Final Report

CURRENT LIBRARY OPERATING DATA

The current Public Library building is approximately 86,000 square feet with 94 public parking spaces located on-site (1.09 spaces / 1,000 square feet). The observed peak weekday parking occupancy is 53 percent or approximately 50 parked vehicles (0.61 spaces/ 1,000 square feet).

Many variables impact parking demand generated by a downtown public library. The programing of events, classes, and meetings along with the community interests and the immediate surroundings can drive demand patterns. We understand the proposed new Appleton Public Library would likely offer similar programming as the current library, although with a greater potential capacity. Therefore, the projected parking demand for the proposed library is based on a review of historical operating data and the assessment of new facility space.

The following are operating figures provided by the Appleton Public Library for calendar year 2013.

Exhibit 15: Current Appleton Public Library

Operating Information

- 40 full-time and part-time staff working at any given time plus a large pool of volunteers
- 95,000± registered borrowers
- 42,311± people attended library programs
- 1,376,000± items checked out
- 82,000 computer sessions
- 1,600± visitors per day
- 3,000± visitors during peak summer day
- 4,000± community meetings held

Source: Appleton Public Library

LIBRARY PARKING PLANNING

Public library parking needs are a reflection of the diversity of patrons and facility programs. The unique operating dynamics require proximate parking that is relatively easy to locate and use. Important elements of a library parking plan include clear signage and passive safety measures, such as lighting and well-defined pedestrian walkways.

In addition, library parking demand characteristics are unique when compared to other downtown destinations. Based on Walker's experience, the *drive ratios for library patrons are typically low,* due to drop-offs, public transit, biking and walking. The *average occupancy per parked vehicle is typically high* due to carpooling, and families arriving together.

Walker prepared parking demand projections for two operating scenarios; 1) a typical program day when the lecture hall is not in use, and 2) a typical program day when the lecture hall is in use.

The projected parking demand for each scenario is summarized in the following exhibit.

Exhibit 16: Projected Library Parking Demand

Non-Event (Typical Weekday)						
	Units	Base Ratio	Drive Ratio	Presence	Adjusted Ratio	Projected Demand
Employee	120,688 SF	0.45	0.95	0.75	0.32	39
Visitors	120,688 SF	4.50	0.75	0.20	0.68	81
Total						**120**
Event (Evenings & Weekends)						
	Units	Base Ratio	Drive Ratio	Presence	Adjusted Ratio	Projected Demand
Lecture Hall	300 Seats	0.75	0.85	0.90	0.57	172
Visitors/Employees	120,688 SF	3.50	0.80	0.20	0.56	68
Total						**240**

Source: Walker Parking Consultants 2014

CONCLUSION

- The proposed Public Library space is projected to need approximately 120± spaces to accommodate typical weekday parking needs when the lecture hall is not in use.

- The proposed lecture hall is anticipated to have programed events that primarily occur during the evenings and weekend days. Lecture hall events at 100 percent capacity are anticipated to generate a parking need for approximately 172± spaces. In addition to the lecture hall demand, the assumption is that normal library programs may be in operation, resulting in a combined need for approximately 240± spaces.

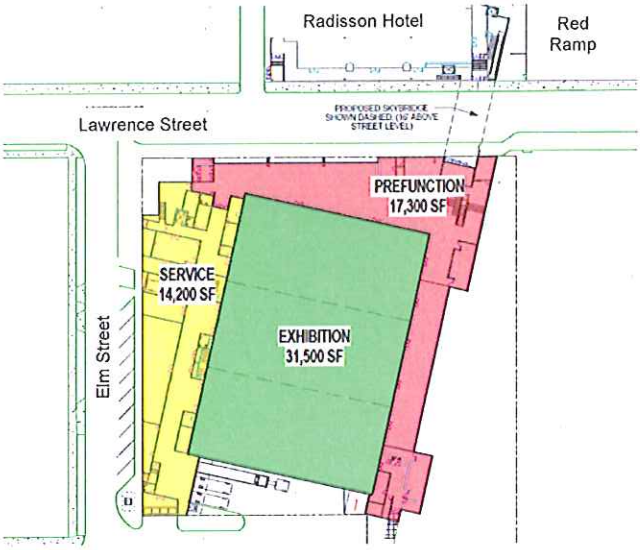
PROPOSED FOX CITIES EXHIBITION CENTER

The proposed site for the new Fox Cities Exhibition Center is the southeast corner of Elm Street and Lawrence Street, south of the Radisson Hotel[2]. The current conceptual plan includes approximately 31,500 square feet of contiguous exhibition space, 17,300 square feet of pre-function space, and 14,200 square feet of service space. The exhibition center would likely host conventions, conferences, meetings, banquets and receptions.

The conceptual site layout and parking planning considerations are presented in the following exhibit.

Conceptual Rendering of Proposed Fox Cities Exhibition Center

Exhibit 17: Proposed Exhibition Center Conceptual Site Layout



Considerations

- Conventions, conferences and meetings would likely occur weekdays during daytime hours
- Banquets and receptions would likely occur during evenings and weekends
- Weekday peak parking demand is projected to occur near the hour of 10:00AM
- Weekend and evening peak parking demand is projected to occur near the hour of 6:00PM.
- Plans include elevated pedestrian walkway connection to the Radisson Hotel, which connects to the Red Ramp (771-spaces)
- Exhibition patrons expect parking within a two to three block radius of event center
- Proposed site is two blocks from City-owned Red Ramp
- Proximate to on-street parking supply is located along Lawrence Street
- County conceptual parking plans include additional on-street parking to serve daytime County employee and visitor parking needs
- Additional on-street parking supply could serve Exhibition Center attendees during evening and weekend events

[2] City of Appleton 2014

EXHIBITION CENTER PARKING PLANNING

The anticipated demand for both weekdays and weekends is summarized in the following exhibits. The projected weekday demand peaks near the hour of 10:00AM and the weekend/evening demand peaks near the hour of 6:00PM.

Exhibit 18: Projected Exhibition Center Parking Demand

			Weekday Projected Demand				
Land Use	Unadjusted Demand	Month Adjustment	Pk Hr Adjustment 10:00 am	Non Captive Daytime	Drive Ratio Daytime	Projected Demand 10:00 am	Projected Demand 6:00 pm
Exhibition Center Guests	126	100%	100%	50%	90%	57	60
Employee	16	100%	100%	90%	85%	12	6
Total Parking Spaces Required	**142**					**69**	**66**

			Weekend Projected Demand				
Employee	Unadjusted Demand	Month Adjustment	Pk Hr Adjustment 10:00 am	Non Captive Daytime	Drive Ratio Daytime	Projected Demand 10:00 am	Projected Demand 6:00 pm
Exhibition Center Guests	142	100%	100%	50%	90%	64	71
Employee	16	100%	100%	90%	95%	14	6
Total Parking Spaces Required	**158**					**78**	**77**

Source: Walker Parking Consultants 2014, ITE Shared Parking Model

CONCLUSION

- Demand for approximately 69± parking spaces could be generated during a weekday daytime event and approximately 66± spaces during a weekday evening event.
- Demand for approximately 78± parking spaces could be generated during a weekend daytime event and approximately 77± during a weekend evening event.
- Exhibition Center parking demand projections are adjusted for attendees already in the study area and parked by applying a non-captive ratio. For example, hotel guests parking in the Red Ramp and attending an event are counted only once. The projected parking demand represents cars parked by event attendees who are not staying downtown.
- Nearby unoccupied parking spaces in the Red Ramp and on-street could accommodate projected peak parking needs for the proposed Exhibition Center.

PROPOSED CITY HALL RELOCATION

Plans are under consideration to possibly relocate City Hall from City Center West to the current Public Library building. The current library building would be renovated to accommodate approximately 157 employees. This may require displacement of up to 50 surface parking spaces located in the 98-space Library Lot. The proximity of the current City Hall to the proposed site would allow employees to continue to park in the Blue Ramp, until deconstructed, and in the Yellow Ramp long-term.

