WALKER
PARKING CONSULTANTS

DOWNTOWN PARKING STUDY

CITY OF ROCKFORD

ROCKFORD, ILLINOIS

Prepared for:
City of Rockford

FINAL REPORT

MAY 2008

THE CITY OF ROCKFORD ILLINOIS, USA

the BUCKLEY COMPANIES
Designing Solutions, Delivering Results

Heartland Parking Inc.

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May 28, 2008

Mr. Richard M. May
Commercial Development Coordinator
City of Rockford
425 East State Street
Rockford, IL 61104

Re: Downtown Parking Study
Walker Project No. 31-6792.00

Dear Mr. May:

We are pleased to submit the attached final report regarding the Downtown Parking Study for the City of Rockford. This report represents a collaboration of three firms, Walker Parking Consultants, the Buckley Companies, and Heartland Parking, with Walker being the prime consultant. Heartland Parking provided data collection services and the Buckley Companies was our financial consultant.

We are looking forward to presenting the findings of our parking study on June 4, 2008.

Sincerely,
WALKER PARKING CONSULTANTS

Richard T. Klatt, P.E., PTOE
Project Manager

Mark J. Lukasick, CPP
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Cc: Linsey Neyt, Attorney
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EXECUTIVE SUMMARY

INTRODUCTION

The City of Rockford (Rockford) has received a variety of comments from downtown stakeholders and customers in regards to the parking of Downtown Rockford. Some of these comments are:

- Not enough parking;
- Parking is inconvenient;
- Posted time periods are not long enough;
- Parking is difficult to locate and access.

Downtown Rockford will also be faced with future challenges, such as:

- The loss of existing surface lots to new development;
- Improved economic development and increased downtown development increasing the parking demand;
- Limited financial and human resources to administer and develop parking facilities and services.

Presently, the parking supply appears to be adequate but with the downtown redevelopment that could occur over the next ten years it is almost certain that additional parking will be needed. The City of Rockford has retained Walker Parking Consultants to conduct an analysis of the current and future parking needs of Downtown Rockford.

The engagement consisted of eight tasks as follows;

1. Existing conditions;
2. Physical Inventory and utilization;
3. Parking supply and demand analysis;
4. Development of supply-side solutions;
5. Development of demand-side solutions
6. Development of parking policy and municipal needs;
7. Development of public information tools;
8. Overview of financing mechanisms and timetable for plan execution.

PARKING SUPPLY AND DEMAND

Under survey-day conditions, there was technically a surplus of parking in each of the eleven activity centers of the downtown (please refer to Figure 3 on page 7 for study area and section boundaries). A number of blocks within the Main Street Mall and the East State Historic District activity centers were at a 70% to 100% occupancy rate. This could give the impression that a parking problem exists. However, parking

surpluses were available within a short walking distance. A summary of the parking adequacy by activity center is shown in the following table.

Peak Occupancy, 10:00 a.m. Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskel Neighborhood	827	221	606
West Industrial	1,445	879	566
Federal Courthouse/Davis Park	841	353	488
Riverfront/Museum	1,736	668	1,068
Main Street Mall	3,313	1,998	1,315
Westside Total	8,163	4,119	4,044
Eastside:			
Madison Street	604	145	459
St. James Neighborhood	1,351	478	873
East State Historic District	1,361	854	507
East Gateway Theater District	716	357	359
Haight Village	407	140	267
Ingersol/ComEd	360	243	117
Eastside Total	4,798	2,217	2,581
Study Area Total	12,961	6,336	6,625

Scenario One includes developments that will increase the parking demand by approximately 1,674 spaces. The effective parking supply is projected to remain the as is at 12,961. The parking demand for Scenario One is estimated to be 8,814 spaces. When comparing the future land-use demand in Scenario One to the effective parking supply of 12,961 spaces, the parking adequacy is determined to be a 4,147-space surplus. A detailed description of the proposed developments can be found in Appendix Table E-1. The following table illustrates the future parking adequacy for Scenario One:

Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskel Neighborhood	827	259	568
West Industrial	1,445	955	490
Federal Courthouse/Davis Park	841	1,085	(243)
Riverfront/Museum	1,736	736	1,000
Main Street Mall	3,313	2,416	898
Westside Total	8,163	5,450	2,713
Eastside:			
Madison Street	604	424	180
St. James Neighborhood	1,351	666	685
East State Historic District	1,361	1,005	356
East Gateway Theater District	716	816	(100)
Haight Village	407	177	230
Ingersol/ComEd	360	276	84
Eastside Total	4,798	3,364	1,434
Study Area Total	12,961	8,814	4,147

In Scenario Two, the future parking supply is expected to decrease by approximately 24 spaces with the loss of Lots Q, T, CC, plus the additional parking planned (150-space facility) as part of the development projects. A detailed description of the proposed developments can be found in Appendix Table E-2.

When comparing the future land use demand in Scenario Two (10,393 spaces) to the effective parking supply of 12,940 spaces, the parking adequacy is determined to be a 2,547-space surplus. The following table illustrates the future parking adequacy for Scenario Two:

Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskell Neighborhood	827	259	568
West Industrial	1,445	955	490
Federal Courthouse/Davis Park (1)	841	1,190	(348)
Riverfront/Museum	1,736	736	1,000
Main Street Mall (2)	3,293	3,706	(413)
Westside Total	8,142	6,846	1,297
Eastside:			
Madison Street	604	413	191
St. James Neighborhood	1,351	666	685
East State Historic District (3)	1,360	1,285	75
East Gateway Theater District	716	462	254
Haight Village	407	177	230
Ingersol/ComEd	360	545	(184)
Eastside Total	4,797	3,547	1,250
Study Area Total	12,940	10,393	2,547

(1) Does not include projected demand for Davis Park Events.
Includes porjected demand for the New Federal Courthouse.
(2) Lost to Development Lot CC/23 spaces
(3) Lost to Development Lot Q/55 spaces; Plus proposed 150-space parking facility
Lost to development Lot T/96 spaces.

The future parking demand projection assumes that all of the noted developments will come to fruition. If all of the noted developments are completed as proposed, additional parking may be needed to offset shortages in certain activity centers. We suggest the City revisit parking occupancy levels once developments are complete.

DEVELOPMENT OF SUPPLY-SIDE SOLUTIONS

Presently, there is an overall parking surplus of 5,821 spaces (12,961 effective supply spaces – 7,140 peak parking demand). However, there still is a perception that there is a parking shortage within the core of the downtown. It would appear that better utilization of the existing parking supply, especially the private parking supply, would meet the parking needs of most parkers within the downtown area.

Many of the existing downtown buildings are now underutilized or vacant, which accounts for much of the large parking surplus that now exists in the downtown. The City and the Riverfront District have developed a plan to revitalize the downtown area. Walker utilized that plan to develop two future parking Master Plan scenarios. Scenario Two is the more aggressive scenario and under that scenario, an overall surplus of 2,547 spaces is projected to occur within the overall study area. However, there are three Activity Centers that are projected to have substantial parking deficits and they as follows:

Activity Center	Parking Deficit
Westside	
Federal Courthouse	348
Main Street Mall	413
Sub-Total	761
Eastside	
Ingersol/Comed	184
Total	945

Therefore, if the downtown redevelops as projected, there will be a need for about an additional 840 spaces (761 x 110%) on the west side of the Rock River and 200 spaces (184 x 110%) on the east side of the river.

Nineteen parking alternatives were evaluated on the basis of eight criteria to meet the future parking needs.

A parking garage on Lot M and providing diagonal parking on Water Street appear to be the best solutions for additional parking on the east side of the Rock River. On the west side of the river, a new parking garage on the block of the Old Post Office along with diagonal parking on a reopened Main Street between Elm and Mulberry Streets are the best solutions for that area on the downtown.

The recommended solutions are summarized in the table on the next page.

	Alternative	Spaces Added	Total Spaces	Project Cost per Space	Project Cost Total
	Westside				
1	Open Main St.	55	55	$5,700	$316,000
2B	Old Post Office Site	496	496	$23,600	$11,720,000
				Total	$12,036,000
	Eastside				
10	Lot T	24	120	$24,500	$2,936,000
11	Water St.	25	43	$5,100	$218,000
13A	Lot M	213	304	$29,900	$9,088,000
				Total	$12,242,000

Source: Walker Parking Consultants, 2008

Under today's conditions, in almost all areas of the downtown, the parking supply is adequate, but all of the spaces are not available to many of the motorists seeking a parking space. There is a need to make better use of the available parking supply by including as many spaces as possible in a common pool of shared, publicly available spaces.

Rockford should work to make existing private parking lots available to the public when they are not being used by the primary parking lot's user.

Walker recommends that the City of Rockford begin negotiating lease arrangements with the owners of private parking facilities that would allow the general public to park in those private parking facilities private parking facilities during non-peak parking times. A high priority area should be the East State Historical District activity center.

DEMAND-SIDE SOLUTIONS

When municipalities such as the City of Rockford face financial and spatial constraints, a transportation demand management program (TDM) can be an inexpensive alternative to building more parking. Generally, a TDM program is a collection of policies that reduce parking demand by offering a combination of incentives and alternatives to motorists so that they find alternative methods of transportation to their destination rather than driving alone.

A successful TDM program can be an efficient and inexpensive way to manage parking demand than trying to create enough parking spaces (supply) for all who would use it. The marginal cost of providing the last 10% of the needed parking supply can be significantly more expensive than reducing the first 10% of the demand.

A successful TDM plan can potentially reduce the future parking demand in the City of Rockford by as much as 4%. If one uses the projections developed under Scenario Two, a 4% reduction represents a potential savings of approximately $6.86 million.

Walker recommends that the City of Rockford take the following steps:

- Establish the position of Transportation Demand Management Coordinator. The TDM Coordinator will be responsible for developing, implementing, and marketing all components of the City's TDM plan.

Moreover, the City of Rockford should establish a TDM plan that has the following elements:

- Priced parking that allows for motorists to be charged for parking. The parking rates should reflect the market value of the parking spaces and encourage motorists to consider alternate means of travel.

- Unbundled parking options that render the cost of parking transparent and allow the lease or purchase of parking spaces separately from building space.

- Parking cash-out programs that allow area employees to receive compensation for not using parking spaces.

- Ride sharing opportunities that include both carpools and vanpools. These programs would include measures that provided for situations in which participants needed emergency rides home and incentives that rewarded participants.

- Telecommuting programs in which employees enjoy limited flexibility in working location and hours.

More transit initiatives and programs between local employers and the Rockford Mass Transit District. Although the existing TransitChek®program is underutilized, it represents the type of partnership crucial to the success of a TDM plan.

PARKING MANAGEMENT – POLICIES & STRATEGIES

One of the tasks included in the Downtown Parking Study completed for the City of Rockford, Illinois (City), was to review the existing parking management policies and strategies utilized to manage the City garages and surface parking lots. The objective of this task was to compare the City's rates to other municipal and private parking entities to ensure a competitive presence within the paid parking market and to provide pricing, management and operational recommendations that enhance the parking system. In addition, our analyses are intended to assist the City in determining whether any of the recommendations would have a positive impact on the system and therefore should be implemented.

Historically, paid parking is often perceived as a negative competitive element that impacts downtown business activity in comparison to suburban developments, where parking is generally provided for free. In response to this inequity, the City of Rockford revised its municipal ordinances and removed on-street parking meters in 1983 and replaced the meters with either time-limit zones or permit parking areas. Today, the Concourse Parking Garage is the only location in the City that charges for daily transient parking.

In most markets, highly valued commodities that are in limited supply are fairly rationed by price. There are various pros and cons to implementing this strategy, as the primary purpose of charging a fee for parking is to allow market participants to properly value the parking asset and efficiently allocate a scarce resource. When assessing the parking needs of a community, the value of a parking space typically declines from high to low in the following order:

- Proximity to destination;
- Visibility from the destination;
- Simplicity to complexity (surface parking to structured parking);
- Perceived safety (light to dark, above to below ground).

Utilizing the above criteria, an argument could be made that on-street parking is the most valuable asset within a city's parking system.

Given Rockford's current time-limit enforcement policies, many of the premium on-street parking spaces in the downtown area are regularly occupied by long-term parkers comprised of employees, business owners and managers; who rationalize their occupancy of the closest spaces to their businesses by the necessity to run frequent errands or

tend to their banking or personal needs. This behavior is often exaggerated as most users are unaware of the value of on-street parking. In Rockford, the penalty for violating the time-limits is a fine and if a citation is avoided with any regularity the penalty is far less than the perceived cost of parking.

While it is clear that Rockford is committed to future development that will impact the downtown area, many of the downtown retailers have concerns regarding convenience and accessibility of parking for their customers in the future. To best assess the concerns and provide effective management strategies that support future development, we conducted two public forums to obtain input from the community; utilizing the information gathered to develop the pricing and management strategies included in our report.

We emphasize that the cost to operate a public parking system is either paid for directly by the users or indirectly in the form of taxes, higher rent rates, or cost of goods. Regardless of the methodology selected to recoup the costs of providing public parking, *there is no such thing as free parking*.

The management strategies and recommendations included herein suggest that patrons utilizing the City system pay directly for parking; since charging the individuals who use a public resource offers an equitable solution to better fund the City's parking enterprise fund. The City would benefit from effective pricing and management strategies by ensuring that any added revenue generated from the recommended changes would be continually used for improvements in the City's parking system; an action that is consistent with Rockford's current policies.

A parking system in which the spaces in highest demand are priced at the highest rates, the less convenient spaces are priced lower, and employee spaces and other parking at the periphery of the area are priced the cheapest, can effectively spread out parking demand and better utilize all the spaces in the system. We suggest managing the Rockford parking system through pricing based on the following principles:

"Turning" spaces provides more drivers with access to parking spaces, and when managed correctly should ultimately result in the accommodation of more cars over a given period of time.

Turning spaces more frequently creates an effective supply cushion of a few open spaces around the premium space area so that drivers can find a parking space more quickly and easily.
The use of parking meters or other forms of paid parking are far more effective at creating turnover than are time-limits.
Effective parking management will not hinder the parking experience for the person who must drive and park; it should facilitate the process.
When a parking system is impacted, drivers will likely "pay" for parking with their time or their money.
Paying with time may involve driving around in search of a parking space or walking a significant distance from the parking to their destination. When drivers pay with their time and frustration the "payment" is lost.

Paying with money should increase the likelihood and ease of finding a space. When drivers pay with money the resulting revenue can be used to fund the system and maintain the parking infrastructure.
The Rockford system would be managed more efficiently and accommodate more drivers if a parking management plan that reduced the concentration of demand were implemented. Upon reviewing our proposed pricing strategies the City should consider implementing the following changes:

- Increase monthly permit fees that currently range from $25.00 to $40.00 per month, to $30.00 and $50.00 respectively;
- Implement the on-street rate structure discussed in *Option 1* that assumes: 25¢/15 minutes, 2 hour maximum rate of $2.00, free parking from 6 p.m. until 6 a.m. or;
- Implement the on-street rate structure outlined in *Option 2* that assumes: 25¢/30 minutes during off hours and 25¢/15 minutes during peak hours (10:00 a.m. until 2:00 p.m.), free parking from 6 p.m. until 6 a.m. In this variable rate structure, customers would pay for the length of stay based upon the cumulative duration selected without time restrictions;
- Implement a variable transient rate structure of 75¢/hour, $6.00 maximum daily rate, for transient customers entering any paid parking location (structure or surface lot) between 6 a.m. and 4 p.m. and 75¢/hour, $3.00 maximum evening rate, for customers entering after 4 p.m. and before 6 a.m.;
- Increase the current fine for citations issued for minor parking violations from $10.00 to $20.00.

In addition to the proposed pricing strategies and to better manage the City's parking system, we also included management strategies and operational recommendations that could be implemented to assist the City in meeting their long-term goal of operating an effective, self sufficient parking system. The recommendations would streamline access and access control, as well as enhance revenue generation and revenue controls. The recommendations are highlighted in the following list:

- Install pay-and-display meters in selected high demand on-street areas (85 - 95% on-street occupancy during peak periods);
- Install pay-by-space meters in selected high demand surface lots (85% - 95% off-street occupancy during peak demand periods);
- Upgrade the parking access and revenue control (PARCS) equipment in all of the parking structures;
- Open the parking structures to the general public for transient parking for 24 hours/day, 7 days/week;
- Implement PARCS upgrades that include: ticket dispensers, readers, exit stations, pay-on-foot (POF) stations, and pay-in-lane (PIL) stations;
- Budget approximately $700,000 for the required PARCS equipment upgrades (actual cost will vary based upon a bid proposal process conducted by the City);
- Budget approximately $15,000 to $20,000 per meter (total cost to install meters throughout the system would be contingent upon the quantity of meters purchased and an actual bid proposal process);
- Implement radio frequency identification devices (RFID) that could be read by the PARCS and used by customers to gain access into the parking structures;
- Incorporate RFID windshield tags into the monthly permit system that could be read electronically and would allow parking enforcement officers to enforce parking regulations within the City's surface parking lots;
- In conjunction with replacing the existing permits (decals) with RFID windshield tags and to enhance the management of the permit process, the City should implement an on-line permit sales program;
- On-line permit sales would create a live database that could be uploaded daily to hand-held scanners used by enforcement personnel to verify permit validity in the

field (possible since the permit information is kept on the system, which identifies the RFID tag and not on a manually issued permit);

- The combination of on-line permit sales and permanent RFID tags that do not have to be replaced monthly would provide economic benefits to the City by streamlining a process that is predominantly manual today;
- Upgrade the existing sign system used to identify the City parking structures and lots.

Implementing multi-space meters, on-line permit sales, upgraded PARCS equipment and upgraded signage would enhance customer service and provide the City's parking management team with the ability to track, record and reconcile transient, monthly and special event parking revenue while accounting for all daily and monthly activity in each of the structures and on the lots; effectively adding levels of customer service and revenue control that do not exist today.

In addition to the pricing, management and operational recommendations, we also provided information for the City on privatization and/or possible third-party management of their parking system. The decision to privatize or contract with a third-party management company to manage the City parking system would require detailed analyses and therefore, we suggest the City review the material we provided for content to determine whether their parking system would ultimately benefit from either privatization or third-party management.

As an alternative, the City could issue a request for proposal (RFP) from third-party parking management companies that would require each operator to provide a complete operating budget for the services needed to manage the entire parking system. The RFP should be written so the City does not have to award a contract and upon receipt of the responses, the City would evaluate the pros and cons of implementing third-party management before deciding on an actual contract award.

Finally, a parking system in which the spaces in highest demand are priced the highest rates, the less convenient spaces are priced lower, and employee spaces and other parking at the periphery of the area is priced the cheapest can effectively spread out parking demand and better utilize all of the parking spaces within the system.

We emphasize that our discussion of managing parking with prices focuses on increasing the efficiency of the parking system by providing the public with added parking opportunities in the most premium parking spaces. Any new revenue generated from these measures is a secondary effect, and the additional revenue could be used not only to help supply more parking, but also to help fund the parking operation through improved technology, security and future structural maintenance.