CONCLUSION

The parking demand for the City Hall is reported in the performance-based parking occupancy data previously shown in the Current Conditions section of this report. There are approximately 3,187 unoccupied parking spaces in downtown Appleton during peak weekday conditions. The new City Hall, if located in the current Public Library Building, would generate the same parking need as documented in the current conditions analysis. Walker does not project parking demand to exceed available supply if the City Hall is relocated to the current library site.

If City Hall is relocated, there is the possibility that the vacated office space in City Center West on floors 1, 5 and 6 would be occupied by a new tenant. For the purpose of this analysis, the assumption is a high-density tenant would occupy the vacated office space with up to 400 new employees. This would likely result in the reallocation of current demand, augmented by a material increase in daytime employee demand. As a result, Scenario 4 includes an increase in demand resulting from the potential absorption of office space in City Center West.

OUTAGAMIE COUNTY BUILDING

The Outagamie County Administration Complex, Justice Center, Youth and Family Services and the 227 Walnut Facility require access to parking supply during weekdays for employees, visitors and jurors. The County currently has 800± employees, up to 90± jurors, and up to 50± visitors present during peak weekday conditions. While the area parking supply is highly utilized during peak weekday conditions, a parking surplus exists. There are unoccupied on-street metered spaces for short-term visitors and unoccupied spaces available in the designated County employee surface lots. Representatives from the County confirmed Walker's market observations that current parking supply is adequate, although highly utilized. Any current localized parking challenges can be address through education, signage and proactive management.

The proposed Exhibition Center will displace the County's 103-space employee parking lot. The County and City are working together to develop a plan that replaces the displaced supply and provides additional parking to accommodate the County's future parking needs.

CONCLUSION

The current plan for the Exhibition Center shows the displacement of a 103-space County employee parking lot and adds approximately 10 new on-street parking spaces. The City and the County could mitigate the impact of displaced supply by increasing the on-street parking supply around the Outagamie County Administration Complex. However, supply alone will not address the local parking challenges. The City and Exhibition Center will need to coordinate event parking policies with the County to ensure parking demand is being proactively managed and enforced. Specifically, the City will need to implement a policy to mitigate use of on-street parking, in select areas, by Exhibition Center visitors during weekday events. This policy may include issuing on-street parking permits to County employees. The Red Ramp should be the primary parking locations for event attendees and the Green Ramp should be the secondary parking location.

Outagamie County is currently undergoing a 20-year space needs study. The parking capacity and needs for Zone B will need to be revisited upon completion of their space needs study.

ANTICIPATED CHANGES TO PARKING SUPPLY

The city-owned Blue Ramp (401-spaces) and YMCA-owned Soldier Square Ramp (450-spaces) are nearing the end of their useful lives and will likely be removed from service by 2020.

BLUE RAMP

The Blue Ramp was designed and constructed in 1963 and today is used primarily by City employees and downtown businesses located adjacent to the ramp. Walker documented 341 parked cars (85% occupancy) during peak weekday conditions. The ramp does not have parking access and revenue controls and uses windshield permits and meters to regulate use.

SOLDIER SQUARE RAMP

The Soldier Square Ramp was designed and constructed in 1967 and today is used primarily by YMCA members and nearby businesses. Standard YMCA memberships include one parking permit for the ramp and family memberships receive two permits. At present, up to 12,000 permits are outstanding for the 450-space ramp. It is a common practice for YMCA members to use their parking permits to access the Soldier Square Ramp when downtown for non-YMCA related visits. This practice, while within current regulations, presents an operating challenge and audit concern. This "free parking" induces demand for the ramp that may otherwise be satisfied by available on-street parking. If the ramp is removed, a replacement ramp will likely be equipped with parking access and revenue controls that allow for more proactive permit management.

The projected future parking adequacy is presented for each scenario and by zone in the next five exhibits.

Exhibit 19: **Scenario 1** – Future Parking Adequacy by Zone

	Current Conditions			Future Conditions				
Zone A	Supply	Occupancy	Adequacy	Supply +	Supply -	Adjusted Supply	New Demand	Projected Adequacy
Public Off-Street	808	647	161	0	0	808	0	161
Private Off-Street	1,505	749	756	0	0	1,505	0	756
On-Street	185	41	144	0	0	185	0	144
Sub-total	**2,498**	**1,437**	**1,061**	**0**	**0**	**2,498**	**0**	**1,061**
Zone B								
Public Off-Street	793	563	230	0	0	793	0	230
Private Off-Street	1,387	1,007	380	0	0	1,387	0	380
On-Street	364	92	272	0	0	364	0	272
Sub-total	**2,544**	**1,662**	**882**	**0**	**0**	**2,544**	**0**	**882**
Zone C								
Public Off-Street	1,745	1,226	519	0	(401)	1,344	0	118
Private Off-Street	422	286	136	0	0	422	0	136
On-Street	219	104	115	0	0	219	0	115
Sub-total	**2,386**	**1,616**	**770**	**0**	**(401)**	**1,985**	**0**	**369**
Zone D								
Public Off-Street	486	347	139	0	(450)	36	0	(311)
Private Off-Street	238	92	146	0	0	238	0	146
On-Street	113	70	43	0	0	113	0	43
Sub-total	**837**	**509**	**328**	**0**	**(450)**	**387**	**0**	**(122)**
Zone E								
Public Off-Street	0	0	0	0	0	0	0	0
Private Off-Street	678	561	117	0	0	678	0	117
On-Street	210	141	69	0	0	210	0	69
Sub-total	**888**	**702**	**186**	**0**	**0**	**888**	**0**	**186**
Total	**9,153**	**5,926**	**3,227**	**0**	**(851)**	**8,302**	**0**	**2,376**

CONCLUSION

- In Zone C, there is available parking supply during peak weekday conditions in the 1,250-space Yellow Ramp and on-street to accommodate the removal of the 401-space Blue Ramp. Based on the analysis of future parking conditions for Scenario 1, the City does not need to replace the parking supply that would be lost from the removal of the Blue Ramp in Zone C.

- In Zone D, there is a projected total deficit of 122± parking spaces when the 450-space Soldier Square Ramp is removed from service. However, the projected *public* deficit is approximately 311± spaces.

- Any new parking ramp in Zone D should be a mixed-use facility that, at minimum, should incorporate grade level retail/office.

- A new parking ramp in Zone D would serve the YMCA, nearby businesses, and Lawrence University.

- While projected parking adequacy may be positive in zones A, B, C, and E, there are localized parking improvements that should be considered for the purposes of improving the delivery of parking services and improving the overall access to downtown.

Exhibit 20: **Scenario 2** – Future Parking Adequacy by Zone

	Current Conditions			Future Conditions				
Zone A	Supply	Occupancy	Adequacy	Supply +	Supply -	Adjusted Supply	New Demand	Projected Adequacy
Public Off-Street	808	647	161	0	0	808	65	96
Private Off-Street	1,505	749	756	0	0	1,505	75	681
On-Street	185	41	144	0	0	185	4	140
Sub-total	**2,498**	**1,437**	**1,061**	**0**	**0**	**2,498**	**144**	**917**
Zone B								
Public Off-Street	793	563	230	0	0	793	56	174
Private Off-Street	1,387	1,007	380	0	0	1,387	101	279
On-Street	364	92	272	0	0	364	9	263
Sub-total	**2,544**	**1,662**	**882**	**0**	**0**	**2,544**	**166**	**716**
Zone C								
Public Off-Street	1,745	1,226	519	0	(401)	1,344	75	43
Private Off-Street	422	286	136	0	0	422	50	86
On-Street	219	104	115	0	0	219	37	78
Sub-total	**2,386**	**1,616**	**770**	**0**	**(401)**	**1,985**	**162**	**207**
Zone D								
Public Off-Street	486	347	139	0	(450)	36	35	(346)
Private Off-Street	238	92	146	0	0	238	9	137
On-Street	113	70	43	0	0	113	7	36
Sub-total	**837**	**509**	**328**	**0**	**(450)**	**387**	**51**	**(173)**
Zone E								
Public Off-Street	0	0	0	0	0	0	0	0
Private Off-Street	678	561	117	0	0	678	56	61
On-Street	210	141	69	0	0	210	14	55
Sub-total	**888**	**702**	**186**	**0**	**0**	**888**	**70**	**116**
Total	**9,153**	**5,926**	**3,227**	**0**	**(851)**	**8,302**	**593**	**1,783**

CONCLUSION

- The application of a 10% organic growth rate to current parking conditions, with the removal of the Blue Ramp and Soldier Square Ramp, results in an overall parking surplus of 1,783± spaces in the study area.
- In Zone C, even with a 10% increase in demand, there is a parking surplus during peak weekday conditions in the 1,250-space Yellow Ramp and on-street to accommodate the removal of the 401-space Blue Ramp. Based on the analysis of future parking conditions for Scenario 2, the City does not need to replace the parking supply that would be lost from the removal of the Blue Ramp in Zone C.
- In Zone D, there is a projected total deficit of 173± parking spaces, when the 450-space Soldier Square Ramp is removed from service and parking demand is increased by 10%. However, the projected *public* deficit is approximately 346± spaces.
- Any new parking ramp in Zone D should be a mixed-use facility that, at minimum, should incorporate grade level retail/office.
- A new parking ramp in Zone D could serve the YMCA, nearby businesses, and Lawrence University.
- While projected parking adequacy may be positive in zones A, B, C, and E, there are localized parking improvements that should be considered for the purposes of improving the delivery of parking services and improving the overall access to downtown.

Exhibit 21: **Scenario 3** – Future Parking Adequacy by Zone

	Current Conditions			Future Conditions				
Zone A	Supply	Occupancy	Adequacy	Supply +	Supply -	Adjusted Supply	New Demand	Projected Adequacy
Public Off-Street	808	647	161	0	0	808	65	96
Private Off-Street	1,505	749	756	0	0	1,505	75	681
On-Street	185	41	144	0	0	185	4	140
Sub-total	**2,498**	**1,437**	**1,061**	**0**	**0**	**2,498**	**144**	**917**
Zone B								
Public Off-Street	793	563	230	0	(103)	690	125	2
Private Off-Street	1,387	1,007	380	0	0	1,387	101	279
On-Street	364	92	272	10	0	374	9	273
Sub-total	**2,544**	**1,662**	**882**	**10**	**(103)**	**2,451**	**235**	**554**
Zone C								
Public Off-Street	1,745	1,226	519	0	(451)	1,294	243	(175)
Private Off-Street	422	286	136	0	0	422	29	107
On-Street	219	104	115	0	0	219	10	105
Sub-total	**2,386**	**1,616**	**770**	**0**	**(451)**	**1,935**	**282**	**37**
Zone D								
Public Off-Street	486	347	139	0	(450)	36	35	(346)
Private Off-Street	238	92	146	0	0	238	9	137
On-Street	113	70	43	0	0	113	7	36
Sub-total	**837**	**509**	**328**	**0**	**(450)**	**387**	**51**	**(173)**
Zone E								
Public Off-Street	0	0	0	0	0	0	0	0
Private Off-Street	678	561	117	0	0	678	56	61
On-Street	210	141	69	0	0	210	14	55
Sub-total	**888**	**702**	**186**	**0**	**0**	**888**	**70**	**116**
Total	**9,153**	**5,926**	**3,227**	**10**	**(1,004)**	**8,159**	**782**	**1,451**

CONCLUSION

- The application of a 10% organic growth rate to current parking conditions; the removal of the Bue Ramp and Soldier Square Ramp; the expansion of the Appleton Public Library at current location; and development of the Exhibition Center – results in an overall parking surplus of 1,451± spaces in the study area.

- In Zone B, there is a projected total surplus of 554± spaces. The projected weekday parking demand for the Exhibition Center could be accommodated by the Red Ramp and nearby on-street parking spaces. While not shown in this analysis, any additional on-street parking supply that could be added near the Outagamie County Administration Complex should be considered by the City. Also, increasing access to unoccupied private parking supply and sharing resources could improve employee parking conditions.

- In Zone C, there is a projected total surplus of 37± spaces. However, there is a projected deficit of 175± *public* parking spaces. If Scenario 3 assumptions come to fruition, the City may consider options for adding approximately 200± public parking spaces in Zone C.

- In Zone D, there is a projected deficit of total 173± parking spaces. However, there is a projected deficit of 346± *public* parking spaces. If Scenario 3 assumptions come to fruition, the City may consider partnering with the YMCA to replace the Soldier Square Ramp. A new parking ramp in Zone D would primarily serve the YMCA, nearby businesses, and Lawrence University.

- Any new parking ramps in Zones C and D should be mixed-use facilities that, at minimum, should incorporate grade level retail/office.

- Options for addressing future parking needs are presented in the following section.

Exhibit 22: **Scenario 4** – Future Parking Adequacy by Zone

	Current Conditions			Future Conditions				
Zone A	Supply	Occupancy	Adequacy	Supply +	Supply -	Adjusted Supply	New Demand	Projected Adequacy
Public Off-Street	808	647	161	0	0	808	65	96
Private Off-Street	1,505	749	756	0	0	1,505	75	681
On-Street	185	41	144	0	0	185	4	140
Sub-total	**2,498**	**1,437**	**1,061**	**0**	**0**	**2,498**	**144**	**917**
Zone B								
Public Off-Street	793	563	230	0	(103)	690	125	2
Private Off-Street	1,387	1,007	380	0	0	1,387	101	279
On-Street	364	92	272	10	0	374	9	273
Sub-total	**2,544**	**1,662**	**882**	**10**	**(103)**	**2,451**	**235**	**554**
Zone C								
Public Off-Street	1,745	1,226	519	0	(451)	1,294	473	(405)
Private Off-Street	422	286	136	0	0	422	29	107
On-Street	219	104	115	0	0	219	10	105
Sub-total	**2,386**	**1,616**	**770**	**0**	**(451)**	**1,935**	**512**	**(193)**
Zone D								
Public Off-Street	486	347	139	20	(450)	56	155	(446)
Private Off-Street	238	92	146	0	(132)	106	9	5
On-Street	113	70	43	0	(27)	86	7	9
Sub-total	**837**	**509**	**328**	**20**	**(609)**	**248**	**171**	**(432)**
Zone E								
Public Off-Street	0	0	0	0	0	0	0	0
Private Off-Street	678	561	117	0	0	678	56	61
On-Street	210	141	69	0	0	210	14	55
Sub-total	**888**	**702**	**186**	**0**	**0**	**888**	**70**	**116**
Total	**9,153**	**5,926**	**3,227**	**30**	**(1,163)**	**8,020**	**1,132**	**962**

CONCLUSION

- The application of a 10% organic growth rate to current parking conditions; the removal of the Blue Ramp and Soldier Square Ramp; development of the new Appleton Public Library at the Fox River Bluff site; relocation of City Hall to current Library building; high-density absorption of vacant City Hall space; and development of the Exhibition Center – results in an overall parking surplus of 962± spaces in the study area.

- In Zone C, there is a projected total deficit of 193± spaces, largely resulting from that assumption that 400 new employees would occupy office space currently used for City Hall. However, there is a projected deficit of 405± public spaces. If Scenario 4 assumptions come to fruition, the City may consider options for adding approximately 400± public parking spaces in Zone C.

- In Zone D, there is a projected total deficit of 432± parking spaces. However, there is a projected deficit of 446± public spaces. If Scenario 4 assumptions come to fruition, the City may consider partnering with the YMCA to replace the Soldier Square Ramp. A new parking ramp in Zone D would primarily serve the YMCA, nearby businesses, and Lawrence University, in addition to the new Library.

- Any new parking ramps in Zones C and D should be mixed-use facilities that, at minimum, should incorporate grade level retail/office.

- While the total projected parking adequacy in the study area may be positive, there are localized parking improvements that should be considered for the purposes of improving the overall delivery of parking services and access to downtown.

- Options for addressing future parking needs are presented in the following section.