OVERVIEW OF FINANCING MECHANISMS, STAGES TIME TABLES FOR PLAN EXECUTION

The City of Rockford has been presented with a challenge regarding the efficient and economical use of its parking system. This study has found that the City does not currently have a parking deficit but that the current parking is not being used efficiently. This situation is further compounded by the anticipated re-growth of the downtown area, which will bring new businesses, workers and traffic to downtown Rockford.

Walker conducted extensive inventory of the existing parking, hosted meetings with public members and evaluated parking systems of similar communities. Based on the information gathered, a number of recommendations have been created to (i) increase utilization of existing parking, and (ii) allow the City to absorb the additional anticipated growth.

To address the current ineffective utilization of parking, the City should install PARCS equipment at its four main garages. To assist in offsetting this cost, the City should increase both transient and monthly parking fees, as well as fines. The increased revenue will allow the City to install the new equipment in approximately two years, or, in the alternative, issue bonds to be repaid from the increased fee and fine revenue. The City should also install meters in the downtown areas where there is a high demand for parking, both to increase revenue and encourage efficient use of the meters and structure parking.

Looking to the future, the City anticipates major growth in the downtown area. As these new businesses relocate, the City will experience a need for additional parking. This need will be met by creating metered locations on Main and Water Streets, as well as constructing three new structures at the Old Post Office Site, Lot T and Lot M. The metering locations will be best financed through the use of

a Special Service Area that is paid by the local businesses benefiting from the new parking. The Old Post Office Site, Lot T and Lot M are all in current Tax Increment Financing Districts, and any additional money in these TIFs would be available to offset these costs. Finally, Lot T is a good candidate for a sale/leaseback arrangement with a private developer.

As with any long-range planning, it is important that the City continue to evaluate parking supply and demand as new developments occur. By utilizing a combination of traditional and non-traditional sources, the City will be able to effectively utilize current parking while absorbing future parking demand.

INTRODUCTION

The City of Rockford (Rockford) has received a variety of comments from downtown stakeholders and customers in regards to the parking of Downtown Rockford. Some of these comments are:

- There is not enough parking;
- Parking is inconvenient;
- Posted time periods are not long enough;
- Parking is difficult to locate and access.

Downtown Rockford will also be faced with future challenges, such as:

- The loss of existing surface lots to new development;
- Improved economic development and increased downtown development, which will likely increase the parking demand;
- Limited financial and human resources to administer and develop parking facilities and services.

Presently, the parking supply appears to be adequate, if development occurs as currently projected, it is almost certain that additional parking will be needed. The City of Rockford has retained Walker Parking Consultants to conduct an analysis of the current and future parking needs of Downtown Rockford.

DEFINITION OF TERMS

Several terms are used in this report that are specific to the parking industry and thus might not be readily understood by the reader. The definitions of these terms can be found in Appendix B of this report.

SCOPE OF SERVICES

The scope of services is provided in Appendix A of this report.

STUDY METHODOLOGY

In order to complete the objectives of this study, Walker obtained a physical inventory, conducted by Heartland Parking, of all parking spaces in the study area. The inventory was tabulated by block and categorized by on-street vs. off-street, public or private. Public parking is defined as any parking that the general public can park in, regardless of the ownership. Private parking is parking that can only be used by customers and/or employees of particular businesses.

Occupancy counts were taken by Heartland Parking employees in the study area on Tuesday, October 16, 2007, resulting in a tabulation of the number of vehicles found utilizing parking spaces located within the study area. These counts were taken at two-hour increments between the hours of 10:00 a.m. and 8:00 p.m. By comparing the supply with the observed occupancy of the parking facilities on a block-by-block basis, Walker was able to determine the occupancy levels of each block in the study area and quantify specific demand for each block.

To calculate the projected future parking demand, Walker reviewed the planned future developments and applied parking demand ratios. The basis of these applied parking demand ratios is the City of Rockford's parking requirements found in *Article XIII Parking and Loading Regulations, Section 1300.7 Schedule of Parking Requirements*. Additions and subtractions to the supply and demand, considering both the block and development type, show how the City's parking adequacy will be impacted in the future.

RIVER DISTRICT FRAMEWORK PLAN

This downtown parking study is being conducted so that the City of Rockford can provide adequate parking as the downtown area is revitalized. The City of Rockford, like many other urban areas, in the past has had most of their new growth occur on undeveloped land located on the fringe of the city. As a result, the core of the city has declined, with many of the established businesses leaving the downtown area and moving to the new growth areas. This has resulted in an underutilized downtown infrastructure and abandoned buildings. Today there is an excess of parking but that could change as the downtown transforms back to the vibrant downtown it was before the exodus to the urban fringe.

To meet the needs of City of Rockford and to promote the revitalization of the downtown area, the River District Association (RDA) was formed about 10 years ago. The River District Association's mission is to "create a growing, thriving, prosperous business and residential community in Rockford's downtown neighborhood."[1] The River District Plan Framework Plan was completed in January of 2003 with these core revitalization principals:

- Capitalize on the river;

[1] River District web site home page, http://www.riverdistrict.com/

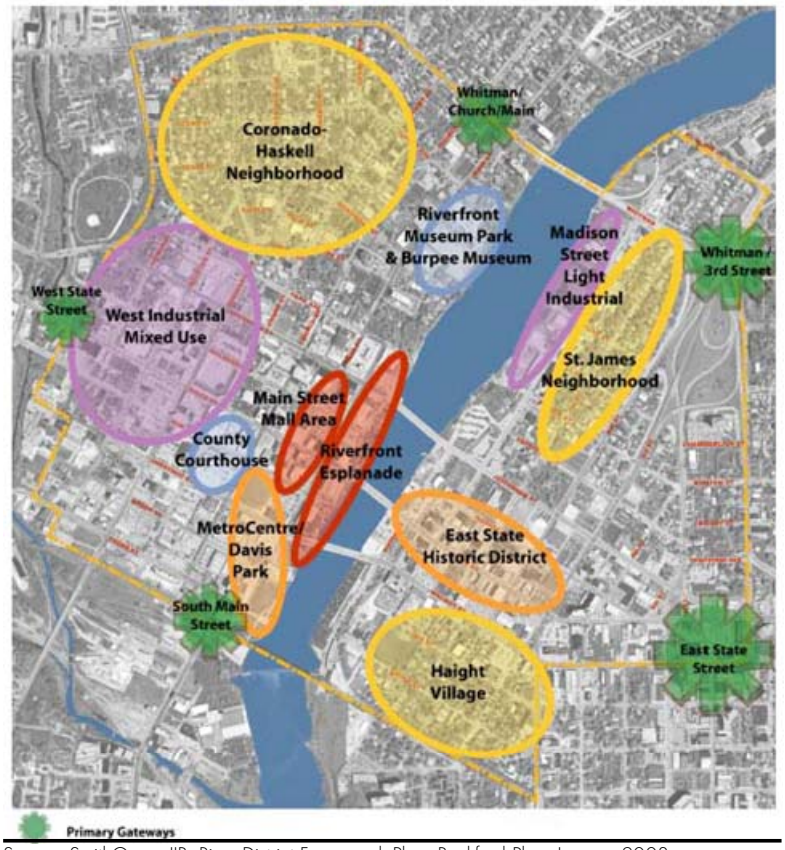
- Build on economic drivers;
- Reinvent the River District as a premium and diverse residential district;
- Create linkages:
- Create a new image; and
- Encourage partnerships.

The 2003 study identified the following existing sub-districts that need to be recognized and serve as the foundation for the new efforts.

- Madison Street;
- St. James Neighborhood;
- East State Historic District;
- Coronado-Haskell Neighborhood;
- Haight Village;
- Riverfront Museum Park and Burpee Museum of Natural History;
- Main Street Mall;
- Riverfront Esplanade;
- MetroCentre/Davis Park; and
- County Courthouse.

Those sub-districts are identified in Figure 1.

Figure 1: Existing Land Use Districts



Source: SmithGroup JJR, River District Framework Plan, Rockford Plan, January 2003

The River District Framework Plan is a result of "public input, steering committee workshops, site evaluation and a response to market opportunities."[2] The catalytic projects are illustrated in the Vision Plan; see Figure 2.

[2] SmithGroup JJR, *River District Framework Plan, Rockford, Illinois*, January 2003, p. 11.

Figure 2: River District Vision Plan

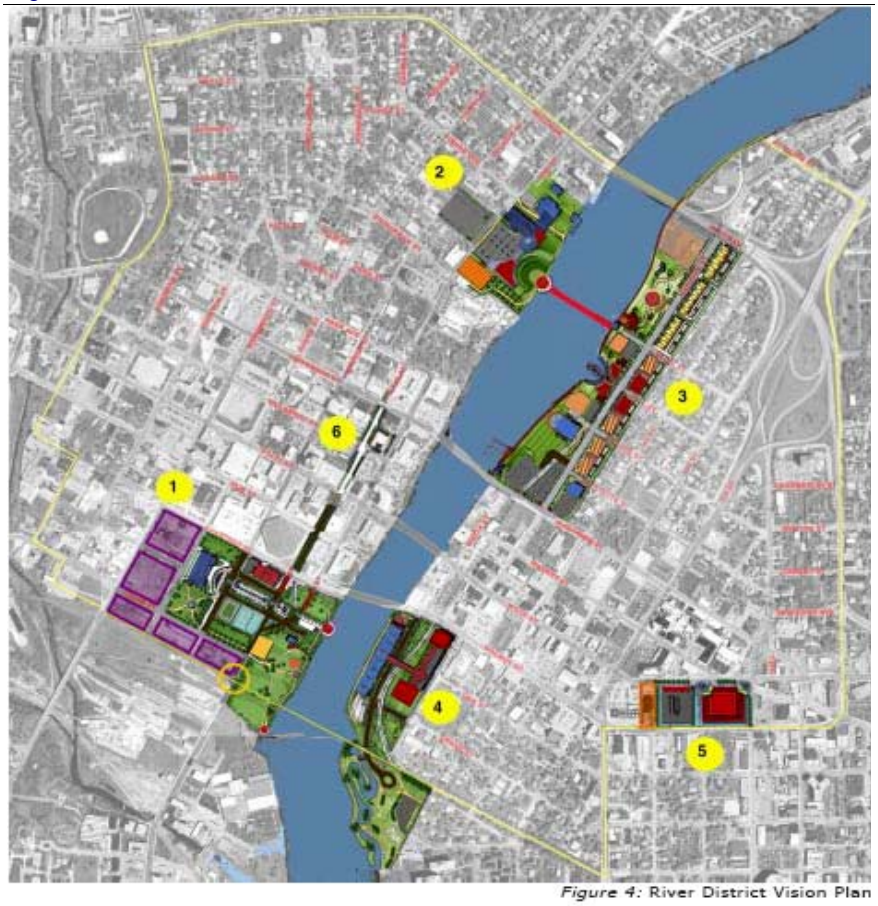


Figure 4: River District Vision Plan

LEGEND

Catalytic Area 1 - Federal Courthouse/Davis Park
Catalytic Area 2 - Museum Campus
Catalytic Area 3 - Madison Street
Catalytic Area 4 - Ingersoll/ComEd Site
Catalytic Area 5 - East Gateway theater
Catalytic Area 6 - Main Street Mall

Source: SmithGroup JJR, River District Framework Plan, Rockford Plan, January 2003

Following the 2003 Framework Plan, the RDA initiated The River District Framework Plan Implementation Study, which was funded by RDA members and the City of Rockford. A multidisciplinary consultant team was established to identify implementation strategies and prioritize the redevelopment sites identified in the River District Framework Plan. A scoring matrix was developed by the consultant team to prioritize the opportunity sites. The matrix took into consideration the ability to 1) generate a fresh image, 2) incorporate catalytic uses, and 3) acquire funding. Of the six catalytic sites identified above, Catalytic Areas 4 and 1b (Davis Park), scored the highest in the evaluation matrix and it was recommended that the City of Rockford focus their attention on those two sites. However, all the catalytic areas were determined to be important for full development of the downtown. River District study area was utilized as the parking

study area and the Activity Centers utilized by the Walker study closely mirror those sub-districts of the River District Framework Plan.

STUDY AREA

The study area consists of 148 city blocks generally bordered by Whitman Street on the North, Kilburn Avenue to the West, the Union Pacific Railroad tracks to the South and Longwood Street to the East.

In order to evaluate the study area more accurately it is broken into eleven activity centers:

A. West Side:

1. Coronado-Haskell Neighborhood
2. Riverfront/Museum Campus
3. West Industrial
4. Main Street Mall
5. Federal Courthouse/Davis Park

B. East Side:

1. Madison Street
2. St. James Neighborhood
3. East State Street
4. East Gateway Theater District
5. Ingersoll/ComEd
6. Haight Village

A map of the complete study area and activity centers areas is shown in Figure 3.

Figure 3: Study Area and Activity Centers Map

Source: Walker Parking Consultants, 2007

CONSENSUS BUILDING

In order to keep the study focused on pertinent issues we have invited all parties concerned to provide input and review the results, so that everyone's expectations are understood and can be met as much as possible. Meeting with the City of Rockford officials and receiving community input have been important for establishing goals and objectives for the Downtown Parking Study Plan.

Walker Parking Consultants, together with City of Rockford officials and the River District, have conducted open forums in order to understand the City of Rockford communities' parking concerns and characteristics. Two public forms were conducted on October 4, 2007.

PUBLIC FORUM

On Thursday October 4, 2007, Walker Parking Consultants conducted two public forum sessions to solicit input from Rockford community members regarding the current state of Rockford's downtown parking system. The sessions were held at 2:00 p.m. and 6:00 p.m. in the Rockford Public Library. The 2:00 p.m. session was attended by approximately 25 community members and the 6:00 p.m. session had approximately 8 attendees. The City of Rockford issued a press release on September 18, 2007 inviting the public to discuss parking options for downtown Rockford. The public forums were opened by representatives of the River District Association[3]. Walker Parking Consultants (Walker) started each session with a discussion of the planned "scope of services" developed by the City for the parking study. Walker ended the brief explanation with a series of questions devised to solicit input from the attendees. The following comments were offered by the attendees and recorded by Walker's representative at the meeting. A brief summary of the public comments is provided below and the forum minutes are provided in Appendix A.

- The Parking study should focus on both the east and west side of downtown, as each section has a unique demographic make-up.

[3] River District Association is a private, 501(c)6 not-for-profit, membership based organization with over 550 members. The Association's mission is to promote a growing, thriving, prosperous business and residential community in Rockford's downtown neighborhood, River District.

- On-street parking is limited during day-time hours, but there is ample parking during evening hours. Short-term parking is adequate, but long-term parking is lacking. River District perceives constant abuse of short-term parking spaces (two hours or less) by employees of local merchants or commercial tenants, who constantly relocate their vehicles throughout the day to avoid being ticketed while using premium spaces near local merchant outlets.

- On special event dates at the Metro Center or Coronado Theatre, traffic back-ups occur, which possibly result from the one-way street configuration that currently exists. Also, these special event days result in parking problems.

- The Concourse Garage (840 sp.) is over-utilized by employees, leaving no room for public parking on jury call dates. I would like to see more utilization of the State/Main or Wyman parking structures for paid customer parking. Under current conditions, the parking structures are used primarily for employee contract parking. The prime spaces within the surface parking lots are also used for reserved permit parking.

- An improved wayfinding to identify public parking facilities would be beneficial for downtown visitors. The international parking symbol "P" should be utilized. The downtown area is not user friendly as there is poor signage, and no way-finding system.

- There is a perceived lack of security in all of the public parking structures (i.e., homeless people in elevator vestibules, and on surrounding streets).

- A pricing structure should be implemented, and pricing should be used to control demand in designated areas of downtown.

- Walker should explore implementation of both pay-and-display and pay-by-space meters for the surface lots and pay-on-foot with centrally located pay-stations for the parking structures.

- Under current conditions an excess supply of spaces exists, however, the available spaces are not convenient to the desired downtown destinations.

- Parkers are reluctant to using structure parking due to poor maintenance, inaccessible parking spaces and a lack of appropriate way-finding, poor signage, homeless squatters in the elevators and around the facility, and a lack of security.

- There is a need for a full-service hotel in downtown Rockford.

- The City should explore new ideas and ways to administer the permit parking program. The program should include an on-line registration and renewal option and, bar-coded decals good for one year. The decals could be checked with hand-held devices, in lieu of having to purchase decals in person on a monthly basis, and would allow registration of multiple vehicles on the same permit.

- Consensus from local talk-radio shows: that metered parking is needed in downtown Rockford.

- Improvements to the downtown parking system should be funded through revenue bonds or an increase in the parking rates.

PHYSICAL INVENTORY AND UTILIZATION

This section of the report documents our understanding of the parking characteristics within downtown Rockford. The information contained herein serves as the basis for analysis of the parking needs of downtown Rockford. Included is a discussion of parking supply, effective supply, parking demand, parking adequacy, and future developments that may impact existing parking conditions.

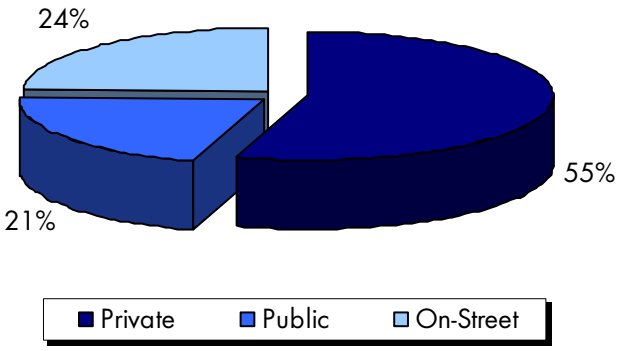
PARKING SUPPLY

The foundation of a parking supply and demand study is an inventory of the existing parking supply. Parking in downtown Rockford is available in several forms. On-street parking is signed and restrictions are clearly marked. Off-street parking is available for permits and the public in lots as well as garages. Rates vary little from location to location. Private parking is available for specific user groups within the study area.

The inventory is compared to the parking demand to quantify the existence of a parking surplus or shortfall. We conducted this analysis on a block-by-block basis within the study area, segmenting the demand by the five activity centers.

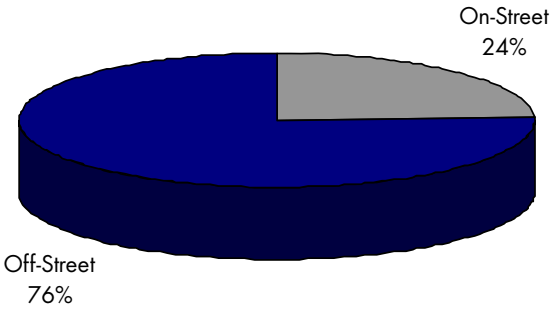
Based on the data supplied to Walker from Rockford and data collected by Heartland Parking on October 4, 2007, there are a total of 14,598 spaces within the downtown study area. The on-street inventory comprises 3,538 total parking spaces and the off-street inventory makes up the remaining 11,060 parking spaces. Of the off-street spaces, 3,061 are open to the public and 7,999 are private or restricted-use spaces. This is graphically shown in Figures 4 and 5. The complete tabulated parking supply on a block-by-block basis is provided in Appendix Table D-1.