Exhibit 23: **Scenario 5** – Future Parking Adequacy by Zone

	Current Conditions			Future Conditions				
Zone A	Supply	Occupancy	Adequacy	Supply +	Supply -	Adjusted Supply	New Demand	Projected Adequacy
Public Off-Street	808	647	161	30	0	838	185	6
Private Off-Street	1,505	749	756	0	(170)	1,335	75	511
On-Street	185	41	144	0	0	185	4	140
Sub-total	**2,498**	**1,437**	**1,061**	**30**	**(170)**	**2,358**	**264**	**657**
Zone B								
Public Off-Street	793	563	230	0	(103)	690	125	2
Private Off-Street	1,387	1,007	380	0	0	1,387	101	279
On-Street	364	92	272	10	0	374	9	273
Sub-total	**2,544**	**1,662**	**882**	**10**	**(103)**	**2,451**	**235**	**554**
Zone C								
Public Off-Street	1,745	1,226	519	0	(401)	1,344	473	(355)
Private Off-Street	422	286	136	0	0	422	29	107
On-Street	219	104	115	0	0	219	10	105
Sub-total	**2,386**	**1,616**	**770**	**0**	**(401)**	**1,985**	**512**	**(143)**
Zone D								
Public Off-Street	486	347	139	0	(450)	36	35	(346)
Private Off-Street	238	92	146	0	0	238	9	137
On-Street	113	70	43	0	0	113	7	36
Sub-total	**837**	**509**	**328**	**0**	**(450)**	**387**	**51**	**(173)**
Zone E								
Public Off-Street	0	0	0	0	0	0	0	0
Private Off-Street	678	561	117	0	0	678	56	61
On-Street	210	141	69	0	0	210	14	55
Sub-total	**888**	**702**	**186**	**0**	**0**	**888**	**70**	**116**
Total	**9,153**	**5,926**	**3,227**	**40**	**(1,124)**	**8,069**	**1,132**	**1,011**

CONCLUSION

- The application of a 10% organic growth rate to current parking conditions; the removal of the Blue Ramp and Soldier Square Ramp; development of the new Appleton Public Library at the Post Crescent site; high-density absorption of vacant library building space; no relocation of City Hall; and development of the Exhibition Center – results in an overall parking surplus of 1,011± spaces in the study area.

- In Zone C, there is a projected total deficit of 143± spaces, largely resulting from that assumption that 400 new employees would occupy the current public library space. However, there is a projected deficit of 355± public spaces. If Scenario 5 assumptions come to fruition, the City may consider options for adding approximately 400± public parking spaces in Zone C.

- In Zone D, there is a projected total deficit of 173± parking spaces. However, there is a projected deficit of 346± public spaces. If Scenario 5 assumptions come to fruition, the City may consider partnering with the YMCA to replace the Soldier Square Ramp. A new parking ramp in Zone D would primarily serve the YMCA, nearby businesses, and Lawrence University.

- Any new parking ramps in Zones C and D should be mixed-use facilities that, at minimum, should incorporate grade level retail/office.

- While the total projected parking adequacy in the study area may be positive, there are localized parking improvements that should be considered for the purposes of improving the overall delivery of parking services and access to downtown.

- Options for addressing future parking needs are presented in the following section.

A comparative summary of the future parking adequacy by scenario is presented in the following exhibit.

Exhibit 24: Summary of Future Parking Adequacy by Scenario

	Future Parking Planning Scenarios				
Future Parking Assumptions	**1**	**2**	**3**	**4**	**5**
BASE PARKING DEMAND					
Current Parking Conditions "As Is"	x	x	x	x	x
Organic Growth in Parking Demand (10%)		x	x	x	x
CHANGES TO CURRENT PARKING SUPPLY					
Blue Ramp Removal	x	x	x	x	x
Soldier Square Ramp Removal	x	x	x	x	x
Surface Parking Displacement for New Development			x	x	x
APPLETON PUBLIC LIBRARY					
Appleton Public Library - Existing Site (No Change)	x	x			
Appleton Public Library - Existing Site Expansion			x		
New Appleton Public Library - Fox River Bluffs Site				x	
New Appleton Public Library – Post Crescent Site					x
High Density Absorption of Vacated Library Space					x
APPLETON CITY HALL					
City Hall – Existing Site (No Change)	x	x	x		x
New City Hall – Relocation to Current Library Site				x	
High Density Absorption of Vacated City Hall Space				x	
New Exhibition Center					
New Exhibition Center - County Lot			x	x	x
PROJECTED PARKING ADEQUACY					
Zone A	1,061	917	917	917	657
Zone B	882	716	554	554	554
Zone C	369	207	37	(193)	(143)
Zone D	(122)	(173)	(173)	(432)	(173)
Zone E	186	116	116	116	116
TOTAL SURPLUS (DEFICIT)	**2,376**	**1,783**	**1,554**	**962**	**1,011**

Scenarios defined by the City of Appleton

POLICIES, PRACTICES AND OPPORTUNITIES FOR IMPROVEMENT

Prior to building any new public parking in downtown Appleton, Walker recommends the City consider changes to current policies and practices. The proposed changes are intended to help improve the overall delivery of parking services. These recommendations are based on input from stakeholders directly impacted by public parking policy and practices. In addition, the recommendations reflect Walker's analysis of current and future parking conditions, and assessment of current operations. The recommendations for the public parking system can be scaled to support the various needs of a growing and active downtown market. The recommendations are organized and presented in the following categories:

- Technology
- Enforcement
- Demand Management
- Planning

TECHNOLOGY

Proven technology advancements in the parking industry can improve the patron experience and financial performance of a public parking system. Outcomes often include more efficient use of public assets, a higher level of customer service, and reduced direct labor costs.

The following recommendations provide scalable technology improvements that align with stakeholder input.

1. Install new Parking Access and Revenue Control System (PARCS) at each public off-street parking ramp.
    a. Convert entry lanes to Ticket Dispensing entry devices (barcode or mag-stripe)
    b. Convert exit lanes to Credit Card Exit Verifiers that accept paid tickets, validations, and credit card payments (no cash option for in-lane automated devices)
    c. Maintain at least 1 central automated pay-station (pay-on-foot) that accepts cash, credit card, and validations
    d. Maintain at least 1 in-lane cashier station and cashier booth, that can be manned during busy times or as needed, but encourage use of un-manned automation system
    e. Provide credit card in credit card out capability
    f. In-lane gates *may* be able to be re-used, but ultimately based on negotiations with the vendor
    g. Provide intercom system for each device that connects to multiple master stations, roll-over to cell phones, and office phone lines
    h. Implement web-based back-end software system that can be accessed from any computer with internet capabilities (remote dashboard management)

i. Provide access control hardware at every entry and exit lane, Walker recommends either:
   i. Close range proximity reader either attached to the entry and exit lane revenue control devices; or
   ii. Hands-free, Automated Vehicle Identification (AVI), readers and tags

j. Include a facility counts system:
   i. Each lane should count (entry / exit / illegal), and appropriately increment or decrement the facility count
   ii. Ability to separate counts by contract or transient
   iii. Ability to communicate counts to external systems (signage, website, 3rd party software application)

k. Ensure Payment Application Data Security Standard (PA-DSS) validated application (version 2.0 with a date for their 3.0 validation in 2015)

l. Ensure Payment Card Industry Data Security Standard (PCI-DSS) certified compliant (version 2.0 with a date for their 3.0 validation in 2015)

2. Off-Street Ramp Pricing with New Parking Access and Revenue Controls

   a. Current Pricing Strategy:

      Ramps: $2.00 daily flat rate ($1.00 per hour for 2 hour stay or about $.08 per hour for 24 hour stay)

      Meters: $1.50 for 2 hour maximum stay ($ 0.75 per hour)

   b. Recommended Strategy: Continue to price parking ramps lower per hour than on-street parking to encourage long-term parking off-street and short-term parking on-street.

      With new pay-on-exit equipment, consider implementing a graduated rate schedule that is appropriate for the local market, equitable to the patron, and supports the financial solvency of the public parking utility. Consider the same low rate for the first 2 hours and reach the daily maximum rate after 4 hours. For example:

      $1.00 for <2 hours

      $2.00 for 2-3 hours

      $3.00 for 3-4 hours

      $5.00 for 4+ hours

      Lost ticket = minimum of $5.00 price point

      Offer a lower evening and weekend rate. For example: $2.00 from 6:00 pm to 6:00 am Monday – Thursday; $2.00 from Fri 6:00 pm to Saturday 6:00 am; and Sundays free

Do not split dollar rates ($.25; $1.50; etc.), keeping rates at whole dollar amounts. Coin currency is costly to manage in the form of equipment and direct labor.

3. Provide on-street single-space meters with the following:
    a. Coin and credit card processing capabilities (Smart Meters) - utilize as much of the existing single-space meter hardware as possible
    b. Cellular (preferred) or Wi-Fi connectivity
    c. Web-based back-end software system that can be accessed from any computer with internet capabilities and the ability to communicate counts (transaction by area, zone, location, street, block-face, etc.) to external systems (signage, website, 3rd party software application)
    d. Solar power option
    e. Real-time back-end system connectivity for operational management, support, maintenance, and reporting
    f. Payment Application Data Security Standard (PA-DSS) validated application (version 2.0 with a date for their 3.0 validation in 2015)
    g. Payment Card Industry Data Security Standard (PCI-DSS) certified compliant (version 2.0 with a date for their 3.0 validation in 2015)

4. Offer validations to local businesses – enable downtown merchants to offer free parking to their customers, and help promote off-street parking options.
    a. Recommend pre-paid validations only, avoiding pay for use options. Limit the types of validation offered. Maintain a simple validation program to avoid confusion and audit challenges. For example: Only offer the purchase of full day (at $4.00 each) validations and first two hour free validations (at a $1.00 price point that reduces the final transient ticket price by $1.00).
    b. Avoid providing specific businesses with discounts on validation charges or free validations as this practice can present audit challenges, revenue loss, and be difficult to manage

5. Offer hotel key card access and PAC prepaid parking equipment integration.
    a. Provide hotel guests with the option to purchase overnight parking at one of the public ramps with in/out access via hotel key card
    b. Provide PAC event attendees the option to prepay for parking when purchasing an event ticket

6. Offer Mobile Payment Application
    a. Implement a mobile payment option for downtown Appleton on-street parking that includes:

       Website, app, phone, and sms options – mobile payment applications offer a fast and inexpensive way to implement credit card option in the field prior to a complete on-street hardware infrastructure replacement
    b. Pass the transaction fee on to the consumer as a convenience fee ($.25 - $.35 / trans added on to total fee)
    c. Consider a pilot program or trial implementation to be paid for by the vendor of choice
        i. Install the on-street meter equipment in a highly visible section of College Avenue and proactively measure and report the results of the pilot program
        ii. Market the solution, working with the vendor to refine and promote the payment option
        iii. Allocate staff "ambassadors" to patrol the trial location and promote / assist with the new payment option
    d. Ensure Payment Application Data Security Standard (PA-DSS) validated application (version 2.0 with a date for their 3.0 validation in 2015)
    e. Ensure Payment Card Industry Data Security Standard (PCI-DSS) certified compliant (version 2.0 with a date for their 3.0 validation in 2015)

7. Implement Website Improvements
    a. Improve the interactive parking map to display all public parking locations, hours of operation, costs to park, and citation fees - consider occupancy counts and availability as part of the interactive map
    b. Integrate online citation payment option (offered now)
    c. Integrate online citation appeals (offered now)
    d. Offer online permit purchasing
    e. Offer the ability to report broken meters online
    f. Prepare and provide online access to Annual Public Parking Report that communicates Public Utility mission and goals, operating and financial figures, current policies, and future plans
    g. Leverage social media presence to announce special event parking plans, policy changes, marketing promotions, and gather feedback from the public – connect Appleton Public Parking with downtown stakeholders

PARKING ENFORCEMENT

The perception of on-street parking ordinance enforcement is often negative. The manner in which enforcement is presented to the public is often the reason. Enforcement is seen as punitive, which in many cases it is, but that is not the only role. For this reason, Walker recommends that the City adopt a hospitality-based compliance program for the Downtown area as used successfully in many other cities across the United States. In addition to the hospitality oriented nature of the program, Compliance Officers are still required to enforce parking regulations.

The mission of a downtown Appleton Parking Compliance Program would be *to provide hospitality, tourism and public safety services to local citizens, businesses and visitors, in addition to enforcing parking regulations.* The Compliance Officers would be required to complete a multi-faceted training program in hospitality and customer service, emergency response and first aid, public transportation and City services. They should work directly with local stakeholders and serve as community advocates.

The primary goals of the program should be to promote the area, resolve concerns, deter criminal activity, and help make the downtown area a better, safer and friendlier place to live, visit, shop and conduct business. Compliance Officers should initiate personal contacts with the parking public (known as "touches"), issue more warnings and slightly fewer citations, and interact with visitors and citizens in a positive manner. The vision of the program is to help promote a progressive and dynamic downtown experience. The officers may accomplish these goals while providing parking management by monitoring public safety, extending a helping hand in emergency situations, and calling on area merchants on a regular basis.

Beyond enforcing parking regulations, examples of appropriate behaviors of Compliance Officers are:

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

The program is envisioned to initially operate with two full-time officers, and one part-time officer working 6 days per week (Monday – Saturday) and as needed for special events in the evenings. Initially, the operating times would be business hours (9:00 am – 6:00 pm) however, depending on the success of such a program the hours could be extended into the evening due to the large demand placed on certain areas of downtown after normal business hours. It is important that the officer's uniforms be highly identifiable. The goal is for them to be identifiable and approachable in both how they look and act.

ENFORCEMENT EQUIPMENT

The purpose for improving enforcement technology is to support compliance with public parking regulations and reduce the time and costs associated with the process. Recommendations for enforcement equipment are presented below:

Recommended hardware features include:

1. WLAN 802.11 a/b/g
2. Minimum WWAN (3G minimum) GSM HSDPA (AT&T) or CDMA EVDO (Verizon); or best 4G LTE
3. Expandable memory (SD or microSD expansion slot)
4. Bluetooth
5. 3 mega-pixel camera or better can also perform the functions of a 2D barcode imager
6. 1D barcode scanner
7. Global Positioning System (GPS)
8. Optional integrated or separate printer

Recommended software features include:

1. Electronic tire chalking
2. Real-time data communications
3. GPS location citation tagging
4. Configurable citation text formats
5. Real-time payment checks for multi-space meters and mobile payment applications

NEW ENFORCEMENT AREAS

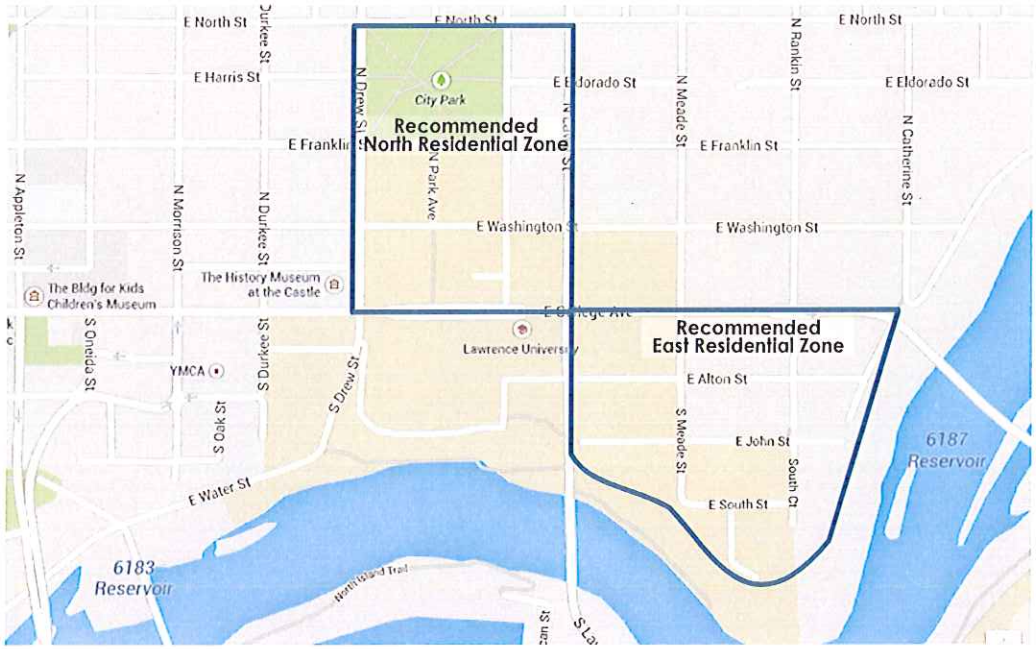
Representatives from the City and Lawrence University understand that neighborhood parking challenges can be successfully addressed through a combined approach that requires cooperation between the City and University. Walker recommends the City consider the following changes to enforcement policies and areas.