Figure 4: Parking Supply



Source: Heartland Parking, Inc., 2007 field data

Figure 5: On-Street vs. Off-Street



Source: Heartland Parking, Inc., 2007 field data

EFFECTIVE PARKING SUPPLY

It is generally an industry accepted standard that a parking supply operates at peak efficiency when parking occupancy is no more than 85 percent to 95 percent of the supply. When occupancy exceeds this level, patrons may experience delays and frustration while searching for a space. Therefore, the parking supply may be perceived as inadequate even though there are some spaces available in the parking system.

The inventory of parking within the study area is adjusted to allow for a cushion necessary for vehicles moving in and out of spaces, and to reduce the time necessary to find the last few remaining spaces when the parking supply is nearly full. This cushion also allows for vacancies created by restricting parking spaces to certain users (reserved spaces), misparked vehicles, and minor construction. We derive the effective supply by deducting this cushion from the total parking capacity.

Because it represents the realistically usable parking supply, the effective supply is used in analyzing the adequacy of the parking system rather than the total supply or inventory of spaces. Following are some factors that affect the efficiency of the parking system:

- Capacity – Large, scattered surface lots operate less efficiently than a more compact facility, such as a single-threaded helix, which offers one-way traffic that passes each available parking space one time. Moreover, it is more difficult to find the available spaces in a widespread parking area than a centralized parking area.

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

- On-street vs. off-street – On-street parking spaces play a very important role for any downtown parking system, and this is especially true within downtown Rockford, but are less efficient than off-street spaces due to the time it takes patrons to find the last few vacant spaces. In addition, patrons are typically limited to one side of the street at a time and often must parallel park in traffic to use the space. Many times on-street spaces are not striped or are signed in a confusing manner, thereby leading to lost spaces and frustrated parking patrons.

For parking within the downtown Rockford study area, the effective supply factor is determined to be 85% for all on-street spaces and 90% for all off-street private and public spaces. The study area has available a total of 14,598 parking spaces made up of on-street and off-street spaces. However, when adjusted to reflect the effective supply, there are a total of 12,961 effective parking spaces. The following table gives a breakdown by activity center of the parking supply and the effective parking supply.

Table 1: Parking Supply by Activity Center

Parking Zone/Activity Center	Parking Capacity	Effective Parking Supply	Cushion Spaces	Cushion Percentage
Westside:				
Coronado-Haskel Neighborhood	958	827	131	14%
West Industrial	1,626	1,445	181	11%
Federal Courthouse/Davis Park	950	841	109	11%
Riverfront/Museum	1,937	1,736	201	10%
Main Street Mall	3,705	3,313	392	11%
Westside Total	9,176	8,163	1,013	11%
Eastside:				
Madison Street	683	604	79	12%
St. James Neighborhood	1,529	1,351	178	12%
East State Historic District	1,528	1,361	167	11%
East Gateway Theater District	806	716	90	11%
Haight Village	468	407	61	13%
Ingersol/ComEd	408	360	48	12%
Eastside Total	5,422	4,798	624	12%
Study Area Total	14,598	12,961	1,637	11%

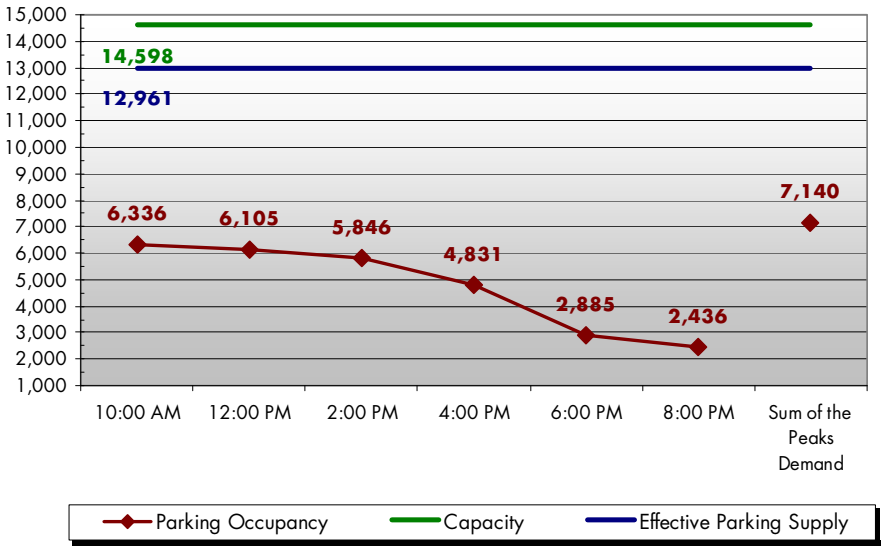
Source: Walker Parking Consultants

PARKING OCCUPANCY

To determine the parking patterns of patrons in the study area, the usage of all parking facilities located in the study area was evaluated. Understanding these parking patterns helps define which type of patron is parking in what location. Occupancy counts were taken for all on and off-street parking spaces. Data was collected on Tuesday, October 16, 2007 from 10:00 a.m. to 8:00 p.m.

The occupancy counts taken on Tuesday indicate that the peak occupancy count occurred at 10:00 a.m. when 6,336 spaces (43%) of the 14,598 spaces were occupied. Figure 6 is an illustration of the parking occupancy that was taken at two-hour intervals.

Figure 6: Parking Occupancy, October 16, 2007



PUBLIC VS. PRIVATE PARKING OCCUPANCY

The perception is that public parking is difficult to locate, because most of the available parking spaces are located in private off-street facilities. The utilization of the public vs. private parking on Tuesday, using the "sum of the peaks demand"[4] compared to the parking supply, is summarized in the table below:

Table 2: Parking Occupancy - Public vs. Private

Table 2: Parking Occupancy - Private vs. Public

Type	Parking Supply	Sum of the Peaks Occupancy	Percent Occupied
Private	7,999	3,927	49%
Public	6,599	3,213	49%
Total	14,598	7,140	49%

Source: Walker Parking Consultants, Tuesday, October 16, 2007 field data

Overall, public parking, in comparison to private parking, is equally utilized, with both being 49% occupied at peak.

[4] The observed peak occupancy of each individual parking facility was utilized rather than the peak occupancy of the entire parking system.

PARKING TURNOVER SURVEY

A parking turnover survey was performed on selected parking facilities. The City of Rockford identified parking lots located on the west side. The parking lots identified are Lots C, W, WW, and 38. These parking facilities are located in the Main Street Mall activity center.

A total of 304 parking spaces were surveyed between the hours of 10:00 am to 8:00 pm. In terms of turnover, Lot WW had the highest turnover rate with 5.83 cars parked per parking space over the course of the day. With a capacity of 52 spaces, there were a total of 303 vehicles parked between the hours listed above.

Table 3: Parking Turnover

Observed October 16, 2007 - 10:00 am to 8:00 pm

Parking Facility	Capacity	Cars Parked	Turnover Rate
Lot C	125	78	0.62
Lot W	59	281	4.76
Lot WW	52	303	5.83
Lot 38	68	206	3.03
Total	304	868	2.86

Source: Walker Parking Consultants

PARKING SUPPLY AND DEMAND

PARKING ADEQUACY

Parking adequacy is defined as the difference between the effective parking supply provided and the parking demand generated by various land uses within a given area.

A fundamental aspect of any central business district or downtown area is the interplay of activities from block to block. Commonly, patrons of a downtown area park on one block and go to work and/or patronize a business on another block. Additionally, not all of the parking patrons bound for a particular block will choose to park if there is a sufficient amount of available space. Market factors, especially price, walking distance and convenient access will result in significant interplay between blocks. For these reasons, it is not critical to focus on the balance for any individual block.

Key Finding:
Overall opinions of the parking system tend to be somewhat negative.

DOWNTOWN SECTIONS

The present perception of parking within the core downtown area is that parking is in short supply and that there is a parking problem. Comparing the parking demand against the effective parking supply on a block-by-block basis does not adequately reflect the parking situation as perceived by the users. A one-block area is perceived as too small of an area to accurately illustrate the actual parking situation. For this reason, the parking service areas defined previously in this report were used, rather than the parking supply for any given block.

Based on the observed parking occupancy for Tuesday, October 16, 2007, the result was that all eleven downtown activity centers are experiencing parking surpluses. The highest percentage of occupied spaces appears to occur in the East State Historic District. There was a 356-space surplus. Individually, six of the twelve blocks were experiencing a 70% to 90% occupancy rate.

At the time data collection was conducted, there were no events at the Metro Centre or at the Coronado Theatre. Even though some of the parking facilities may have been at their capacity, none of the blocks in the study area experienced a deficit in parking.

The parking adequacy is usually calculated by comparing the effective parking supply (12,961 spaces) to the observed peak count (6,336 spaces), which occurred at 10:00 a.m. The peak demand appears to be reflecting a lighter than usual day when compared to the "sum of the peaks" demand. The "sum of the peaks demand" (7,140 spaces) will be used to determine the parking adequacy. When comparing

the effective parking supply to the sum of the peaks demand, there is an overall surplus in parking of 5,281 spaces. Table 4 shows the parking adequacy for downtown study area by activity center. Figure 7 is an illustration of the parking adequacy by block and by activity center.

The adequacy of parking, on a block-by-block basis, is tabulated in Appendix Table D-1.

Table 4: Existing Parking Adequacy by Activity Center

Sum of the Peaks Demand Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskel Neighborhood	827	259	568
West Industrial	1,445	935	510
Federal Courthouse/Davis Park	841	379	462
Riverfront/Museum	1,736	736	1,000
Main Street Mall	3,313	2,064	1,249
Westside Total	8,163	4,373	3,790
Eastside:			
Madison Street	604	214	390
St. James Neighborhood	1,351	666	685
East State Historic District	1,361	1,005	356
East Gateway Theater District	716	435	281
Haight Village	407	177	230
Ingersol/ComEd	360	270	90
Eastside Total	4,798	2,767	2,031
Study Area Total	12,961	7,140	5,821

Source: Walker Parking Consultants 2007

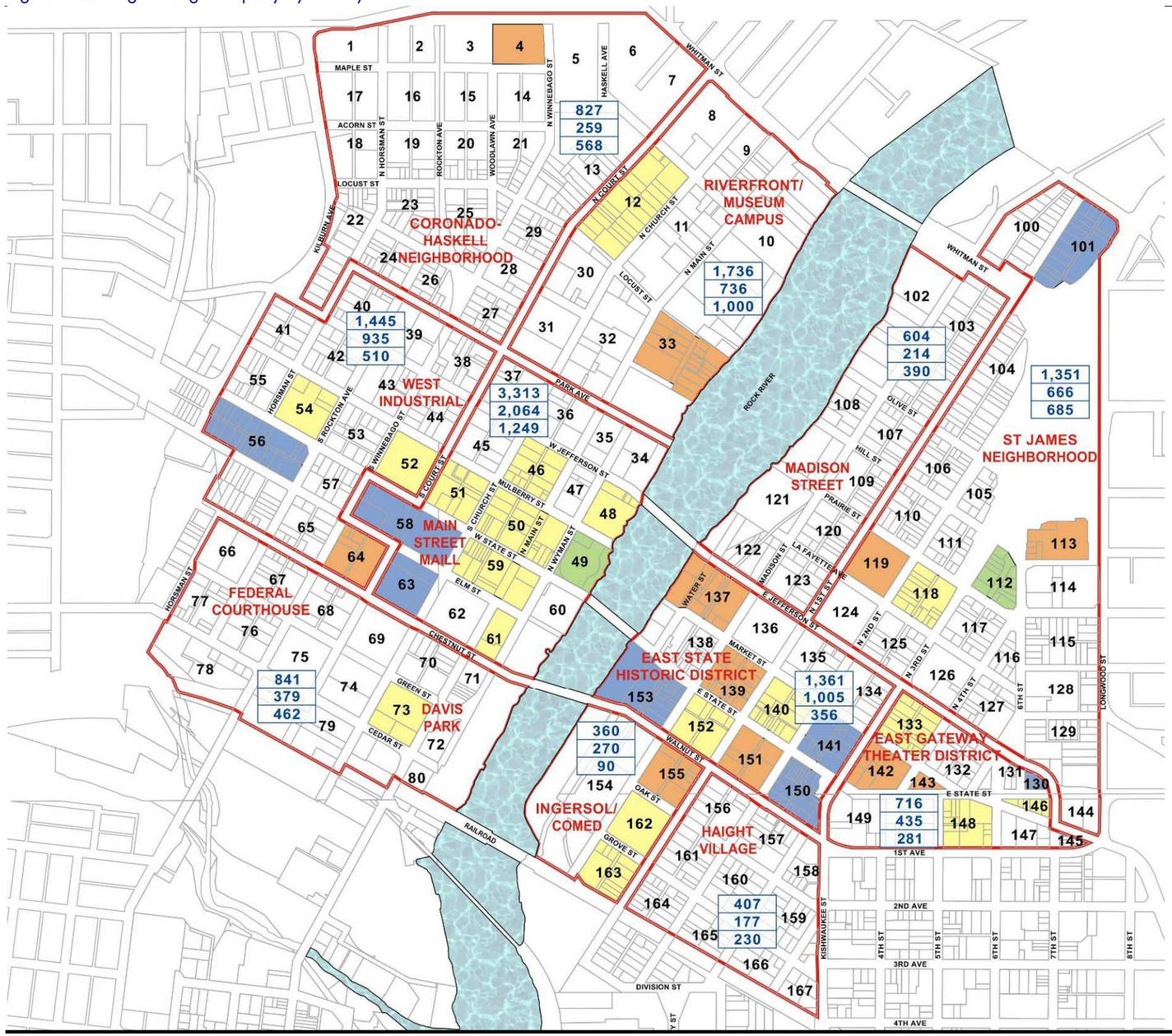
The Coronado on Block 36 and the Metro Center on Block 63 were both inactive at the time of the occupancy counts. The Coronado, with approximately 44 shows a year, has a majority of its shows in the evening (6:00pm – 8:00pm). The Metro Center, depending on the show, also holds evening events.

An average event at the Coronado is calculated to be approximately 1,700 seats per show. Based on parking requirements of one space for every four sets, there is an estimated parking demand of 425 spaces. A 7:00 p.m. event patron would have no problem finding parking in the area. At 6:00 p.m. the Main Street Mall activity center had an observed occupancy of 628 vehicles. Adding the Coronado demand (425 spaces) to the 6:00 p.m. demand will increase the demand to 1,053 spaces. Compared to the activity center's effective

parking supply of 3,313 spaces, we conclude that the activity center will have a parking surplus of 2,260 during an event.

The Metro Centre (Block 63), with approximately 37 events, will also have evening demands. The schedule consists of Icehogs Hockey, Raptors Indoor Football, concerts, shows, boxing, and truck racing. If an average show is equal to 80% of the maximum seating (10,000 seats), the estimated demand will be approximately 8,000 seats. At one space for every four seats (per Rockford *Article XIII, Parking and Loading Regulations, Section 1300.7*), the estimated parking demand for the Metro Centre 7:00 p.m. events will add approximately 2,000 spaces. Adding this demand to the existing 6:00 p.m. parking occupancy (628 spaces) will increase the demand to 2,628 spaces. Comparing this to the activity center's effective parking supply of 3,313 spaces, we conclude that the activity center will have a parking surplus of 685 spaces at 6:00pm. A sell-out event (100% of the maximum seating) at the Metro Centre at one space per four seats will have an estimated parking demand of 2,500 spaces. The parking supply will still be adequate within this activity center.

Figure 7: Existing Parking Adequacy by Activity Center



LEGEND

STUDY AREA/ACTIVITY CENTER

PEAK OCCUPANCY

90% - 100%

80% - 89%

70% - 79%

60% - 69%

BELOW 60%

DESIGN PARKING ADEQUACY

12,961	EFFECT PARKING SUPPLY
7,140	PARKING DEMAND
5,821	SURPLUS/(DEFICIT)

FUTURE CONDITIONS

Per discussion with the City of Rockford and the River District, our analysis of future conditions includes two possible development scenarios. Scenario One is based on set assumptions that includes redevelopment of existing properties. Scenario Two includes assumptions generated by the River District Association and the City of Rockford. Detailed descriptions can be found in Appendix E of this report.

SCENARIO ONE

For the purposes of this report, the future parking supply for Scenario One is not projected to change.

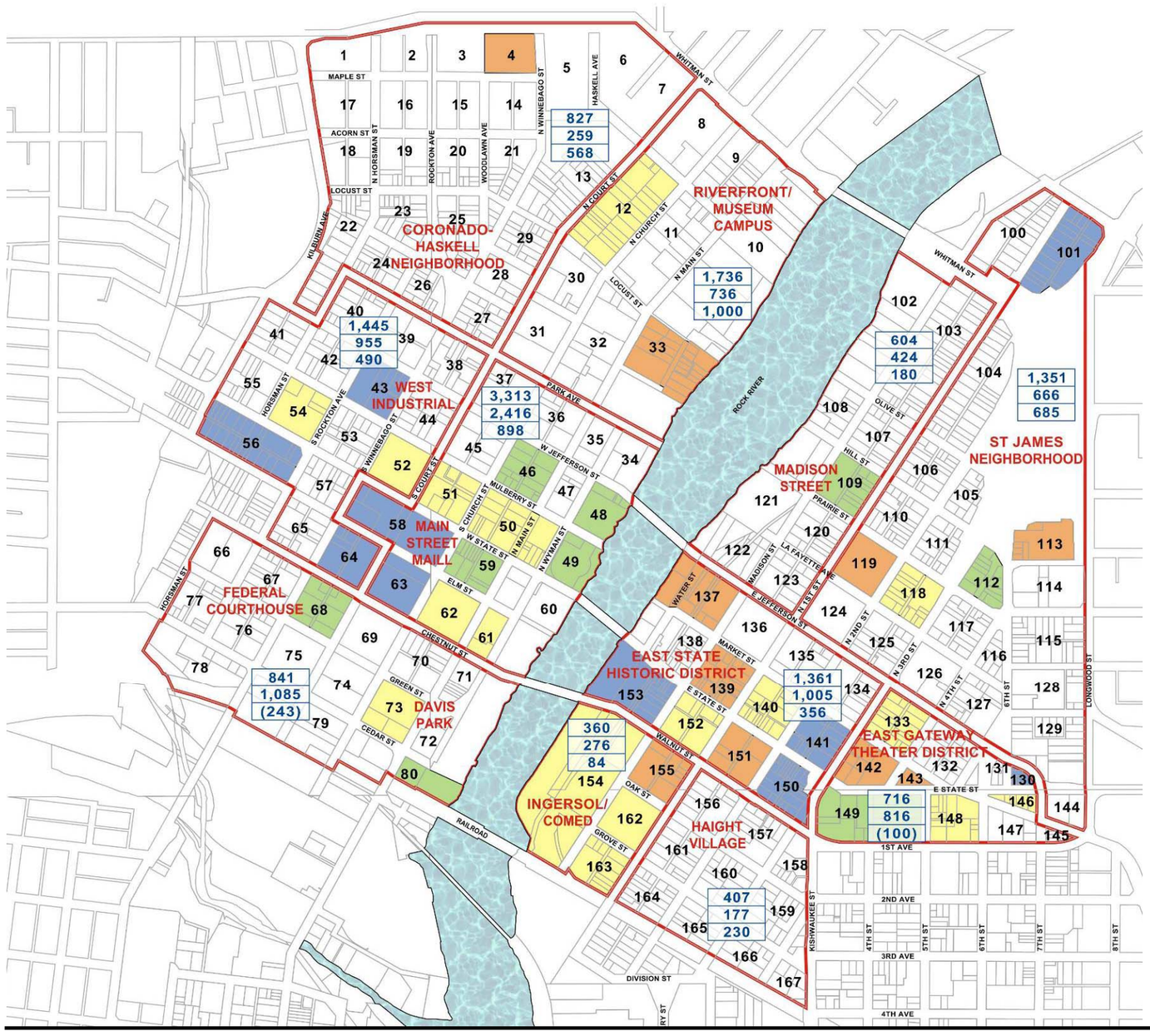
The future developments assumed for Scenario One and the projected parking requirements for each of these assumptions are shown in Appendix Table E-1.