1. Implement a neighborhood parking zone that limits on-street parking to 2-hours, from 9:00 am – 6:00 pm, Monday – Friday.

2. Two enforcement zones are recommended

   North Residential Zone: Inside study area - bounded by North Street to the north, College Avenue to the south, Lawe Street to the east, and Durkee Street to the west.

   East Residential Zone: Outside study area - generally bounded by College Avenue to the north, Fox River to the south and east, and Lawe Street to the west.



City enforcement staff would be required to expand current enforcement routes and routinely monitor on-street parking in the North and East Residential Zones. Improvements in enforcement technology may enable the City to integrate the additional zones without incurring additional labor costs. The City and University would need to routinely measure the impact of the residential parking zones and make policy and program adjustments, as needed.

The University understands that in addition to off-campus parking enforcement, on-campus permit allocation and demand management are required for improved parking conditions. The University intends to work towards solutions that include:

1. *Auditing the University's active parking permit list and revising the allocation policy.* At present, parking permits are not tracked to determine if a permit is active or inactive. An active permit would mean the permitted faculty/staff is employed by the University and allowed to park on campus, where as an inactive permit would mean the person is no longer employed by the University and allowed to park on campus. Proof of permit abuse has been identified by the University but the magnitude of abuse has not been quantified. Policy and technology changes are under consideration by the University to more accurately manage the allocation and enforcement of campus parking permits. This will help reduce the number of inactive permitted vehicles parking on campus.

2. *Continuing to market public parking options to faculty, staff and students.* While the University pays for 100 monthly parking permits in the Yellow Ramp for use by students, on average only 25 University parking permits are issued to students for that ramp.

3. *Exploring options to add new surface parking north of College Avenue to support faculty, staff and student parking needs during the daytime and evenings.* The Chapel parking lot can be expanded to add up to 50 surface parking spaces.

DEMAND MANAGEMENT

There are areas within each zone that temporarily experience high levels of demand that strain local parking supply, while at the same time nearby areas experience a parking surplus. Even though available supply may exist within one or two blocks, these localized "hot spots" form perceptions that parking supply is inadequate. Often the solution includes a combination of improving access to the unoccupied public and private supply and long-term consideration for building more proximate supply. It is Walker's professional opinion that current parking challenges can be improved with a management solution that is foundational for a long-range plan that may include replacing and adding structured parking capacity. Many communities are rethinking how best to address the challenges of parking and pursuing management solutions before committing to a long-term capital investment. This course of action may improve perceptions and increase access to available supply. At the very least, management improvements can help the city mitigate future capital costs by maximizing the use of existing public resources.

The parking utilization data and market observations indicate that most on-street patrons are parking for less than two hours and are most likely downtown visitors. The downtown employees are primarily parking in the public ramps and in private lots. This allocation of demand aligns with the locations intended for each user group. Our conclusion, based on observation, is that current policies support short-term parking on-street and long-term parking off-street.

While the current parking system works for the current market conditions, modifications could help position the Appleton Parking Utility to proactively address future planning concerns and support economic development. Walker recommends the City consider implementing a formal *Downtown Employee Parking Program* that provides options for long-term parking at different price points. To encourage participation in this program, it would be necessary for the City to market the associated benefits to the local businesses.

The employee parking program should offer economic choices that allow employees and employers to select long-term parking options that align with desired levels of convenience and desired price point.

Walker recommends the City consider offering longer on-street time limits, up to eight hours, along select roadways to the north and south of College Avenue that have underutilized parking meters. The hourly rate should be lower than the hourly rate to park on College Avenue. This policy would offer an economic incentive to patrons, mitigate the risk of receiving a parking citation, and redistribute on-street demand away from congested areas.

EMPLOYEE AND STUDENT PARKING STRATEGY

Walker identified two types of policy measures that can help achieve the broader policy goal of an Employee and Student Parking Program. They can be divided simply between "push" and "pull" efforts applied to long-term parkers parked in spaces designated for visitors or in areas that are not intended for long-term parking, such as neighborhoods.

"Push" policies are focused directly on the behavior of drivers parked in the on-street spaces. They include time restrictions on parkers, pricing on-street parking spaces, and related measures used to enforce compliance of these policies and restrictions. "Pull" policies are essentially policies put in place in locations away from the on-street spaces, which encourage long-term parkers not to park in the coveted visitor spaces, or not park at all, but instead use other means to access the downtown, such as Valley Transit. "Pull" policies may take the form of incentives to park in certain locations, such as relaxed or eliminated time limits and inexpensive or free parking.

"Push" policies tend to be punitive in nature while "pull" policies are incentives to change behavior. "Pull" policies attempt to make what initially may be an inconvenient choice into a more attractive choice. "Push" policies therefore address the issue at the source whereas "pull" policies tend to work in a more indirect fashion.

Because "push" policies are more targeted, they are nearly always more effective than "pull" policies though they require often more effort to implement. "Pull" policies are generally easier or more attractive to implement than "push" policies, primarily because they rely on incentives rather than punishment of drivers who do not follow the desired policies.

The most effective policies to improve parking system performance in the study area will combine "push" and "pull" policies. The strategic implementation of such policies is not only desirable, but often necessary in order to achieve the desired parking management goals.

Relocating long-term vehicles is a tool. Our goal is to make spaces available for customers and other visitors; not simply relocate vehicles parked in the long term. We therefore note that we are not necessarily focusing on all employee parkers with these policies. The primary goal is to eliminate the parking deficits highlighted in red in the maps shown earlier in the report.

There are few options for allocating and identifying spaces that are dedicated to downtown business employee parking only. One option is to provide a reduced rate for roof top parking in all public ramps. The two options could be implemented in coordination or independently. Reduced rates could be advertised to local business employees to provide real benefit for these parking patrons to utilize the ramps and walk. This allows the parking to be more efficient by sharing all spaces, but it does require closer management of how many active permits to sell in order to properly manage overall public off-street demand.

VALLEY TRANSIT

The Valley Transit provides public transportation services with routes servicing Appleton, Buchanan, Grand Chute, Kaukauna, Kimberly, Little Chute, City of Menasha, Town of Menasha, and Neenah. The City of Appleton should continue to work with Valley Transit to increase daily ridership on routes serving downtown Appleton. The City should continue to support Transportation Demand Management (TDM) strategies, which include a series of measures promoting alternatives to SOV's (single occupancy vehicles) that reduce traffic congestion and improve air quality by maximizing the use of existing infrastructure. These measures also include carpooling, vanpooling, transit, walking, biking, telecommuting and compressed work weeks.

SOLDIER SQUARE RAMP (YMCA RAMP)

The YMCA is not in the parking business but recognizes the critical need to ensure community access to the facilities and services offered at the downtown Appleton location. The Appleton YMCA offers parking in the Solder Square Ramp at no charge to members while utilizing the YMCA facility. Non-members can park in the ramp for $2.00, similar to the city-owned ramps. However, there is a three hour parking limit enforced between the hours of 8:00 am to 6:00 pm Monday through Friday. The purpose for the time limit is to discourage long term parkers and help maintain turnover to maximize use of the parking spaces.