The future parking demand for Scenario One is expected to increase to 8,814 spaces. Compared to the effective parking supply of 12,961 spaces, there is a surplus of parking of 4,147 spaces. The Federal Courthouse/Davis Park and the East Gateway Theater District activity centers show parking deficits due to an increase in demand without change to the parking supply. The parking adequacy for Scenario One is shown in Table 5 and Figure 8.

Table 5: Future Parking Adequacy – Scenario One

Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskel Neighborhood	827	259	568
West Industrial	1,445	955	490
Federal Courthouse/Davis Park	841	1,085	(243)
Riverfront/Museum	1,736	736	1,000
Main Street Mall	3,313	2,416	898
Westside Total	8,163	5,450	2,713
Eastside:			
Madison Street	604	424	180
St. James Neighborhood	1,351	666	685
East State Historic District	1,361	1,005	356
East Gateway Theater District	716	816	(100)
Haight Village	407	177	230
Ingersol/ComEd	360	276	84
Eastside Total	4,798	3,364	1,434
Study Area Total	12,961	8,814	4,147

Figure 8: Future Parking Adequacy Scenario One



LEGEND

STUDY AREA/ACTIVITY CENTER

PEAK OCCUPANCY

90% - 100%

80% - 89%

70% - 79%

60% - 69%

BELOW 60%

DESIGN PARKING ADEQUACY

12,961	EFFECT PARKING SUPPLY
7,140	PARKING DEMAND
5,821	SURPLUS/(DEFICIT)

SCENARIO TWO

The parking supply for Scenario Two is projected to change mainly due to the planned developments. Some of the blocks involved with the planned developments are expected to lose parking spaces while others will gain. The parking facilities for Blocks 48 and 139 are to accommodate the planned developments only. Therefore in determining the future parking adequacy, these parking facilities will not be included in the future parking conditions. This will result in the loss of Lot Q (55 spaces) and Lot CC (23 spaces). One of the new developments included in Scenario Two will increase the future parking supply with a 150-space parking facility to be located on Block 140. The result of these developments will be a future parking supply of 14,670 spaces.

Appendix Table E-3 shows on a parcel-by-parcel basis the inventory of the future parking supply and the effective parking supply.

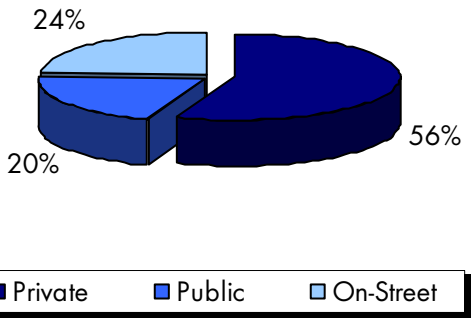
The future parking inventory was also identified as on-street or off-street parking spaces. The majority of the parking spaces are identified as being private off-street parking spaces with a total of 8,149 or 56% of the total inventory of 14,670. The following table and figure show how the future parking supply will be divided.

Table 6: Future Private vs. Public Parking Inventory

	Supply	% of Total
Private Off-Street	8,149	56%
Public Off-Street	2,983	20%
Public On-Street	3,538	24%
Total	14,670	100%

Source: Walker Parking Consultants 2007

Figure 9: Future Private vs. Public Parking Inventory



FUTURE PARKING ADEQUACY – SCENARIO TWO

The City of Rockford provided information on the developments that are planned for the near future that will affect the overall parking adequacy of the study area. Appendix Table E-2 contains the land uses, square feet, and parking spaces required of the planned developments.

Based on the information provided to Walker, Table 6 represents a projection of how these revised future developments will impact the future parking conditions by activity center when compared to the effective parking supply. The demand for Davis Park events are not reflected in the activity center total demand since these events do not occur on a daily basis. The projected demand for these events is estimated to be 3,125 spaces based on the number of seats. The effective parking supply of 12,940 spaces is used in determining the future parking adequacy. Based on the developments of Scenario Two, there is a projected parking demand of 10,393 spaces. Comparing the projected parking demand to the effective parking supply of 12,940 spaces results in a surplus of 2,547 spaces.

The planned developments for Scenario Two will result in parking deficits in three of the activity centers. Main Street Mall is projecting a deficit of 413 spaces; Ingersol/ComEd is projecting a deficit of 184 spaces; and as previously stated, the Federal Courthouse/Davis Park activity center is projecting a parking deficit of 348 spaces. This is graphically shown in Figure 10.

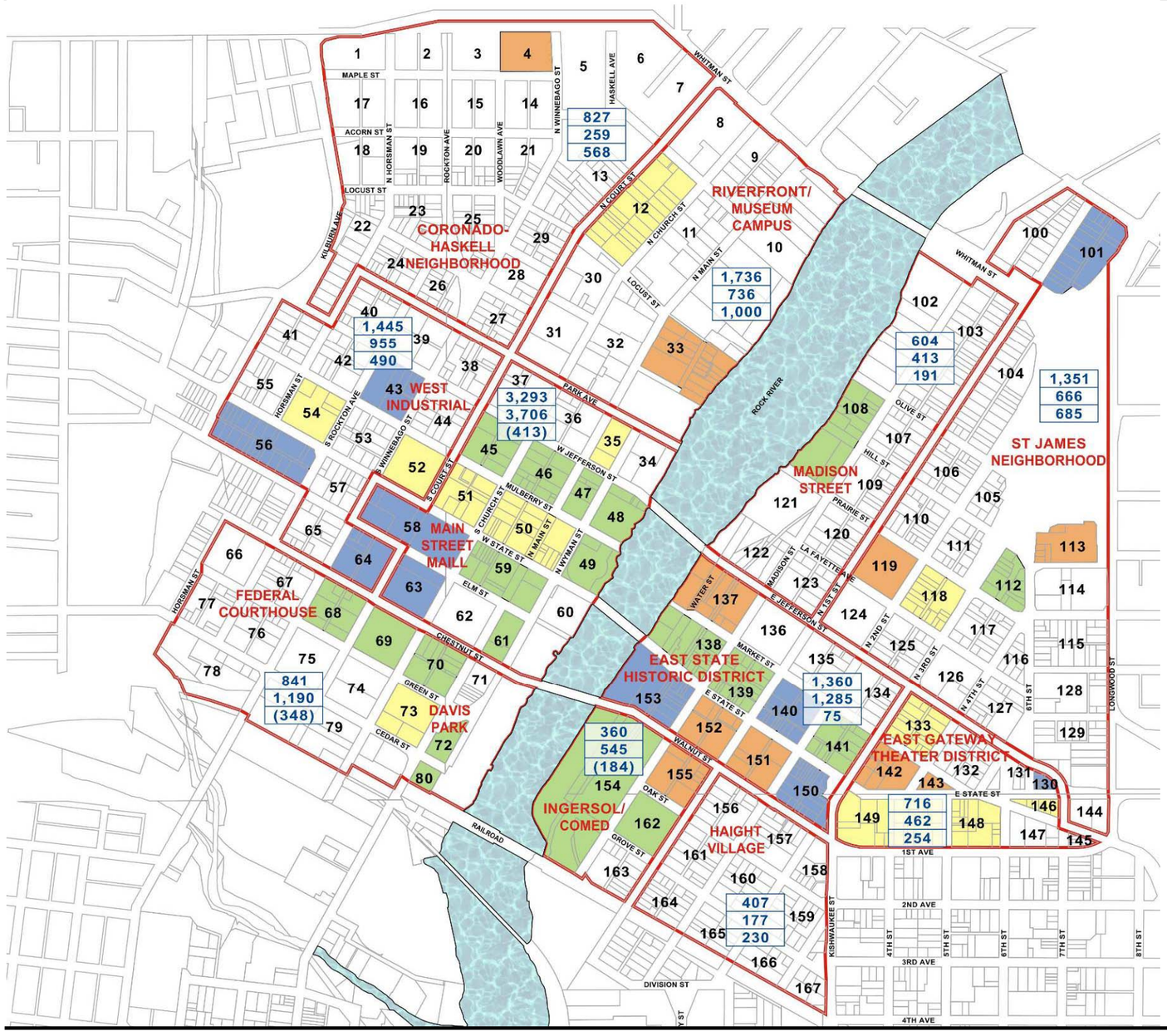
Table 7: Future Parking Adequacy – Scenario Two

Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskell Neighborhood	827	259	568
West Industrial	1,445	955	490
Federal Courthouse/Davis Park (1)	841	1,190	(348)
Riverfront/Museum	1,736	736	1,000
Main Street Mall (2)	3,293	3,706	(413)
Westside Total	8,142	6,846	1,297
Eastside:			
Madison Street	604	413	191
St. James Neighborhood	1,351	666	685
East State Historic District (3)	1,360	1,285	75
East Gateway Theater District	716	462	254
Haight Village	407	177	230
Ingersol/ComEd	360	545	(184)
Eastside Total	4,797	3,547	1,250
Study Area Total	12,940	10,393	2,547

(1) Does not include projected demand for Davis Park Events.
Includes porjected demand for the New Federal Courthouse.
(2) Lost to Development Lot CC/23 spaces
(3) Lost to Development Lot Q/55 spaces; Plus proposed 150-space parking facility
Lost to development Lot T/96 spaces.

The future parking demand projection assumes that all of the noted developments will come to fruition. If all of the noted developments are completed as proposed, additional parking may be needed to offset shortages in certain activity centers or blocks. We suggest the City revisit parking occupancy levels once developments are complete.

Figure 10: Future Parking Adequacy – Scenario Two



LEGEND

STUDY AREA/ACTIVITY CENTER

PEAK OCCUPANCY

90% - 100%

80% - 89%

70% - 79%

60% - 69%

BELOW 60%

DESIGN PARKING ADEQUACY

12,961	EFFECT PARKING SUPPLY
7,140	PARKING DEMAND
5,821	SURPLUS/(DEFICIT)

EVENING PARKING DEMAND

In order to capture occupancy data that would properly represent the Downtown sections affected by evening special events, the City of Rockford requested that occupancy counts be conducted on a predetermined evening. Friday, February 29, 2008 was picked because of the events that were taking place at the Metro Centre and the Coronado Theatre. The thought was to capture an evening when both entertainment venues had an event scheduled. The Rockford *IceHogs* were playing at 7:30 p.m. at the Metro Centre and *The Beatles Experience* tribute band was playing at 8:00 p.m. at the Coronado Theatre.

The occupancy counts were taken on Friday, February 29, 2008 from 5:00 p.m. to 9:00 p.m. There were a total of 28 blocks on the west side and 12 blocks on the eastside that was included in the East State Historic District. The total number of spaces for this portion of this study is 6,657 spaces. The peak observed occupancy occurred at 8:00 p.m. when 3,273 spaces or 49% of the 6,657 spaces were occupied. The Concourse Deck and the Wyman and Elm Garage were both over 80% occupied at 8:00 p.m. Occupancy could have been higher if the rooftop spaces were free of ice and snow. The Pioneer Deck with a capacity of 775 spaces was just over 50% occupied.

The "sum of the peaks demand" total is used when estimating the evening parking demand to better represent a peak evening. "Sum-of-the-peaks demand" is the total of all parking facilities reaching their peak simultaneously. Therefore, for Friday evening the "sum of the peaks demand" is equal to 3,943 or 59% of the total spaces.

The following tables show the 8:00 p.m. peak parking adequacy and the design day or "sum of the peaks" demand parking adequacy.

Table 8: Evening Parking Occupancy, February 29, 2008

Peak Occupancy, 8:00 p.m. Parking Zone/Activity Center	Parking Capacity	Parking Demand	Surplus/ (Deficit)
Westside:			
West Industrial	204	56	148
Federal Courthouse/Davis Park	808	351	457
Riverfront/Museum	412	166	246
Main Street Mall	3,705	2,284	1,421
Westside Total	5,129	2,857	2,272
Eastside:			
East State Historic District	1,528	416	1,112
Eastside Total	1,528	416	1,112
Study Area Total	6,657	3,273	3,384

Source: Walker Parking Consultants 2008

Table 9: Design Evening Parking Occupancy, February 29, 2008

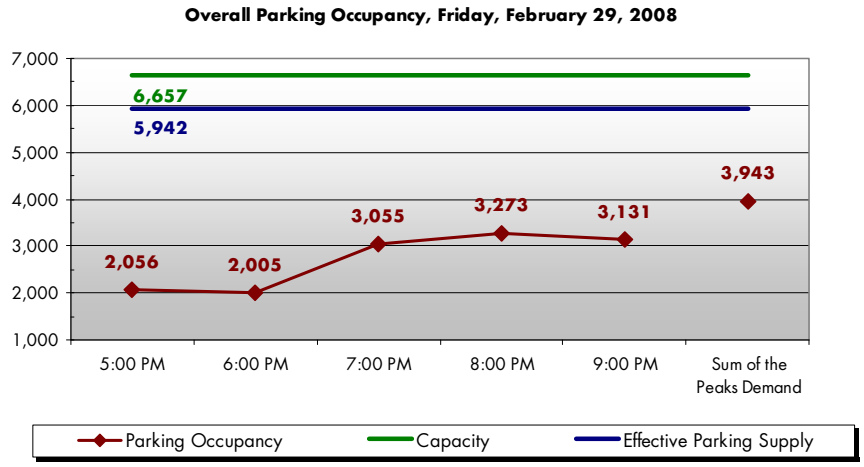
Sum of the Peaks Demand

Parking Zone/Activity Center	Parking Capacity	Parking Demand	Surplus/ (Deficit)
Westside:			
West Industrial	204	62	142
Federal Courthouse/Davis Park	808	382	426
Riverfront/Museum	412	181	231
Main Street Mall	3,705	2,373	1,332
Westside Total	5,129	2,998	2,131
Eastside:			
East State Historic District	1,528	945	583
Eastside Total	1,528	945	583
Study Area Total	6,657	3,943	2,714

Source: Walker Parking Consultants 2008

The following figure illustrates the overall parking demand when compared to the parking capacity. The peak parking demand occurred at 8:00 p.m. when 3,273 spaces were occupied. The "sum of the peaks" demand is 3,943 spaces. The detailed account of the evening parking occupancy counts can be found in Appendix D of this report.

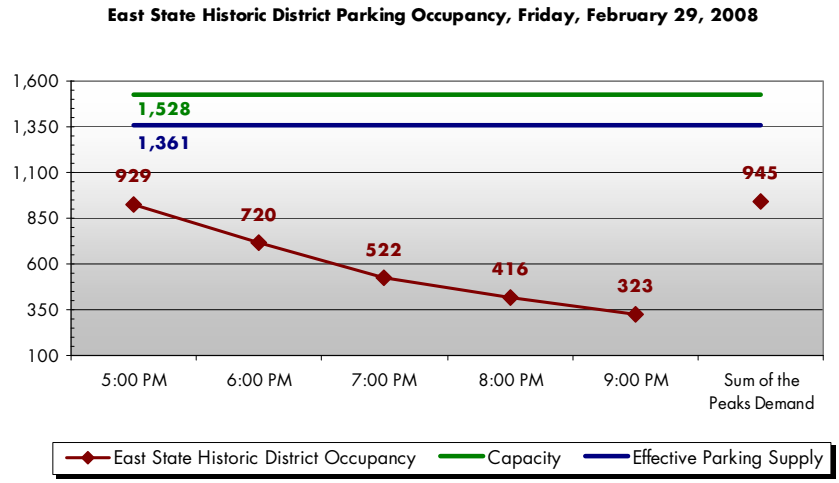
Figure 11: Evening Parking Occupancy



Source: Walker Parking Consultants 2008

The westside demand peaked at a later time than the eastside. The eastside is mainly made up of local pubs and restaurants where the westside demand was predominantly generated by entertainment venues. As shown in Figure 2, the peak parking demand for the eastside occurred at 5:00 p.m. when 929 spaces were occupied.

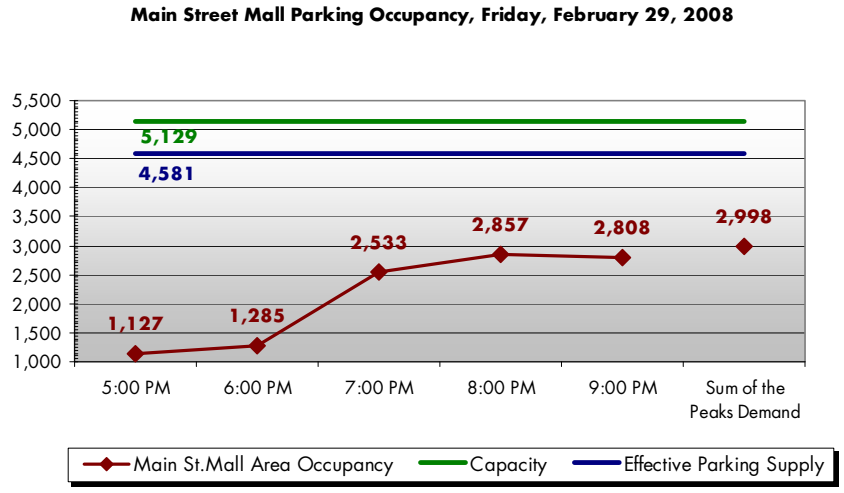
Figure 12: Eastside Existing Observed Parking Occupancy, 2008



Source: Walker Parking Consultants 2008

As shown in Figure 3, the Westside peak parking demand occurred at 8:00 p.m. when 2,897 spaces were occupied.

Figure 13: Westside Existing Peak Parking Demand, 2008



Source: Walker Parking Consultants 2008

Based on the observed parking occupancy for the evening of Friday, February 29, 2008, the result was that the two core activity centers experienced peak parking demands at different times based on the land uses that were creating the demands. As shown in Figure 4, the highest percentage of occupied spaces (90% to 100%) occurred in areas surrounding the demand generators; the Metro Centre and the Coronado Theatre.