If the Soldier Square Ramp is removed from service and replaced, Walker recommends the City coordinate with the YMCA to implement the same parking access and revenue controls previously recommended in this report. The following are specific management recommendations for the City and YMCA to consider:

1. At present, up to 12,000 permits are outstanding for the 450-space ramp. It is a common practice for YMCA members to use their parking permits to access the Soldier Square Ramp when downtown for non-YMCA related visits. This practice presents an operating challenge and tracking concern.
2. Revise current permit allocation policy for YMCA members with the installation of new parking access and revenue control equipment.

3. Continue to offer one (1) permit with single memberships and two (2) permits with family memberships and make sure to conduct monthly audits of active parking permits and deactivate parking permits when YMCA memberships are deactivated.
4. Offer members free parking for up to three hours, but charge the standard hourly parking rate upon exit if the member parks for longer than the three hour limit. This policy will encourage members to continue to use of the ramp and turnover within the desired timeframe. The pricing policy will discourage members from parking in the ramp for work or class, and encourage them to seek out long-term parking facilities.

PARKING PLANNING

There are areas of downtown Appleton that temporarily experience high levels of demand that strain local parking supply, while nearby areas experience a substantial parking surplus. Even though available supply may exist within one or two blocks, these localized challenges form perceptions that parking is inadequate. The community can either address the parking challenges by building more supply or better managing the existing resources or a measured combination of both. Many communities are rethinking how best to address the challenges of parking and are pursuing management solutions before committing to a long-term capital investments. This course of action is proven to improve perceptions and increase access to available supply.

The following exhibit provides an overview of how communities are starting to think about parking planning.

Exhibit 25: Community Approach to Parking Planning

Old Parking Paradigm	New Parking Paradigm
• "Parking Problem" means inadequate parking supply.	✓ There are many types of parking problems (management, pricing, enforcement, etc.)
• Abundant parking supply is always desirable.	✓ Too much supply is as harmful as too little. Public resources should be maximized and sized appropriately.
• Parking should be provided free, funded indirectly, through rents and taxes.	✓ Users should pay directly for parking facilities. A coordinated pricing system should value price parking with on-street the highest.
• Innovation faces a high burden of proof and should only be applied if proven and widely accepted.	✓ Innovations should be encouraged. Even unsuccessful experiments often provide useful information.
• Parking management is a last resort, to be applied only if increasing supply is infeasible.	✓ Parking management programs should be applied to prevent parking problems.

CONTINUOUS IMPROVEMENT MODEL

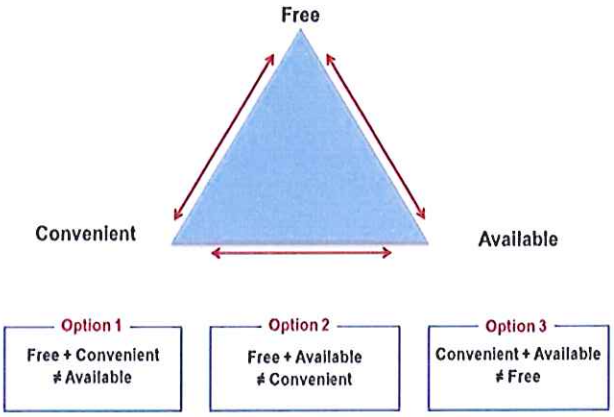
The City of Appleton should continue their Continuous Improvement Model (CIM) for downtown parking. The primary objective of the model is to ensure that adequate supply of appropriately located parking is available to support the community and economic development needs. It is important to ensure that the parking needs of the many people who work and visit the downtown each day are being successfully addressed. The model uses the market data derived from this annual CIM analysis and tracks key performance measurements determined by the City. For example, categories to be tracked may include:

- Parking Inventory
- Peak Parking Occupancy
- Parking Adequacy
- Future Parking Needs
- Parking Satisfaction Survey
- ADA Compliance and Available Supply
- Market Pricing
- Annual Citations
- Annum Number of Parked Cars

PARKING PLANNING WORKSHOPS

Public parking is interwoven with many aspects of a vibrant downtown community. There are some community members who believe public parking should be free of charge, and other that believe a public utility should charge market rates. Parking planning workshops, facilitated by City staff, provide an opportunity for community members with different viewpoints on parking to come together, learn, and help shape future parking plans. The placement of parking and pricing are two of the most examined parking-related topics.

Community members often learn that poorly thought out pricing policies can encourage overcrowding on-street and drivers circling during times of peak demand. The outcome is the result of on-street parking that is, at times, priced too cheaply in relation to parking in the public ramps. The artificially low price drives up demand for the type of parking that is already hardest to find, short-circuiting the free-market functionality that would otherwise allow people to make smart choices about where to park. The result include the scarcity of underpriced on-street parking (near popular destinations), perceptions of inconvenience among potential shoppers, and an underutilization of public off-street ramps and lots. The exhibit to the right illustrates three outcomes from pricing strategies.



There is a resistance in some communities to charge for parking out of fear that the added cost will turn customers away. Our research has identified that customers are more concerned with availability and convenience than having to pay a nominal fee to park their car. A fee-based parking program serves as a management tool that aims to increase availability on-street, while offering lower-cost alternatives for long-term patrons. Parking challenges often arise from a community's desire to offer free, convenient and available parking at all times. The reality is that only two of the three objectives in the previous exhibit can be achieved simultaneously.

Walker encourages the City to facilitate annual community workshops on parking to help inform stakeholders of planning initiatives and improve parking policies. This annual process should be part of the Continuous Improvement Model for the Appleton Public Parking Utility.

ALTERNATIVE SITE ANALYSIS

The identified potential projects in the Future Parking Conditions section of this report could generate a net increase of 1,132± vehicles to the study area during peak weekday conditions. In addition, the removal of the Blue Ramp (401 spaces), Soldier Square Ramp (450 spaces), and displaced supply for new development (312 spaces) would decrease the public parking supply by 1,163± spaces. Given that the overall current downtown parking occupancy at peak is approximately 65%, with over 3,187± spaces unoccupied, the current inventory can *theoretically* absorb the identified new demand plus displaced supply without the need to build additional parking. However, the *practical assessment* of the downtown parking system identifies localized areas of activity that exhibit different levels of demand and future need. So while the overall theoretical assessment is an operating surplus, the zone-based local analyses indicate a need for strategically placed parking to serve current and future parking needs. There are suitable locations to construct new parking ramps in Zones C and D.

ALTERNATIVES ANALYSIS CONCLUSION

Walker recommends that the City consider Soldier Square Ramp replacement with grade-level retail and or commercial space. A new 575-space mixed-use parking ramp would add 125 spaces to the site and help support existing businesses along College Avenue, events at Soldier Square and Houdini Plaza, the YMCA, the proposed Appleton Public Library, and Lawrence University.

Walker recommends that the City's Parking Utility work with the University to ensure surface parking is maximized at the Chapel Lot. The additional 50 spaces would help alleviate student, faculty and staff parking spillover into the neighborhood.

FINANCIAL CONSIDERATIONS

CONCEPTUAL ESTIMATE OF PROBABLE COST

Walker understands that future parking improvements in the study area may be developed as a stand-alone parking ramp or incorporated with the design of a future mixed-use building. A parking facility that is built into a project as either the upper or lower floors of that development, compared to a stand-alone parking facility, requires in most cases that the garage use short-span construction. Short-span construction uses an increased number of columns to support the weight of the structural elements above it. In short-span construction, the column grid is roughly 30 feet on center. The efficiencies of short-span construction are less than long-span construction because of the column projections that interfere with the parking layout. A typical short-span construction garage has an efficiency in the range of 400-450 square feet per space, depending upon the geometrics of the footprint. If the ramp is a stand-alone structure, the columns can be located at the front of the parking stalls so that there are no column projections; this is long-span construction. The efficiency of the garage can be increased to an approximate range of 315 to 350 square feet per space, depending upon the geometrics of the footprint. The increase in efficiency is due to the ability to increase the number of parking spaces inside the same footprint.