Figure 14: Existing Parking Adequacy by Block

LEGEND

- OVERALL STUDY AREA
- EVENING STUDY AREA

PEAK OCCUPANCY

- 90% - 100%
- 80% - 89%
- 70% - 79%
- 60% - 69%
- BELOW 60%

WALKING DISTANCES

Representatives from the City of Rockford are interested in determining what patrons consider reasonable walking distances when visiting the downtown area. There are multiple variables to consider when classifying whether or not a distance is reasonable. According to the article entitled, "How Far Should Parkers Have to Walk," written by Mary Smith and Thomas Butcher of Walker Parking Consultants, the way to evaluate the qualitative variables in parking design in a systematic way is through the level of service (LOS) approach. The level of service classification system is similar to the grading system used in schools, where LOS A is the best, LOS B is good, C is average, and D is below average but minimally acceptable. Issues affecting walking distance are related to the path of travel itself. The article states that there are at least four variables related to path of travel: degree of weather protection, climate, line of sight, and "friction" (interruptions and constraints on the path of travel such as crossing streets with or without traffic signals). The table below presents the recommended gradation of maximum acceptable walking distance for levels of service A through D.

Table 10: Walking Distance Level of Service

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

Source: "Parking Structures", Third Edition, Walker Parking Consultants

The LOS A unprotected walking distances in the chart were derived from sources who cited 400 feet as the reasonable maximum walking distance for shoppers in central business districts. For special events the article also makes reference to another source that cited 1,500 to 2,000 feet as a reasonable walking distance.[5]

[5] Edward Whitlock, Parking for Institutions and Special Events, Eno Foundation for Transportation, Inc. (Westport, CT).

DEVELOPMENT OF SUPPLY-SIDE SOLUTIONS

INTRODUCTION

As summarized previously in the Supply/Demand portion of this report, an overall parking surplus of 5,821 spaces currently exists (12,961 effective supply spaces – 7,140 peak parking demand). However, there still is a perception that there is a parking shortage within the core of the downtown. It would appear that better utilization of the existing parking supply, especially the private parking supply, would meet the parking needs of most parkers within the downtown area. Better utilization of the private parking supply will be discussed later in this section of the report.

Presently, many of the existing downtown buildings are underutilized or vacant, which accounts for much of the large parking surplus that now exists in the downtown. The City and the Riverfront District have developed a plan to revitalize the downtown area. Walker has utilized that plan to develop two future parking Master Plan scenarios. Those scenarios are described in detail in the Parking Supply and Demand section of this report. Scenario Two is the more aggressive scenario; we project an overall surplus of 2,547 spaces will exist within the whole study area under that scenario. However, there are three Activity Centers that are projected to have substantial parking deficits and they as follows:

Activity Center	Parking Deficit
Westside	
Federal Courthouse	348
Main Street Mall	413
Sub-Total	761
Eastside	
Ingersol/Comed	184
Total	945

Therefore, if the downtown redevelops as projected, there will be a need for about an additional 840 spaces (761 x 110%) on the west side of the Rock River and 200 spaces (184 x 110%) on the east side of the river.

To meet these needs, the City and Walker have developed several potential parking solutions as part of the City's downtown master planning process. These alternatives are summarized in Table 1 and are discussed below. The location of each alternative is illustrated in Figure 1.

ALTERNATIVE DESCRIPTIONS

Alternative 1, Open Main Street – Main Street between Elm and Mulberry Streets was closed for a pedestrian mall a number of years ago. Many pedestrian malls are now being reopened with the hopes of revitalizing the commercial business that had been located along a roadway closed to vehicular traffic. Elgin, IL reopened their pedestrian mall about 10 years ago to vehicular traffic and has seen new commercial interest along the roadway. To maximize both sidewalks' widths and the number of parking spaces provided the roadway is being proposed to be one way northbound with 55 spaces striped at 60 degrees. Presently, there are no parking spaces; therefore, there would be a net gain of 55 parking spaces as shown in Table 1.

West Side of the Rock River

Alternative 2A, Old Post Office Parking Structure – Construct a three-level, two-parking-bay parking structure on a site adjacent to the Old Post office. The parking structure would occupy approximately the south half of Block 73. The structure would contain 358 spaces. There are no parking spaces now on that site, thus there would be a net gain of 358 spaces.

Alternative 2b, Old Post Office Parking Structure – Same parking structure as Alternative 2A, but with an additional parking level. This larger structure would contain 496 spaces, which is a net gain of 496 spaces.

Alternative 3, Old Post Office Parking Structure – This parking has a larger footprint that either Alternatives 2A or 2B. This parking structure would be "L" shaped and would have the same footprint as 2A and 2B plus it would wrap around the Old Post Office. It would have three parking levels and would contain a total of 601 parking spaces. The parking lot just west of the Old Post Office now contains 41 spaces, thus there would be a net increase of 560 spaces.

Alternative 4, Bus Transfer Station – Construct a three-level, four-parking-bay parking structure on the South Main Street Redevelopment site. The parking bays would be aligned in the north-south direction. The parking structure would occupy approximately the south half of Block 79. The structure would contain 540 spaces. There are no parking spaces now on that site, thus, there would be a net gain of 540 spaces. This location would serve the downtown and the bus transfer station. It is proposed that Metra, Chicago's commuter rail system, would be extended to Rockford and this location would be the

terminus of that line. For this alternative the rail line is proposed to run along the north edge of the parking structure.

Alternative 5, Bus Transfer Station – Construct a three-level, four-parking-bay parking structure on the South Main Street Redevelopment site. The parking bays would be aligned in the east-west direction. The garage would be split in the middle with each half on either side of the rail line. The parking structure would occupy approximately the south half of Block 79. The structure would contain 682 spaces. There are no parking spaces now on that site, thus there would be a net gain of 682 spaces. This location would serve the downtown and the bus transfer station. It is proposed that Metra, Chicago's commuter rail system, would be extended to Rockford and this location would be the terminus of that line.

East Side of the Rock River

Alternative 10, Lot T Parking Structure – The existing Parking Structure T is in poor condition and needs to be replaced. Tentatively, this parking structure will be replaced with two-story row houses which could consist of retail/office space on the first level and residential space on the second level. Parking will also be required for this development along with an existing need which includes daily parking by the newspaper office and printing facilities located across State Street. The parking structure would be similar to the existing parking. It is assumed that the parking structure would be constructed and controlled by the City. Air rights could then be sold to the developers of the row house development. The new parking facility would contain 120 spaces, which is a net increase of 24 over the 96 spaces that are in the existing parking structure.

Alternative 11, Water Street – Water Street between State and Jefferson Streets now is a two-way street with parallel parking on the west side of the street and 90 degree parking on the east side of the street just south of Jefferson Street. By converting the street to one-way northbound there would be sufficient street width to stripe 60 degree diagonal parking on either the east or west side of the street south of the location of the 90 degree parking. Utilizing the west side of the street approximately 43-parking spaces could be provided. There are now approximately 18 parallel parking spaces along the west side of the street, thus with diagonal parking there would be a net increase of 25 parking spaces.

Alternative 12A, Vacated Car Dealership Parking Structure – The vacated Humphrey Cadillac & Oldsmobile car dealership is now

being listed for sale with an asking price of $895,000. The City could purchase that site and construct a four-level. two-bay parking structure on the site. A four-level parking structure would have approximately 372 parking spaces. There would be a loss of approximately 28 spaces from the existing parking lot, which will result in a net increase of 344 spaces.

Alternative12B, Vacated Car Dealership Parking Structure – Same parking structure as Alternative 12A, but with an additional parking level. This larger structure would contain 478 spaces, which is a net gain of 450 spaces.

Alternative 13A, Lot M Parking Structure – Construct a four-level, two-parking-bay parking structure on the site of parking Lot M. The structure would contain 304 spaces. There are now 91 parking spaces in Lot M, thus there would be a net gain of 213 spaces.

Alternative13B, Lot M Parking Structure – Same parking structure as Alternative 13A, but with an additional parking level. This larger structure would contain 395 spaces, which is a net gain of 304 spaces.

Alternative 14, Lot Q Parking Structure – Construct a four-level parking structure on a site that is behind and underneath buildings that face State Street, between Madison and First Streets. Gary W. Anderson & Associates, Inc. has developed a conceptual plan for the site that is located on the site of parking Lot Q. A total of 186 spaces would be provided, one of which is below grade. The architect's conceptual plan is provided in Appendix F. Presently, there are 55 spaces in Lot Q; therefore, there would be a net increase of 131 spaces.

Alternative 15, Midway Theater Parking Structure – Construct a two-level parking structure adjacent to the Midway Theater. This parking structure would serve a proposed 40-room boutique hotel and the renovated Midway Theater. Included also is a 40-space surface parking lot south of the boutique hotel. The below grade parking structure would extend under the street with pedestrian access from the northeast corner of Block 150. Gary W. Anderson & Associates, Inc. has also developed a conceptual plan for this site. A total of 258 spaces would be provided, one of which is below grade. The architect's conceptual plan is provided in Appendix F. Presently, there are 156 spaces in the existing parking lots; therefore, there would be a net increase of 102 spaces.

Alternative 16, Midway Theater Parking Lot – Reconfigure and reconstruct the existing parking lots east of the Midway Theater to a parking lot that would contain 143 parking spaces. Presently, there are 76 spaces in the existing parking lots; therefore, there would be a net increase of 67 spaces.

Two additional locations had been suggested by the City of Rockford and they were:

1. A parking structure on the site of parking Lot 38 which is located on Block 61, southeast of the Metro Centre.
2. A parking structure on the site of parking Lot SS which is located on Block 70, southwest of the Metro Centre

The soil conditions of for Lot 38 were determined to be un suitable for a parking structure and Lot SS is the proposed site for an 300-room hotel with a 20-40,000 square foot conference center.

The potential parking solutions are further described in the table on the following page.

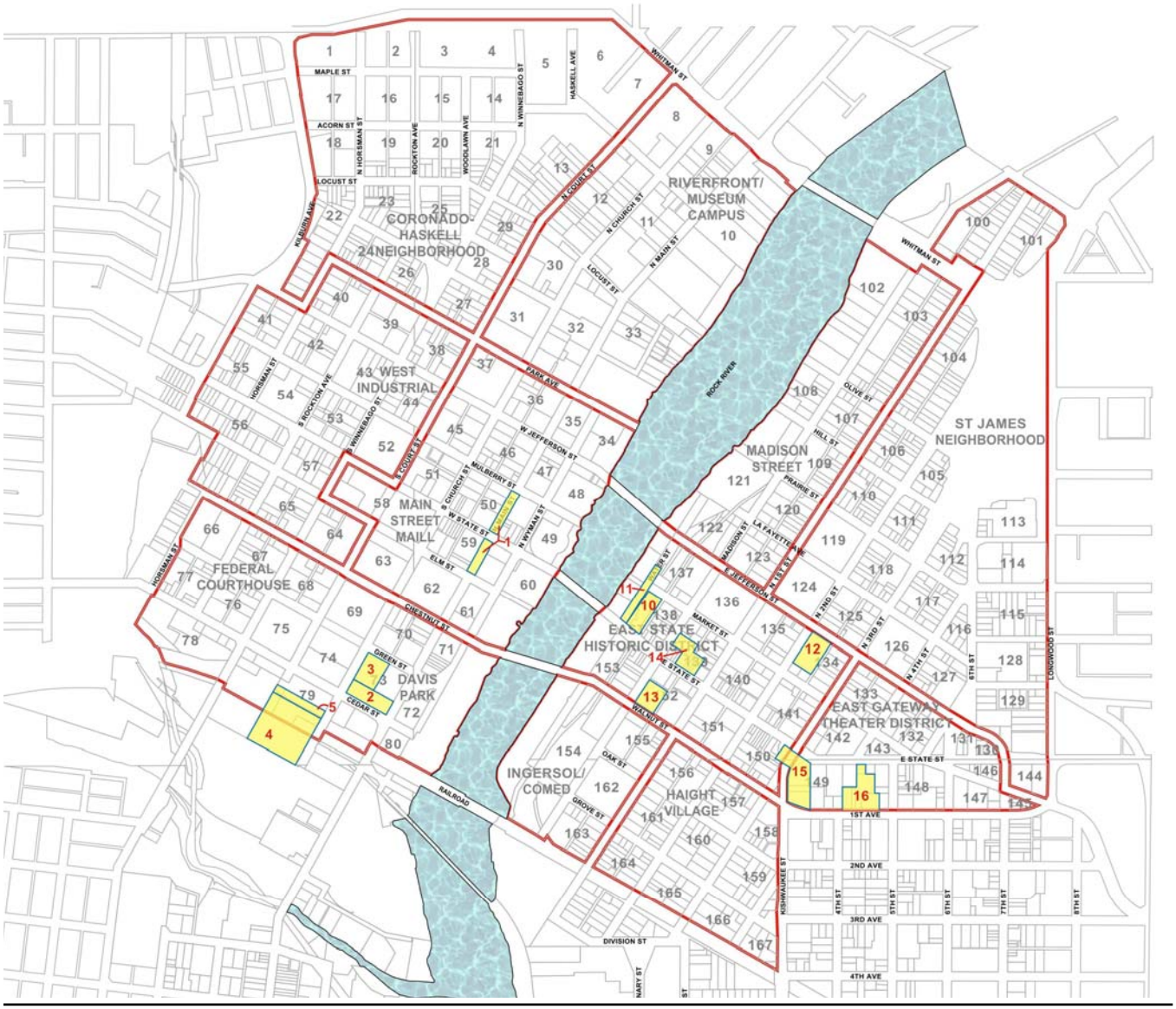
Table 11: Alternative Descriptions

	Alternative	Description	Site Dimensions	Stall Width	Angle (degrees)	Module	Circulation System	Total Spaces	Parking Construction (sq. ft.)	Effc'y Sq.Ft./ Space	Existing Spaces	Net Spaces Added
	Westside											
1	Open Main St.	On-Street Diagonal Parking	NA	9'-0"	60	NA	One-Way Traffic	55	22,400	NA	0	55
2A	Old Post Office Site Parking Structure	3 - Level Single Threaded Helix	124' x 325'	8'-6"	90	60'-0"	Two-Way Traffic	358	106,200	297	0	358
2B	Old Post Office Site Parking Structure	4 - Level Single Threaded Helix	124' x 325'	8'-6"	90	60'-0"	Two-Way Traffic	496	146,500	295	0	496
3	Old Post Office Site Parking Structure	3 - Level Single Threaded Helix	124' x 325' 124' x 185'	8'-6"	90	60'-0"	Two-Way Traffic	601	175,000	291	0	601
4	Bus Transfer Station Parking Structure	3 - Level Single Threaded Helix	248' x 270'	8'-6"	90	60'-0"	Two-Way Traffic	540	188,600	349	0	540
5	Bus Transfer Station Parking Structure	Twin 3 - Level Single Threaded Helix	124' x 315'	8'-6"	90	60'-0"	Two-Way Traffic	682	207,000	304	0	682
	Eastside											
10	Lot T Parking Structure	2 - Level Flat Parking Bays	248' x 490'	8'-6"	90	60'-0"	Two-Way Traffic	120	36,700	306	96	24
11	Water St.	On-Street Diagonal Parking	248' x 490'	8'-6"	60	NA	One-Way Traffic	43	15,400	358	18	25
12A	Vacant Car Dealership Parking Structure	4 - Level Single Threaded Helix	124' x 264'	8'-6"	90	60'-0"	Two-Way Traffic	372	114,600	308	28	344
12B	Vacant Car Dealership Parking Structure	5 - Level Single Threaded Helix	124' x 264'	8'-6"	90	60'-0"	Two-Way Traffic	478	147,300	308	28	450
13A	Lot M Parking Structure	4 - Level Interlocked Helix	166' x 198'	8'-6"	60	53'-0"	One-Way Traffic	304	113,600	374	91	213
13B	Lot M Parking Structure	5 - Level Interlocked Helix	166' x 198'	8'-6"	60	53'-0"	One-Way Traffic	395	145,970	370	91	304
14	Lot Q Parking Structure	4 - Level (1) with Speed Ramps	Irregular	8'-6"	90	60'-0"	Two-Way Traffic	186	95,900	516	55	131
15	Midway Theater Parking Structure	2 - Level (1) with Speed Ramps	232' x 310'	8'-6"	90	60'-0"	Two-Way Traffic	258	88,900	345	156	102
16	Midway Theater Surface Lot	Surface Lot	Irregular	9'-0"	90	60'-0"	Two-Way Traffic	143	52,800	369	76	67

Notes: 1. One level is below grade.

Source: Walker Parking Consultants, 2008

Figure 15: Parking Alternative Locations



Source: Walker Parking Consultants, 2008

COST COMPARISON

Tabulation of the preliminary estimated cost for the parking solutions is shown in Table 2. The construction cost represents the estimated cost (2008 dollars) of the facilities based on unit costs of parking facilities that Walker has designed within the Chicago metropolitan area. The parking structure estimate includes typical amenities provided in Walker projects such as long-span construction (except as noted in the alternative descriptions), special considerations for durability and low maintenance, concern for pedestrian comfort, and security considerations such as openness of elevators, lobbies and stairs, etc. The following costs were used in our analysis.

$ 5.00 per sq. ft. to resurface and restripe a surface lot or street
$12.00 per sq. ft. to construct a new surface lot or street
$60.00 per sq. ft. to construct an open structure
$50.00 per sq. ft. to construct a one-level, flat deck
$90.00 per sq. ft. to construct a one-level, flat deck below grade

The below-grade cost includes excavation, retaining walls, sprinklers and ventilation. For those alternatives with a parking level below grade, that level was estimated at $90 per square foot, while the remainder of the parking structure was estimated at the open structure value of $60 per square foot.

The total project cost is the sum of the construction cost and an additional soft cost, which includes the cost of design, construction observation, surveys, testing, permits and contingencies (5% for surface lots and 10% for structures). The soft cost was assumed to be 25% and 15% of the total costs for structures and surface lots, respectively. The project cost is then divided by the number of added spaces (cost per added space), which most fairly represents the economy of each solution for comparison purposes.

Although the cost per added space might at first seem to be the overriding concern, the alternatives also have operating costs. Therefore, an estimate of the annual cost to own and operate each alternative is performed. Financing methods (tax-exempt bonds) have been assumed, with an interest rate of 5% over 30 years for each structured parking facility and 10 years for surface lot options.

Operating cost is based on our data bank of parking facility operating cost, which is updated periodically. All of the parking facilities were assumed to be unattended.

These figures are preliminary estimates and are based on typical unit costs; they are not intended to provide site-specific information. It must be remembered throughout this analysis that the purpose is to compare the schemes on an apples-to-apples basis.

The construction cost estimate does not include any cost associated with the relocation of utilities, roadway improvements or unexpected problems with soils. The cost for the City to purchase the Humphrey Cadillac & Oldsmobile car dealership site, however, was included in the cost for Alternatives 12A and 12B.

Table 12: Alternatives Financial Summary

	Alternative	Parking Construction Cost	Parking Cost /Total Space	Total Project Cost (6)	Total Cost Per Space	Annual Debt Service (7)	Annual Operating Cost (8)	Net Annual Cost	Net Annual Cost Per Space	Net Annual Cost Per Added Space	Footnotes
	Westside										
1	Open Main St.	$269,000	$4,900	$316,000	$5,700	$40,923	$4,675	$45,598	$829	$829	2,6b,7b,8d
2A	Old Post Office Site Parking Structure	$6,372,000	$17,800	$8,496,000	$23,700	$552,677	$113,486	$666,163	$1,861	$1,861	3,6a,7a,8b
2B	Old Post Office Site Parking Structure	$8,790,000	$17,700	$11,720,000	$23,600	$762,403	$157,232	$919,635	$1,854	$1,854	3,6a,7a,8b
3	Old Post Office Site Parking Structure	$10,500,000	$17,500	$14,000,000	$23,300	$1,813,064	$190,517	$2,003,581	$3,334	$3,334	3,6a,7a,8b
4	Bus Transfer Station Parking Structure	$11,316,000	$21,000	$15,088,000	$27,900	$1,953,965	$171,180	$2,125,145	$3,935	$3,935	3,6a,7a,8b
5	Bus Transfer Station Parking Structure	$12,420,000	$18,200	$16,560,000	$24,300	$2,144,596	$216,194	$2,360,790	$3,462	$3,462	3,6a,7a,8b
	Eastside										
10	Lot T Parking Structure	$2,202,000	$18,400	$2,936,000	$24,500	$190,991	$38,040	$229,031	$1,909	$9,543	3,6a,7a,8b
11	Water St.	$185,000	$4,300	$218,000	$5,100	$28,232	$3,655	$31,887	$742	$1,275	2,6b,7b,8d
12A	Vacant Car Dealership Parking Structure	$6,876,000	$18,500	$9,168,000	$24,600	$596,392	$117,924	$714,316	$1,920	$2,076	3,6a,7a,8b
12B	Vacant Car Dealership Parking Structure	$8,838,000	$18,500	$11,784,000	$24,700	$766,566	$151,526	$918,092	$1,921	$2,040	3,6a,7a,8b
13A	Lot M Parking Structure	$6,816,000	$22,400	$9,088,000	$29,900	$591,187	$96,368	$687,555	$2,262	$3,228	3,6a,7a,8b
13B	Lot M Parking Structure	$8,758,000	$22,200	$11,677,000	$29,600	$759,606	$125,215	$884,821	$2,240	$2,911	3,6a,7a,8b
14	Lot Q Parking Structure	$7,192,000	$38,700	$9,589,000	$51,600	$623,778	$58,962	$682,740	$3,671	$5,212	3,4,6a,7a,8b
15	Midway Theater Parking Structure	$6,353,000	$24,600	$8,471,000	$32,800	$551,051	$81,786	$632,837	$2,453	$6,204	3,4,6a,7a,8b
16	Midway Theater Surface Lot	$634,000	$4,400	$746,000	$5,200	$96,610	$12,155	$108,765	$761	$1,623	2,6b,7b,8d

Construction Costs:

1/ Resurface Lot/Street $5.00 /sq. ft.
2/ New Surface Lot/Street $12.00 /sq. ft.
3/ Open Structure $60.00 /sq. ft.
4/ Flat Deck-1 Level $50.00 /sq. ft.
5/ Below Grade Structure $90.00 /sq. ft.
6/ a) Plus Soft Costs @ 25% of the total project cost
b) Plus Soft Costs @ 15% of the total project cost

Note: The project costs do not include unusual soil conditions and/or environmental abatement expenses.

7/ Annual Debt Service
a) Structure @ 5.00% for 30 years
b) Lot @ 5.00% for 10 years

8/ Operating Costs
a) Above Grade-Attended $584 /space/year
b) Above Grade-Unattended $317 /space/year
c) Below Grade-Unattended $400 /space/year
d) Surface Lot-Unattended $85 /space/year

Source: Walker Parking Consultants, 2008

COMPARISON OF ALTERNATIVES

The matrix shown in Table 3 (page 11) evaluates the parking alternatives for the City of Rockford on the basis of eight criteria. The points awarded for each alternative are determined first by scoring each solution for each category. Some of the criteria, such as net annual cost per added space, can be scored objectively; the associated value is shown in the matrix. For subjective criteria such as internal function, a value of 5 = excellent, down to 1 = poor, has been awarded. The scoring shown in Table 3 was prepared by Walker Parking Consultants. Next, each criteria is weighted by assigning it points; the sum of all criteria totals 100 points. The criteria used to evaluate the alternatives are as follows:

Annual Cost/Added Space – The annual cost to own and operate the facility divided by the number of spaces added. The scores were assigned to each alternative based on the annual cost per added space with the most costly being 1 and the least costly being 5.

Location vs. Need – A judgment of how closely the location of the new parking matches the location of the generator of parking demand and meets the need for additional spaces. This is a partial measure of user acceptance.

Implementation – The ease or difficulty of getting the improvement in place, including practical and political considerations (but not financial).

Pedestrian Experience – Consideration of the walking path and distances to/from the structure and conflicts with traffic patterns.

Traffic Impact – The ability of vehicles to move to and from the area without conflicting with its access onto major streets.

Internal Function – The ease of finding an available space, of relocating the parking location on return and the ease of exiting the system.

Security – The ability to safeguard the personal safety and property of potential users. The key to security is visibility; those facilities with the best internal and external visibility are ranked the highest. Surface lots provide good security, unless they are in remote locations, because of their lack of hiding places. However, high visibility from an activity

Center in the downtown, is also a determining factor of security. Parking structures with flat levels above ground would be best from a security standpoint. Conversely, the more the facility is underground and/or the more complex the ramping system, the more difficult it is to provide security.

Aesthetics – The compatibility of the proposed parking facility with the present and future downtown environment.

Table 13: Alternatives Comparison

Criteria	Total Weighting	Alternative 1	2A	2B	3	4	5	10	11	12A	12B	13A	13B	14	15	16
Annual Cost Per Added Space	20%	5	4	4	3	3	3	1	4	4	4	3	3	1	1	4
Location/Program	20%	5	4	4	4	4	4	3	3	2	2	4	4	4	2	1
Implementation	10%	2	3	3	3	3	3	4	5	4	4	5	5	3	2	5
Pedestrian Experience	10%	5	3	3	2	2	2	5	5	3	3	4	4	5	3	3
Traffic Impact	10%	5	3	2	1	2	2	4	5	3	2	3	3	4	3	5
Internal Function	10%	5	4	4	3	3	3	3	5	4	4	4	4	2	3	5
Security	10%	5	3	3	3	3	3	2	5	3	3	3	3	2	2	5
Aesthetics	10%	2	3	3	3	3	3	4	2	3	3	3	3	5	5	2
	100%															
UNWEIGHTED																
Points		4.3	3.4	3.3	2.8	2.9	2.9	3.3	4.3	3.3	3.1	3.6	3.6	3.3	2.6	3.8
Rank		1	6	7	12	12	12	7	1	7	11	4	4	7	12	3
Points		4.4	3.5	3.4	2.9	3.0	3.0	3.0	4.1	3.2	3.1	3.6	3.6	3.1	2.4	3.5
Rank		1	5	7	14	11	11	11	2	8	9	3	3	9	15	5

5 = Excellent
4 = Very Good
3 = Good
2 = Fair
1 = Poor

Source: Walker Parking Consultants, 2008

FINDINGS – PARKING SOLUTIONS

The two on-street parking alternatives, the opening of Main Street and diagonal parking on Water Street ranked number 1 and 2, respectively in the weighted matrix evaluation. However, neither provides enough additional parking spaces (a total of 75 spaces for both projects). The highest ranking parking structure is Alternative 13A and 13B, constructing a parking structure on Lot M. An additional 213 and 304 spaces would be provided by Alternatives 13A and 13B, respectively. Alternative 10, the replacement of parking Structure T appears to be almost a necessity, especially if the row house development becomes a reality.

The highest ranking parking structure on the west side of the river is Alternative 2A, which would provide an additional 358 spaces in area that would meet the daily parking needs, but also the needs of the Metro Centre since it would be located within a block of that facility and directly across the street from the proposed new Federal Courthouse. Alternatives 4 and 5, two parking alternatives as part of the South Main Street Redevelopment project, did not rank that would be high as Alternative 2A. Either of those two sites could be attractive however, if that redevelopment project proceeds.

Alternatives 14 and 15 do provide additional convenient parking spaces in the area where additional parking will be needed if those are developed into areas with higher parking demand. The small and unique sites, coupled with providing expensive below grade parking, make both of those alternatives expensive on a per-space basis. The estimated cost per space is $51,600 and $32,800 for Alternatives 14 and 15, respectively.

A parking garage on Lot M and providing diagonal parking on Water Street appear to be the best solutions for additional parking on the east side of the Rock River. On the west side of the River, a new parking garage on the block of the Old Post Office along with diagonal parking on a reopened Main Street between Elm and Mulberry Streets is the best solution for that area on the downtown. The recommended parking program is shown in the table on the following page.

Key Finding:
A parking garage on Lot M and providing diagonal parking on Water Street appear to be the best solutions for additional parking on the east side of the Rock River. On the west side of the River, a new parking garage on the block of the Old Post Office along with diagonal parking on a reopened Main Street between Elm and Mulberry Streets is the best solution for additional parking in that area on the downtown.

Table 14: Recommended Parking Solutions

	Alternative	Spaces Added	Total Spaces	Project Cost per Space	Project Cost Total
	Westside				
1	Open Main St.	55	55	$5,700	$316,000
2B	Old Post Office Site	496	496	$23,600	$11,720,000
				Total	$12,036,000
	Eastside				
10	Lot T	24	120	$24,500	$2,936,000
11	Water St.	25	43	$5,100	$218,000
13A	Lot M	213	304	$29,900	$9,088,000
				Total	$12,242,000

Source: Walker Parking Consultants, 2008

BETTER UTILIZATION OF THE EXISTING PARKING SUPPLY

In almost all areas of the downtown, the parking supply is adequate, but all of the spaces are not available to many of the motorists seeking a parking space. The result is the perception that there is a need for more parking spaces when the solution may simply be better access to the available empty parking spaces. There is a need to make better use of the available parking supply by including as many spaces as possible in a common pool of shared, publicly available spaces. It is not to ticket and/or tow vehicles that are parked in public and private parking lots, especially during times that the demand for parking in a lot is low.

In almost all areas of the downtown, the parking supply is adequate, but, all of the spaces are not available to many of the motorists seeking a parking space. There is a need to make better use of the available parking supply by including as many spaces as possible in a common pool of shared, publicly available spaces.

Fundamental to the revitalization of the Rockford is the creation of a "park once" environment. The typical suburban pattern of isolated, single use buildings each surrounded by parking lots requires two vehicular movements and a parking space to be dedicated for each visit to a shop, or office, or civic institution. To accomplish three errands in this type of environment requires six movements in three parking spaces for three tasks. With the majority of the parking held in private hands, spaces are not efficiently shared between uses, and each building's private lots are therefore typically sized to handle the worst-case parking need. Most significantly, when new and renovated buildings in an existing downtown are required to provide worst-case parking ratios, the result is often stagnation and decline: buildings are not renovated, since no room exists on the site for the required parking.

New shops, therefore, often demand the tear-down of adjacent buildings, generating freestanding retail boxes surrounded by cars. The result is low density or under-utilized land uses which generate too few pedestrians to let the downtown obtain its potential.

When the urban practice of building individual private lots for each building is introduced into a traditional downtown, the result is also a lack of welcome for customer: at each parking lot, the visitor is informed that her vehicle will be towed if he or she peruses any place besides the adjacent building. When this occurs, nearby shopping malls gain a distinct advantage over the downtown with fragmented parking. Mall owners understand that they should not divide their mall's parking supply into small fiefdoms. The mall owners operate their supply as a single pool for all shops, so that customers are welcomed wherever they park.

Operating the downtown parking supply as a single shared pool would result in significant savings in daily vehicle trips and required parking spaces, for three reasons:

- Park Once - Those arriving by car can easily follow a "park once" pattern: they park their car just once to complete multiply daily tasks on foot before returning to there car.

- Shared Parking among Uses with Differing Peak Times – Spaces can be efficiently shared between uses with differing peak hours, peak days, and peak seasons of parking demand (such as office, restaurant, retail and entertainment uses).

- Shared Parking to Spread Peak Loads – The parking supply can be sized to meet average parking loads (instead of the worst-case parking ratios needed for isolated suburban buildings), since the common supply allows shops and offices with above average demand to be balanced by shops and offices that have below-average demand or are temporarily vacant.

To implement a shared parking concept strategy, parking in downtown Rockford must be managed as a public utility, just like streets and sewers, with public parking provided in a strategically-placed, city-owned and managed lots and garages. New development should be prohibited (or strongly discouraged) from building private parking (except residential spaces). In cases where private developments, such as new offices, require a guarantee of a certain number of spaces at particular hours (e.g., Monday through Friday, 8:00 AM to 5:00 PM),

they should be provided with the opportunity to lease those spaces in a nearby public lot or garage, with the exclusive right to use them during the hours specified. Such arrangements leave the parking available during the evening and weekend hours for other users.

In addition, Rockford should work to make existing private parking lots available to the public when they are not being used by nearby commercial uses. Based on the data supplied to Walker from Rockford and data collected by Heartland Parking on October 4, 2007, there are a total of 14,598 spaces within the downtown study area. The on-street inventory comprises 3,538 parking spaces and the off-street inventory makes up the remaining 11,060 parking spaces. Of the off-street spaces, 3,061 are open to the public and 7,999 are private or restricted-use spaces. The resource of 8,000 parking spaces needs to be better utilized than it is today if the City is going to see the downtown revitalization they are hoping for. If motorists continue to be ticketed and towed from available parking spaces they will simply take their business to other more parking friendly commercial locations. As stated in the parking supply and demand section of this report, at peak times the private off-street parking locations are less than half full and many of those locations have signs prohibiting public parking.

Rockford should work to make existing private parking lots available to the public when they are not being used by nearby commercial uses.

The East State Historical District activity center is now the area that is the greatest concern for providing more parking available to the public during non-business hours. If existing resources can be used more effectively, the City may *not need to build as much new parking*

ONE WAY STREETS

A number of years ago many cities converted their downtown two-way streets to one-way streets to improve upon roadway traffic flow. Moving vehicles swiftly through downtown maybe counter productive to providing a vibrate and prosperous downtown that the City is seeking. A number of cities now are studying those one-way streets and are converting them back to two-way to improve upon wayfinding and property access. One-way streets can be confusing to the occasional downtown visitor thus making it difficult to locate business and access parking facilities. The need for one way streets needs to be reexamined by the City with the goal being converting a number of roadways back to two way traffic flow.

DEMAND-SIDE SOLUTIONS

TRANSPORTATION DEMAND MANAGEMENT (TDM)

When faced with financial and spatial constraints, it may more efficient and inexpensive to manage parking demand than to try to create enough parking spaces (supply) for all potential users. The marginal cost of providing the last 10% of the needed parking supply can be significantly more expensive than reducing the first 10% of the demand.

A transportation demand management (TDM) plan may help a municipality to reduce parking demand and thereby ameliorate the need for additional parking spaces. Generally, a transportation demand management (TDM) plan is an array of programs that help an institution to reduce parking demand by encouraging a more efficient use of transportation resources or by reducing the presence of single-occupancy vehicles. This section briefly discusses the components of a transportation demand management plan and how a TDM plan might help the City of Rockford to reduce its parking demand.

When considering the features and benefits of a TDM plan, one should note that a successful plan is one that presents motorists the fullest array of alternatives to the single occupancy vehicle. One should also be mindful that a successful TDM plan may potentially reduce parking demand by approximately 4%.

A 4% TDM parking demand reduction would result in an overall future Scenario Two decrease in parking demand of 520 parking spaces within the downtown parking study area (10,393 x 0.04 = 416). At an average cost of $16,500 per parking space, the reduced demand means a potential savings of approximately $6.86 million.

TRANSPORTATION DEMAND MANAGEMENT COORDINATOR

Given the potential savings from a successful Transportation Demand Management plan, we strongly recommend that the City of Rockford establish the position of TDM coordinator.

DESCRIPTION

The TDM Coordinator would report to the City Traffic Engineer. The TDM Coordinator would be responsible for designing, developing, and marketing the City's transportation demand management (TDM) program. Typical duties include: acting as liaison to regional ridesharing organizations, monitoring the effectiveness of the alternative commute programs, hosting promotional events, developing incentive programs, and writing copy for brochures, newsletters, and

other publications. The TDM Coordinator candidate must be self-directed, have a customer-friendly manner, have the ability to provide strong leadership when appropriate, and be capable of explaining a wide variety of transportation services in a simple, straightforward way.

RESPONSIBILITIES

A successful TDM Coordinator would perform tasks that include the following.

- Coordinate ongoing implementation of TDM outreach and marketing plan, and develop new promotions on a regular basis.
- Develop and manage new and existing alternative transportation programs and manage an in-house ride-sharing database.
- Develop promotional incentives, events, and prize drawings and seek opportunities to coordinate with regional ridesharing promotions and events.
- Produce a video series of shorts intended to inform and educate users about their alternative transportation options.
- Liaise with regional ridesharing agencies and participate in local organizations involved in TDM efforts.
- Analyze data regarding participation in employee transportation programs and recommend refinements, to uncover promising geographic areas for expansion of such programs.

Ideally, the City of Rockford will establish the position of transportation demand management coordinator. This coordinator would help the City to develop and to institute a TDM plan bests-suited to Rockford's needs.

PRICED PARKING: THE FULCRUM OF TRANSPORTATION DEMAND MANAGEMENT

Presently, the City of Rockford does not charge for short term parking. This practice means that the City is subsidizing single occupant vehicle commuting. As long as the City continues not to charge for short term parking, it will continue to subsidize free parking and offer no incentive for motorists to consider alternative means of travel to the downtown area.

Charging motorists to park is the prerequisite of a successful TDM plan. Motorists must be made aware of the fact that parking is never free. In our research, we have found that the average construction cost of a parking space ranges from $3,000 for a surface lot to $30,000 for an underground space parking structure, exclusive the price of land. [6]

Parking spaces exact a high environmental toll. First, the steel, asphalt, and concrete of a parking facility are all materials that have a substantial ecological impact. Second, a parking facility occupies valuable land and makes that scarce resource even more expensive. Third, a parking facility further enhances the preeminence of the automobile in everyday life. In turn, the wide use of cars increases America's dependence on fossil fuels.

For a TDM plan to work, the motorist must obtain some appreciation of the high economic and environmental costs of parking. The best way to achieve this goal is to charge motorists market rates to park their vehicles. Parking is a valuable commodity but as long as the City of Rockford subsidizes the use of this commodity motorists will not change their driving habits and their parking demand will not decrease.

Generally, pricing parking takes one of two forms: charging for parking and offering incentives for motorists not to park. The first method is the easiest way to make the cost of parking transparent but also the most controversial as motorists will now have to pay for commodity that was once free.

Offering incentives not to park is a newer approach to managing parking demand. In the near term, incentives require a higher level of institutional support but in the long run may be more palatable to motorists who can see an immediate benefit to not using a parking system and may decide to explore alternative means of transportation.

Regardless of the differences between the two forms of priced parking, both share in common a critical element pivotal to a successful TDM plan: informed, rational choice. In implementing a priced parking policy as a part of a broader TDM plan, the City would inform motorists the objectives of the plan and the long term benefits to the community. Motorists would weigh these benefits against the now transparent cost of parking.

[6] Walker Parking Consultants, The Cost of Parking (2005), unpublished PowerPoint presentation, 2006.