The cost of parking ramps vary greatly based on site location, architectural features, sustainability features, and whether the facility is above or below-grade. A reasonable range for an above-grade, 500 – 600 space parking facility is $16,000 to $20,000 per space, assuming long-span construction. The cost per space can increase significantly when built below ground.

A reasonable conceptual estimate of project cost for a 575-space, above grade mixed use parking ramp is $10 million. The cost would increase if levels are built below grade.

Many communities recognize that parking structures can be architecturally appealing and enhance a downtown area. If the City decides to build a new parking ramp, Walker recommends the City consider design options that reflect community preferences.

Exhibit 26: Examples of Mixed-Use Parking Ramps

Mixed-Use Public Parking Ramp
City of Watsonville, CA

Mixed-Use Public Parking Ramp
City of Cheyenne, WY

Source: Walker Parking Consultants

OPERATING COST

Walker's 2014 research indicates actual operating expenses that range from $300 to over $1,000 per space annually. The operating costs are lower at facilities that do not maintain revenue and access controls, and have limited hours of operation. Conversely, operating costs are higher at facilities that are staffed; monitor access to the property with revenue and access controls; and operate 24 hours, 7 days a week. A reasonable planning budget is $600 per space annually for a well maintained and part-time staffed parking facility. This includes labor, insurances, routine maintenance, utilizes, and supplies. For a 575-space parking ramp, the annual operating expenses are projected at approximately $345,000.

BREAKEVEN PRICING

The following exhibit provides a contextual reference of the breakeven price needed for a freestanding parking ramp to breakeven. If we assume a $17,000 to $18,000 range for cost per space and annual operating expense of $550 to $650 per space, the breakeven monthly income per space would range from $150 to $165. This table demonstrates why most municipal parking ramps are financed and operated as part of a larger parking system. The insolvent parking garages are often subsidized by more profitable on-street parking or older assets in the portfolio that no longer have debt obligations. This approach allows for a municipality to charge fees that are below breakeven if lower market rates dictate.

Exhibit 27: Breakeven Considerations – Monthly Income Required to Breakeven

Cost per Space	Annual Operating Expense Per Space									
	$300	$350	$400	$450	$500	$550	$600	$650	$700	$750
$ 10,000	86	90	95	99	103	107	111	115	120	124
$ 11,000	92	97	101	105	109	113	117	122	126	130
$ 12,000	99	103	107	111	115	119	124	128	132	136
$ 13,000	105	109	113	117	121	126	130	134	138	142
$ 14,000	111	115	119	123	128	132	136	140	144	148
$ 15,000	117	121	125	129	134	138	142	146	150	154
$ 16,000	123	127	131	136	140	144	148	152	156	161
$ 17,000	129	133	138	142	146	**150**	**154**	**158**	163	167
$ 18,000	135	140	144	148	152	**156**	**160**	**165**	169	173
$ 19,000	142	146	150	154	158	162	167	171	175	179
$ 20,000	148	152	156	160	164	168	173	177	181	185
$ 21,000	154	158	162	166	170	175	179	183	187	191
$ 22,000	160	164	168	172	177	181	185	189	193	197

Assume 100% Financed, 20-Year Term, 4.0 Percent

The City of Appleton's current monthly permit rates range from $24.00 to $33.00 and daily parking is $2.00. While improvements in the technology for parking access and revenue controls and on-street meters will likely improve the overall financial performance of the Parking Utility, the local market rates remain significantly below breakeven. Therefore, it is likely that the City will require a partner or funding sources to ensure a viable project.

ANNUAL DEBT SERVICE

The current financial position of the Parking Utility is positive. However, a new debt obligation associated with a $10,000,000 bond issuance would likely cause the Parking Utility to be insolvent. This is a function of the local volume of daily and monthly demand, current market parking rates, and current operating policies. The annual debt service payment is estimated at approximately $736,000. When an annual debt service coverage ratio of 1.20 is applied, which is commonly required by underwriting agencies, the required minimum annual net operating income available for debt service is approximately $883,000.

Base Financial Assumptions	
Bond Amount	$10,000,000
Term (Years)	20
Annual Rate	4.0%
Estimated Annual Debt Service Payment	$735,818
Annual Debt Service Coverage Ratio	1.20
Minimum Net Operating Income	$882,981

The recommendations to implement new PARCS in the ramps and Smart Meters on-street will likely increase the gross annual parking revenue collected by the Utility. With that in mind, Walker recommends implementation of the technology and operating recommendations prior to issuing debt for a new parking ramp. The improvements to the parking system will strengthen the financial performance of the Utility and mitigate reliance on the General Fund to service future parking-related debt obligation. A primary financial objective for structuring public parking as an Enterprise Fund or utility is to maintain financial solvency. Improvements to the operating system will help support this objective.

STRUCTURAL REPAIR BUDGET

In addition to annual debt service and operating expenses, Walker highly recommends that funds be set-aside on a regular basis to cover structural maintenance costs at a minimum of $60 per structured space annually, to be placed in a sinking fund. Once a sinking fund is established, contributions to this fund accumulate over time and are available to cover structural maintenance and structural repairs. Even the best designed and constructed parking facility requires structural maintenance. For example, expansion joints need to be replaced and concrete invariably deteriorates over time and needs to be repaired to ensure safety and to prevent further deterioration. The structural maintenance cost typically represents the largest portion of the total maintenance budget. Property owners tend to grossly underestimate the structural maintenance cost and do not budget adequately for timely corrective actions that must be performed to cost effectively extend the service life of the structure. The cost of structural maintenance is relatively small considering the potential waste of the improvements associated with the failure to perform proper maintenance on a timely basis.

The periodic structural maintenance includes items such as patching concrete spalls and delaminations in floor slabs, beams, columns, walls, etc. In many instance there are maintenance costs associated with the topping membranes, the routing and sealing of joints and cracks, and the expansion/construction joint repairs. The cost of these repairs can vary significantly from one structure to another. The factors that will impact the maintenance cost include, but are not limited to the value the owner places on the maintenance of the facility, the local climate, and the age of the structure.

PRELIMINARY BUDGET CONSIDERATIONS AND TIMELINE

The recommendations included in this report are generally organized into six (6) phases. Each phase improves elements of the parking system that work towards improving the public parking system in downtown Appleton.

2015 – $250,000 (PHASE 1)

- Prepare Specifications, the RFP and obtain bids for parking access and revenue control equipment in the Green, Yellow and Red ramps (ready to implement in 2016)
- Develop Public Parking Marketing Program, Parking Information Signage / Branding / Website Enhancements (improve community perception and awareness of public parking options and services).
- Improve Pedestrian Walkability and Connectivity near the PAC, along West Johnston Street and Green Ramp (sidewalk repairs, crosswalk, lighting, landscape, etc.)

2016 – $1,000,000 (PHASE 2A)

- Implement Parking Access and Revenue Controls Upgrade in three (3) Ramps (Pay-on-Exit, Pay by CC/Debit/Cash, Hotel Key Card Compatibility, etc.)
- Implement) Pay-by-Cell Application for downtown on-street meters. Pay-by-Cell can be implemented without upgrading the current parking meters.
- Implement Single Space Digital Smart Meters w/ Credit Card/Debit Card/Coin Payment Options along College Avenue.

2016 –BUDGET $4,000,000 (PHASE 2B)

- Soldier Square Replacement Design
- Surface Parking Lot Improvements
- Phase 3 On-Street Meter Upgrade along Peripheral Streets

2017 – BUDGET $500,000 (PHASE 3)

- Planning and Site Preparation for Soldier Square Replacement
- Signage and Potential Parker Relocation Costs
- Consulting / Professional Service Fees

2018 - $10,000,000 (PHASE 4)

- Construction of 500-space parking ramp in Zone D

2019 – BUDGET $3,000,000 (PHASE 5)

- Blue Ramp Demolition
- Costs for demo and site improvements = $3,000,000 based on 2014 Blue Ramp Deconstruction Study by Hoffman