CHARGING FOR PARKING

Currently, the City of Rockford does not charge a fee for on-street parking. While popular with motorists, the availability of subsidized parking impinges on the efficient use of resources and costs the City money. Because it is free, on-street parking generates a high demand. Because it has been free for al long time, on-street parking perpetuates the expectation that on-street parking will remain free. In turn, this expectation influences the determination of parking requirements for future developments. These requirements center around the assumption that on-street parking will remain both free and available. Consequently, future development plans center around a central question: where will people park? This question comes at the expense of an equally important question: how will this development best serve the needs of the city?[7]

Charging for parking helps to reestablish a balance between these two concerns. A well-conceived pricing program will reflect the market price of a parking space. If priced correctly, a motorist will be motivated to make a rational calculation that weighs the cost of using a parking space against the benefits of other means of transportation.

Not everyone will change their behavior; some people will invariably choose to pay for a prime parking space rather than one that is less costly but more distant. Nevertheless, the change in choices of only a small percentage of motorists may make a significant difference in the number of parking spaces that will be needed in the future.

PARKING BENEFIT DISTRICTS

A parking benefit district is an area that benefits directly from the monies collected for priced parking. Within the benefit district, a municipality invests a portion of the collected fees to enhance the parking system. The enhancements can range from increased lightning, improved signage, to more frequent maintenance.

A parking benefit district may help a municipality address the umbrage inspired by the decision to charge motorists to park. The parking benefit district concept can be especially profitable for area merchants in a business district. One such example is in the Old Town district of Pasadena, California. Initially, business owners were wary of making the transition from free parking to paid parking. However, in the

[7] This point draws from Donald Shoup, *The High Cost of Free Parking* (Chicago: Planners Press, American Planning Association. 2005), 7-27.

intervening years, the revenue generated from paid parking has helped to transform the area into one of the region's more popular shopping and entertainment districts.[8]

A residential area can also enjoy the rewards of a parking benefit district. Rather than simply prohibiting non-residents from parking, non-residents can be allowed to pay to park in the resident permit district during business hours. If the revenue generated from non-residents paying fair market value for a parking permit is dedicated to fund improvement projects or additional public services in the district, residents will see a value in allowing non-resident parking in a limited and financially beneficial way.

The City can use the revenue to clean the neighborhood's streets and sidewalks more frequently, repair sidewalks, remove graffiti, plant trees, and add traffic calming features. Residents benefit from the improved services, non-residents are offered more parking options, and the city may be able to alleviate a parking crunch or forgo adding additional parking lots or structures.

UNBUNDLED PARKING

Unbundled parking is a second way of making the cost of parking transparent to motorists. Typically, the cost of parking for residential and commercial units falls on the occupants indirectly through the rent or purchase price. A consequence of this "bundled" parking means that tenants or owners frequently must pay for more parking than they may need or not have the opportunity to subscribe to the amount of parking they do need.

Unbundled parking provides a viable alternative to the usual practice. Unbundled parking allows for the sale or lease of parking spaces separate from building space. Because unbundled parking makes transparent the cost of parking, it allows motorists to weigh the economic cost of driving to their destination. Unbundling, as a component of a TDM plan, can help to regulate the parking supply of an existing or planned building.

For an existing building, unbundled parking provides several options that may be mutually beneficial to both owner and tenant. These options include:

- Separate agreements governing the actual building space and parking spaces;

[8] Ibid, 405-418.

- Discounted rates for tenants who decline the opportunity to lease or to rent parking;

- The inclusion of parking costs as a separate line item to aid in the negotiation of the terms of lease;

- The creation of a market for available parking spaces through the administration of a list of available parking spaces.

For proposed developments, unbundled parking presents numerous opportunities to reduce parking demand. The City and a developer may agree that a proposed building will have unbundled parking. Such an agreement would allow a developer to market the structure to tenants who understand that their establishment will not generate a high parking demand. It may be likely that competition for office space in a structure with unbundled parking will be high, especially if the area benefits from a comprehensive TDM plan.

Unbundled parking may allow developers to build structures at a lower cost (because fewer parking spaces may be required). These savings could then pass along to area businesses. In turn, businesses could use these savings to facilitate their employees' participation in the broader TDM plan.

PARKING CASH OUT

Of all the methods there are to discourage people from driving, paying people for not driving is probably the most popular and therefore the most politically palatable. While no one likes to be charged for something that they have always gotten for free, it is possible, to turn a charge into an incentive. Businesses, municipalities, and other institutions use parking cash-out programs throughout the country to limit their employees' demand for parking.

A parking cash-out program offers employees a fixed amount of money every month, for example fifty dollars, which they can use to purchase parking. If the cost of leasing parking spaces is unbundled, employers may use cash out programs to pass the savings along to employees who do not drive to work. In the case of employers that need to build structured parking for employees, the monthly payment offered to an employee in lieu of a parking space can be significantly less than the debt service on the cost of constructing additional spaces.

To encourage parking cash out, numerous state and local governments are taking measures to encourage the practice. In California, the law requires a significant number of employers that offer free parking to

offer the cash-out option to their employees as well.[9]

A major challenge to making parking cash out effective is the likelihood that many drivers will have at least a few days every month when many employees need to drive to work, often because of needing their automobile during the day or after work. This need may undermine the incentive to give up a monthly parking permit when paying for parking on a daily basis, several days a month, can represent a significant percentage of the cost of a monthly pass. Once the monthly pass is purchased, it represents a significant sunk cost; there is little financial incentive for the employee not to park in a space for which he or she has already paid.

As a result, one corporate campus in Britain came up with a slightly different take on parking cash out. Instead of employees receiving a monthly lump sum payment in place of a monthly parking pass, employees would receive a lump sum at the end of the month based on how few days they had swiped their parking entry cards. For example, someone who never parked in the company lot would receive the equivalent of $66.00 at the end of the month. However, every day that an employee swiped their key card, $3.00 would be deducted from the lump sum they would receive. An employee who drove to work all twenty two work days of the month would receive nothing, but an employee who chose to drive to work on just five separate days during the month would receive their lump sum, minus the $15 they had "paid" for parking just a few days during the month. With less money sunk into the cost of parking, employees had more flexibility about their mode of travel to work. For a large pool of employees, the reduction in the number of spaces provided can represent significant land and construction savings.

IRS PRE-TAX PROGRAM QUALIFICATIONS

The Internal Revenue Service has established conditions under which

[9] It should be noted here that when discussing TDM we refer to traffic and parking reduction plans being implemented by both developers and employers. Before construction, the developer and the city have the opportunity to determine how much parking will be built. In San Jose, the City plans to create agreements with developers before construction by filing a covenant on the title of the property to assure that future owners will comply with the agreements. Enforcement of the policy is monitored in part by annual reports from an assigned transportation coordinator. In this case we would refer to implementation by the developer. In the case of employers that would adopt TDM policies after they had already occupied their buildings, we refer to implementation by the employer.

parking allowances to cover parking or alternative commuting costs may be included within or structured as a "flex plan" (similar to insurance "cafeteria" flex plans), and may include financial payment to employees. These conditions, which may also apply to work-related mass transit or vanpooling expenses, may allow for employers to cash out employees as a pre-tax benefit ranging between $115 and $220 per month.[10]

Parking cash-out is a simple and effective method of reducing parking demand by increasing commuter choice and increasing utilization of the commuting alternatives. Parking cash-out works best when offered through an overall program of managed employee parking benefits. It is popular with both employees and employers, because it serves as an employee benefit and has the potential to reduce parking demand.

Numerous studies have focused on the impact of cash-out programs on parking demand. One study that focused on several Los Angeles-area firms at a time when mass transit options were relatively limited found a reduction of vehicle trips to work ranging from 5% to 24% with an average reduction of 12%.[11]

RIDESHARING

Ridesharing refers to carpooling and vanpooling in which vehicles carry additional passengers. In carpools, participants use their own vehicles. In vanpools, participants use vans that are often supplied by employers or leased from third parties.

Ridesharing presents several immediately tangible benefits. Ridesharing has minimal incremental costs because it makes use of vehicle seats that would otherwise be unoccupied. It tends to have lower costs per vehicle-mile than public transit because it does not require a paid driver and avoids empty backhauls. Ridesharing allows for the distribution of fuel costs among the members of a car- or vanpool.

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[10] Department of the Treasury, Internal Revenue Service, *Employer's Tax Guide to Fringe Benefits for use in 2008*, publication 15-B (2008), pages 17-18, available at <http://www.irs.gov/pub/irs-pdf/p15b.pdf>, accessed on 27 May 2008. As the conditions regulating the application of the benefit vary, it is crucial that the TDM coordinator obtain guidance from an licensed tax professional before the benefit were offered.

[11] Donald C. Shoup, *Parking Cash Out*, American Planning Association Planning Advisory Service report 532 (Chicago, American Planning Association, 2005), 65.

However, ridesharing is generally only suitable for trips with predictable schedules such as commuting or attending special events.

RIDE SHARING INCENTIVES

Americans rely on their automobiles to an extent unparalleled in the industrialized world. For a successful TDM plan, the City of Rockford will need to provide multiple interlocking incentives that not only motivate individuals to participate in ride sharing programs but also allay concerns participants may have for those instances when they may need personalized use of a vehicle.

Guaranteed or Emergency Ride Home programs are essential elements of a ride share program. Guaranteed and emergency rides home mitigate a potential participant's fear that by ride sharing they will no longer be able to get home if ill, if a child is sick, or if unexpected overtime is necessary at work. While the specific programs may vary, it will be crucial to convince potential and active participants in ride share programs that, in a pinch, they can get where they need to go in case of an emergency off campus. Typically, the guaranteed or emergency ride home is provided by a taxi service.

Preferential parking spaces for ride share vehicles would allow participants in ride sharing programs to park closer to core areas of a municipality. These spaces would be reserved for carpools and vanpools and, potentially, could provide a heightened level of service. For example, preferential parking spaces could also be covered, positioned closer to elevators, or have wider parking aisles to facilitate ingress and egress from vehicles.

Price incentives are another common mechanism to promote ride sharing. The cost to ride share participants can be reduced in a number of ways. For example, a carpool permit can be offered at the same price as a regular permit, while allowing carpool members to share the cost, thus reducing their individual obligation toward parking expenses. A carpool permit might also be available at low or no cost, with the stipulation that participants cannot purchase any other type of permit. Finally, a few programs offer discounts, credits, and/or rebates based on the number of people in a carpool, the number of days per week a carpool or vanpool arrives intact, or the length of time an individual has been ride sharing.

Ride matching services would see the TDM Coordinator working with participating employers to provide some degree of administrative or

information technological support to participants in the ride share programs. For example, the City would host on its servers URLs that provide basic information about ride share routes as well as contact information.

Occasional use permits allow participants of a ride sharing program to park on campus as a single occupancy vehicle (SOV) for a certain number of days per year, most commonly one per month or twelve per year. Some programs give participants twelve occasional use permits up front and then allow them to purchase up to a certain number more through the course of a year.

CARPOOLS

A carpool is a group of riders who use a private vehicle to share a ride to campus. Generally, a TDM plan that includes carpools as a ride share option will enter a agreement with the members of each carpool. This agreement may offer the primary driver of the carpool a reduced permit rate in addition to preferential parking spaces.

Concurrently, other members of the carpool might become ineligible to purchase parking permits. Typically, the agreement does allow a carpool to share a limited number of parking permits that would be valid only for one day, it could also provide an additional incentive if a percentage of these single-use permits are not used during the life of the agreement. This exception allows carpoolers to have a limited number of single-occupant vehicle days when needed.

The administration and operation of carpools should the responsibility of the participants of each carpool. The employer is rarely involved in the operation of a carpool although it may help with the marketing of a carpool program by posting advertisements.

VANPOOLS

A vanpool is a group of riders who gather at one or more pre-determined meeting points and then commute to work in a van. The meeting points could be park and ride lots adjacent to transit hubs. The members of a vanpool share the fees for leasing the van and the responsibility for establishing membership policies. A single member of the vanpool frequently serves as both the driver and the coordinator. In exchange for these services, the driver may not have to pay rider-ship dues or may have use of the van on nights and weekends.

While most effective as a componet of a wider Travel Demand Management (TDM) plan, vanpools may serve as an effective stand-alone tactic for reducing parking demand.

ESTABLISHING INSTITUTIONAL SUPPORT

The most effective vanpools are organized under the auspices of an employer. An active alliance between vanpools and their employer can lessen the burden on the former while maximizing for the latter the reduction in parking demand.

The first step in organizing vanpools is for the parent employer to determine its level of support. Proactive, direct support can range from coordinating and subsidizing the leasing of vans, to using its information technology to promote the program and to recruit participants, to providing designated parking areas at reduced cost for vanpools.

Institutions can also support indirectly vanpool programs. This support may encourage participation by providing links on its website to third party vanpool resources. However, links should be maintained because broken or inaccurate links may lead to the mistaken interpretation that a vanpool program has been discontinued or that the broader TDM plan has been abandoned.

Regardless of the level of support, the employer should clearly define the difference between its role in organizing vanpools and administering the individual vanpools. The latter task should be left entirely to the membership of each vanpool.

OBTAINING VEHICLES

The vans themselves may belong to the employer or a member of the vanpool. Often, the van is leased through a third party such as VPSI, Inc., or Enterprise Rent-a-Car's Ride share. Such third parties can also provide organizational, administrative, and technological support to vanpools. Such third-party support would allow institutions to provide less direct support to its vanpool project while not undermining the efficacy of the vanpools. Moreover, working with a third-party such as VPSI, Inc. allows the potential for a wider pool of riders, especially in urban areas. Some institutions collaborate with other businesses to increase the pool of potential riders.

The costs of leasing, operating, maintaining, and insuring a van can be subsidized or the costs can be borne entirely by a vanpool's

members. Variables such as the van's size, vehicle features, and number of riders will be the predominant factors that determine the cost.

Regardless of its provider, the vehicle typically becomes the driver's responsibility. If the van is leased through a third party, the third party may provide assistance to make sure that the driver meets the requirements to operate the vehicle. Generally, these requirements include: proof of an unblemished driving record, valid license to operate a van, a driving test, and a road test. Additionally, third parties may require a credit check, employment verification, and medical history.

Similarly, if the employer owns the vans or is otherwise an active supporter of the vanpool program, it will generally ask prospective drivers for documentation.

ADDITIONAL RIDESHARING OPTIONS

Ridesharing tends to experience economies of scale: as more people use the service the chances of finding a suitable carpool or vanpool increase significantly. As ridesharing requires a certain amount of regimentation potential participants may be deterred from joining a vanpool because they work part time or an irregular schedule.

To increase the pool of potential participants, rideshare programs may be tailored to the needs of its ridership. Some employers offer financial incentives such as a cash payment to employees who carpool, or a voucher that covers vanpool fees, provided as an alternative to a free parking space. Because they have significant economies of scale, it is helpful if one well-publicized ridematching program serves an entire geographic region. There does appear to be such a program in the Rockford area.

Recently, ridesharing programs have sought to increase ridership. These efforts have centered around attempts to encourage motorists to share rides for individual trips, creating a cross between hitchhiking and taxi service. Some involve pre-registering motorists and riders to increase security, and establishing standard reimbursement rates.

Other programs have introduced the concept of dynamic ridesharing. Dynamic ridesharing sees independent organizations matching passengers with drivers for individual trips (as opposed to regularly scheduled trips), using telephone and computer technologies. King County Metro has incorporated special event ridematching into its

regional rideshare program.[12]

Appendix H discusses the Twin Cities metro area of Minnesota as a case study for carpools and vanpools.

TELECOMMUTING

Telecommuting is a work arrangement in which employees leverage advanced information technology to vary their working hours and location. Whether from a home office, a local coffee house, or other 'hot spot,' telecommuters use the internet and mobile telephones to complete their tasks remotely rather than in the traditional workspace.

Because telecommuting results in a decentralized workplace, employers must decide if this practice is well suited for a firm's managerial culture and the skills of its workforce. Similarly, some members of a workforce may prefer not to telecommute.

Despite these potential drawbacks, telecommuting as a component of a TDM plan allows for fewer vehicle trips to the workplace. The reduction in parking demand will come because employees will either work remotely several days a week or employees will alternate their time at the office.

LOCAL MASS TRANSIT DISTRICT INITIATIVES

If priced parking is the fulcrum of a successful TDM plan, a viable mass transit system is the lever. From our discussions with the Rockford Mass Transit District (RMTD) we came to the conclusion that the RMTD is a resource that may be pivotal in the implementation of a TDM plan. Presently, the RMTD has a reasonable rate structure and an underutilized ridership program designed for employees who work in downtown Rockford.

Table 15, below, details the rate structure for the RMTD's fixed routes.

[12] See <http://www.rideshareonline.com/>, accessed on 27 May 2008.

Table 15: RMTD Fixed Route Fares

Patrons	Fare
Rates of Fare - Cash Fares	
Adults & Children (12 years & older)	$1.00
Children under 5	Free
Children 5 to 11 years of age	$0.50
Middle School with RMTD ID or valid school ID	
High School students, 20 years or younger, with RMTD ID or valid school ID	$0.50
Senior Citizens with RMTD ID	$0.50
Disabled Citizens with RMTD ID	$0.50
Rates of Fare - Ticket Fares	
Adult 10-Ride Ticket	$10.00
Student, Disabled or Senior Citizen 10-Ride Ticket	$5.00
30./35 Unlimited Ride Saverpass	$35.00

Source: <http://www.rmtd.org/fares.php>, accessed 27 May 2008.

The fares are very reasonable and should not be a deterrent for most that want to ride the RMTD.

Presently, the RMTD does have a program for downtown employees that could reduce further the fare and decrease downtown parking demand. The program, TransitChek®, is an IRS-approved pretax benefit that not only saves employees money but also any company that participates in the program. The more company employees that are enrolled, the more a company saves.

The RMTD adopted the program to make this tax-savings benefit available to as many businesses and employees as possible. The program's mission is to encourage transit ridership as a way to reduce traffic congestion and air pollution.

Currently, TransitChek® is not utilized by any eligible company in the Rockford area. We believe that the program presents an opportunity for the City of Rockford to assess the level of interest within the City for a program that might be a component of a more comprehensive TDM plan.

OVERVIEW

When it comes to parking policy, the central business districts (CBD) of most major cities are treated differently from other parts of town. As each city parking system expands and contracts, the need for efficient management of the resource continually changes.

This section examines some methodologies and changes that could improve both the efficiency and service provided to visitors and the Rockford community. Based upon our observation of existing conditions and our understating of the Rockford parking operation, we hope to provide recommendations herein for subtle changes that could enhance the operation and overall financial performance of Rockford's parking system.

When drivers perceive a shortage of parking in a popular commercial area, the question is often asked; "Why don't they just build more parking?" The answer is that building more parking is usually not the most efficient way of dealing with the problem. There is typically neither enough physical space nor the financial resources to allow everyone to park immediately adjacent to their preferred destination and in many cases, parking places may in fact be available within walking distance, no further than where any new parking facility could be constructed. Finally, in some instances, the existing parking spaces are not being used for the purpose that was intended, to serve the customer. To put it in real estate terms, the spaces are not being utilized for their highest and best use. Constructing a parking facility is extremely expensive and for this reason, maximizing the efficiency of existing parking spaces is the cost effective way to increase the amount of parking available in the most desirable locations.

It is important to emphasize that existing parking supplies be efficiently utilized. While drivers typically prefer to park on street rather than in an off-street facility, without proper parking management the streets may be crowded with drivers cruising for on-street parking spaces around the most popular blocks. At the same time, an ample number of spaces on the next block or in a nearby parking facility sit vacant. Only an intolerably impacted on-street parking situation or relatively high on-street parking rates are likely to persuade drivers to park in a parking garage. Efficient policies can spread out demand, reduce congestion in the most impacted areas and better utilize the spaces in areas of lower demand.

While an analysis of parking supply and demand determines how many parking spaces a CBD or downtown area will need in

PARKING MANAGEMENT – POLICIES & STRATEGIES

aggregate, parking management strategies address whether those spaces are in the right locations and how they can most efficiently be utilized. Typically, people's preference for parking is in the following order: on the street, in a surface lot, and finally, in a parking structure. These preferences are related to drivers' desire for convenience, time savings and safety.

Parking in an on-street space allows the driver a shorter walk to their destination than would parking in a parking structure, particularly compared to a parking structure where travel through a stairwell or a wait for an elevator may be required. The level of lighting, cleanliness and the perception of safety are hugely important when people are deciding where to park.

The City of Rockford currently offers "free" on-street parking throughout the downtown area; therefore, the on-street spaces located near popular destinations are premium parking spaces. The results of our occupancy counts confirm this, as over 90% of the on-street spaces located in the high demand areas of downtown were occupied during peak demand periods.

Off-street parking spaces located farther from destinations are suitable for people who will stay at their destination for a longer period of time and are more willing to walk to their destination than is a customer whose stay is shorter. By ensuring that employees and other long term patrons park in spaces farther from their destinations, but within walking distance and along the periphery of the commercial district, more parking spaces are provided for customers closer to their destination. We elaborate on this concept in the following paragraphs.

Employees travel to the same place every day and generally spend a significant portion of the entire day at that location. Most employees have little choice (at least in the short term) to go elsewhere. For this reason, it is not unreasonable to have employees walk farther from their parking place to their destinations than short term visitors, such as customers. Employee parking need not be immediately adjacent to the work place; employees who are familiar with an area can be expected to walk farther than visitors, who are often unfamiliar with the vicinity. Research has determined that it is reasonable to have employees walk 1,500 to 2,000 feet in a safe environment from their parking places to their destinations[13].

[13] Smith, Mary and Butcher, Thomas, "*How Far Should Parkers Have to Walk*", 1994

Customers, unlike employees, generally have significant choices when it comes to their destinations; for the economic health of a commercial area, parking should therefore be made as convenient as possible for the customer. However, once again, acceptable walking distances do vary depending on seasonality and the walking environment. In a downtown area, people do expect to walk to a certain extent; they may even prefer to park once and walk along a pleasant street with stores or restaurants rather than to drive and park several times to visit a number of destinations. As discussed earlier, the parking located closest to businesses should be set aside for people making the trips with the quickest turnaround. If spaces in a parking structure or lot are the only ones available, the most convenient spaces should, as much as possible, be set aside for customers.

FREE ON-STREET PARKING

Paid parking is often perceived as a negative competitive element that impacts downtown business activity in comparison to suburban developments, where parking is generally provided for free. In response to this inequity, the City of Rockford revised its municipal ordinances and removed on-street parking meters in 1983. At that time all parking meters were replaced with either time limit zones or permit parking areas. Today, the Concourse Parking Garage is the only location in Rockford that charges for transient parking.

The probable intent of the conversion from on-street metered spaces to time limited spaces was to entice the general public to visit downtown Rockford and also to remove a disincentive to businesses to locate in the CBD. There are various pros and cons to this strategy and specifically this policy has the following positive aspects:

- Reducing the cost of parking for short-term and errand parkers;
- Creating the impression of increased activity due to high occupancy of on-street parking spaces;
- Improving the viability of some ground floor retail and some commercial offices in the CBD;
- Partially balancing the competitive position of the retail and office uses that require but cannot (or do not) provide sufficient short-term parking;
- Reducing the cost of ownership for some property owners and tenants by relieving them of the responsibility to provide sufficient short-term parking, which in turn, reduces the cost of ownership or subsidizing parking through tenant rent;
- Providing evidence that political bodies are responding to the perceived interests of stakeholders to reduce the cost of parking.

The decision to eliminate metered parking also creates a number of unintended consequences, the majority of which are negative. The primary purpose of charging a fee for parking convenience is not the collection of revenue, but rather to allow market participants to properly value the parking asset and therefore, efficiently allocate a scarce resource. In most markets, highly valued commodities that are in limited supply are fairly rationed by price. The value of parking to the typical user declines from high to low as follows:

- Proximity to destination;
- Visibility from the destination;
- Simplicity to complexity (surface parking to structured parking);
- Perceived safety (light to dark, above to below ground).

When evaluating the above criteria, an argument could be made that on-street parking is the most valuable asset within a city's parking system.

Given the current policy, many on-street parking spaces in downtown Rockford are occupied by long-term parkers. Two hours of free parking may be extended effectively to almost three by the circulation time of the enforcement officers. Some long-term parkers may actually arrive late and leave early or periodically throughout the day, while others may arrive by 9:00 a.m. and leave by 11:30 a.m. for lunch, or an appointment, and repeat this behavior in the afternoon and finally, many users continually re-park at two-hour intervals. In fact, employees have even been known to act as "look outs" to let everyone know that the enforcement officer is either in the area, or has already completed checking an area.

Business owners and managers are also frequent violators of time limit policies, who rationalize their occupancy of the closest spaces to their businesses by the necessity to run frequent errands or tend to their banking needs, etc. This behavior is exaggerated because most users are unaware of the value of on-street parking. In most cases, the penalty for violating time limits is a fine and if a citation is avoided with any regularity, the penalty is far less than the perceived cost of parking.

Over the years, a number of cities have replaced parking meters with time limits and many have since decided to reinstall meters, including the cities listed in the Table 16 below:

Table 16: Cities that have Reinstalled Parking Meters

Martinsville, IN	Burlington, VT
Stanley, IN	Georgetown, SC
Mt. Vernon, IN	Richmond, VA
Flint, MI	St. Petersburg, FL
Mt. Clemens, MI	Pittsfield, MA
Quincy, IL	Hackettstown, NJ
Ashland, KY	Princeton, NJ
Lancaster, KY	Schenectady, NY
Murray, KY	Garrett, PA
El Dorado, AK	York, PA

Source: Walker Parking Consultants

PRICING APPROACH

For instructive purposes, the definition of *Parking Pricing*[14] means that motorists pay directly for using parking facilities. Parking pricing may be implemented as a Transportation Demand Management (TDM) strategy (to reduce vehicular traffic in an area), as a parking management strategy (to reduce parking problems in a particular location), to recover parking facility costs, to generate revenue for other purposes (such as a local transportation program or downtown improvement district), or for a combination of these objectives. It is important to note that the cost to operate a public parking system is either paid for directly by users or indirectly in the form of taxes, higher rent rates, or cost of goods. It is often perceived by municipalities that paying directly for parking is more equitable since the individuals who are using the public resources are charged and a fee is collected at the time of use. Regardless of the method selected to recoup the costs of providing parking, *there is no such thing as free parking*.

Parking pricing at municipally-owned garages and lots is impacted by the city's classification of public parking as a public utility or an enterprise. Each scenario is described below:

- Public utility - It is common for municipalities that operate parking as a public utility to implement a cost approach when setting prices. The cost approach to pricing begins by asking what it costs to own, operate, and maintain parking facilities and what rate needs to be charged in order to cover costs. With this approach, the pricing does not consider the location

[14] Victoria Transport Policy Institute, Transportation Demand Management Encyclopedia; Parking Pricing, Updated May 11, 2006

or demand elasticity for parking in the surrounding area. Rather, the primary objective is to keep the parking rates as low as possible for the intended user groups without jeopardizing the solvency of the municipality's asset.

- Enterprise - Conversely, when a municipality operates its public parking as an enterprise, (as in Rockford) the prices are set according to market conditions. Pricing for a parking enterprise tends to be at or near market levels and any net operating income after debt service is reinvested into new infrastructure or program improvements that benefit the community. This approach has benefited municipalities with a collective vision for community improvement projects and a common understanding that parking revenue may help bring the proposed improvements to fruition.

Public parking is an economic good with fixed and variable costs that are often paid for with parking revenue. It is important that the policy makers who view parking as a public utility understand what is included in the parking operating costs along with any potential market forces that may influence costs.

Walker's research shows that operating costs for parking vary dramatically due to geographical location, size of the system, staffing patterns, method of operation, and local legal requirements. Common expenses for parking structures include the cost of utilities, supplies, daily maintenance, cashiering, management and accounting services, security, property taxes, and insurance, while expenses for on-street operations could include: meter collection and meter maintenance staff, accounting and insurance The types of insurance coverage include: comprehensive liability, garage-keeper's legal liability, fire and extended coverage, workers' compensation, equipment coverage, money and security coverage (theft occurring on the premises), blanket honesty coverage (employee theft), and rent and business interruption coverage (structural damage resulting from natural phenomena).

The annual operating expenses related to operating a parking system typically ranges from $200 to more than $800 per space. These figures exclude debt service, structural repairs and replacement costs that may be associated with a public parking system.

A market approach to pricing is implemented when a municipality views parking as an enterprise and reinvests the net operating income back into the parking operation or other public improvements. There are significant market factors that need to be evaluated prior to setting parking rates. These factors include, but are not limited to property location, surrounding land uses, proximate competition, level of demand, policies on public transportation, and traffic mitigation goals.

If there are multiple locations owned by a municipality, then market specific pricing is typically implemented, which results in a wide representation of prices being offered to the community. For example, a parking area located furthest from the core area of demand may warrant a parking price commensurate with its position in the downtown area, whereas a parking area positioned nearer to the core area may warrant a significantly higher price. Demand for parking at each location must be evaluated to determine if the appropriate prices are being charged.

One industry method of determining whether parking prices are appropriately set is to evaluate the peak daily utilization of a parking location. The target equilibrium between supply and demand for most parking operations should be around 85%, and if the available supply is more than 85% occupied, then parking rates may be set too low. Allowing the economic forces of demand to influence the policy towards parking pricing is reflective of a parking operation that seeks both to maximize the efficiency of the system and to bring in revenue to help support infrastructure improvements. In the case of public parking, some municipalities believe that it is a matter of responsible stewardship to generate a positive net operating income, which is then reinvested into the community. This method of operation requires the municipality to actively monitor the parking prices at each of its locations in relation to the demand.

Key Finding:
When parking occupancy in the on-street or off-street spaces is over 85%, rates may be set too low.

The challenge for any municipal parking operation is to determine the appropriate price to charge while honoring the role that government was intended to serve. While some municipalities purposely charge parking rates that are significantly below market, resulting in a less profitable, break-even, or subsidized system, other communities may view public parking as an opportunity to reinvest capital back into the community. Each municipality must make a localized pricing decision that is appropriate for the community's overall well-being. This may result in a pricing policy that is based on a market or cost approach or a combination of both. However, regardless of the method selected, the decision makers are wise to understand the actual costs of providing the parking.

THE DESTINATION IS THE DRAW

Finally, we note that objections to paid parking or rate increases often comes from neighborhood business owners who fear that charging for parking may scare away customers. Except in instances of rates that are extremely high, Walker's experience is that, as one parking expert has stated, "the destination is the draw." If people want to visit a destination, it is highly unlikely that a small fee for parking will affect

their decision. Whether going shopping or dining out, the fee for parking in such instances typically represents a small enough percentage of the cost of the entire evening that it is an insignificant factor in the decision. What may be a more significant factor is the inability of the driver to find convenient parking, a problem which some drivers are likely experiencing in the high occupancy areas of Rockford.

PARKING RATES AND REVENUE

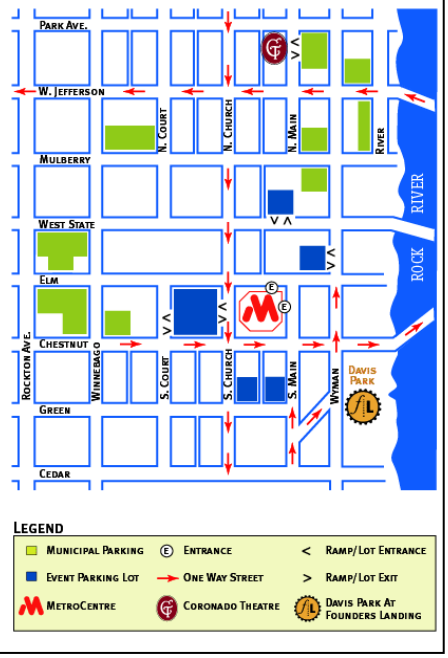
The Rockford parking system is comprised of on-street parking spaces, which are free to the end user and a series of off-street surface parking lots and parking structures that provide a combination of free and paid parking options for public parking. The following provides a brief description of the parking opportunities offered in Rockford:

- Short-term – Several downtown municipal surface parking lots provide short-term free parking Monday through Friday with posted time limits, between the hours of 8 a.m. and 5 p.m. In addition, on-street parking is free for one or two hours during the same hours.
- Transient – Visitors that require more than two hours of parking can use the Concourse Parking Garage between the hours of 6 A.M. and 6 P.M. Transient rates in this facility range from a minimum of $1.00 to a maximum of $3.00 for the entire day.
- Long-term – Long-term or monthly parking is available in most municipal lots and garages. Permits are sold on a monthly basis through an office located in City Hall. The rates for monthly permits range from $30.00 to $40.00 per month dependant upon location.
- Special Event Parking – Parking for special events held at the Metro Centre or Coronado Theatre are controlled by the Metro Authority and most events require a $5.00 flat fee for parking.

Walker evaluated the parking rates charged in comparable suburban communities in Illinois to determine how the current parking rates in downtown Rockford compare. Table 21, which is included in the Appendix of this report, summarizes the results of the survey.

The proposed parking rates included in Table 21 and discussed throughout this section, were derived anticipating that a shortfall may occur over time in Rockford's enterprise parking fund. Therefore, we suggest the City consider implementing the proposed pricing structure as future development and growth occurs, or when deemed appropriate by city officials.

Special Event - Parking Locations



OPERATING EXPENSES

Pursuant to the scope of services outlined for the project, we reviewed the annual operating expense budgets for 2007 and 2008 (provided by the City), to ensure the expenses incurred for the services rendered to operate the parking system were within industry-standard limits. The expenses are shown in Table 17, which details the expenses either as a percentage of payroll, or on a per-space basis. The number of spaces used to calculate the annual expense per space consisted of all the structured and surface lot spaces (2,974) in Rockford, excluding the Water Street Garage.

Table 17: Operating Expense Budgets – 2007 and 2008

Expense	2007	Positions	% Payroll	$/space [4]	Positions	2008	% Payroll	$/space [4]
Salaries	$ 336,062	10		$ 113.00	10	$ 412,043		$ 138.55
Fringe[1]	100,590		29.93%	33.82		123,747	36.82%	41.61
W/Compensation	4,249		1.26%	1.43		4,846	1.44%	1.63
Insurance	14,370		4.28%	4.83		15,170	4.51%	5.10
Utilities	108,000			36.31		108,000		36.31
Contract Services [2]	410,590			138.06		318,770		107.19
Supplies [3]	31,520			10.60		34,300		11.53
Total	$ 1,005,381			$ 338.06		$ 1,016,876		$ 341.92

[1] Includes: IMRF, UE tax, health, life and retiree health insurance.
[2] Includes: postage, phone, travel, service contracts, utilities, snow removal, building, equipment and public works maintenance, microcomputer, vehicle repairs, fuel, equipment, building and land rental, legal fees, auditing and miscellaneous.
[3] Includes: tools, clothing, building, grounds, janitorial and general office supplies.
[4] Based upon 2,974 spaces located in 3 structures and 17 surface lots; Water Street Garage is excluded from the total space count.

Source: Walker Parking Consultants - 2008

Based upon our review, the staffing and expenses are within the industry standard for an operation of this magnitude and therefore no recommendations are provided based upon the results of our findings in this area.

MANAGEMENT STRATEGIES

A clear objective of the City of Rockford is to provide parking for all core government services and the retail sector at the lowest possible cost to the community, which in most cases results in below market rates being charged for the service. Walker suggests that Rockford's parking enterprise fund be operated to maximize potential operating revenue, so that future parking improvement projects and the parking operation would continue to be supported, in whole or in large part, by the enterprise fund alone.

One step that can be taken towards increasing operating revenue and better managing parking demand is to adjust both the parking rates and the available parking supply to better meet the needs of the community. To achieve this goal, on-street parking in the high demand

areas should be priced higher than any off-street parking alternatives and this value-based approach to pricing is recommended by Walker.

We emphasize that the focus of our discussion of managing parking with prices is to increase efficiency by providing the public with more parking spaces. Any revenue earned from these measures is a secondary effect, and can be used not only to help supply more parking, but also to encourage improvements to the parking system and infrastructure.

The value of an on-street parking space is high; whether the value of the is reflected in the rate or not, a driver may be willing to pay a high meter rate per hour for a single hour or less, but that same person is unlikely willing to do so for six or eight hours at a time.

The two most common methods for generating the positive effects that a high turnover of on-street parking spaces creates are pricing and time limits. However, a rates based policy offers far more benefits to the city and the public than do time restrictions for the following reasons:

- In a time restricted space (i.e. two hours) the parker has no less incentive to park for 15 minutes than he does for two hours. Parking rates encourage turnover in smaller increments of time.
- For parkers who are willing to pay to stay longer than time restrictions allow, prices allow them to do so without being fined while still providing an incentive to vacate the space once it is no longer needed.
- It is far more difficult and time consuming to identify a parking infraction using a policy of time limits than enforcing metered parking;
- Parking enforcement must be far more diligent in order to identify a car that has been sitting illegally in a time restricted space than a car parked in a metered space that is enforced solely by pricing. As a result, many cars in time restricted spaces remain there for much of the day;[15]
- The obvious advantage of using pricing to create turnover is the revenue that accrues to the city. Many cities have used downtown parking revenue to fund the construction of new public parking garages and to beautify surrounding streets.

While a policy of time restrictions that is well implemented and enforced can provide many of the same positive turnover effects as a policy of pricing, using parking rates tends to be a more efficient and effective policy tool. The popularity of time restrictions is likely the

[15] A study of on-street parking in Seattle found the average parking duration in spaces with a one-hour time limit was 2.1 hours (Shoup, Donald, "*The High Cost of Free Parking*", 2005).

result of the policy being, in many cases, politically more palatable than pricing parking at market rates.

The City of Rockford is committed to future development that will impact a downtown area that has numerous buildings and sites that could someday be developed into either residential, retail or entertainment land uses. Therefore, effective management strategies are critical to support the development and ensure the best use of the available parking for retail, residential and commercial patrons that utilize the downtown parking system.

Many of Rockford's downtown retailers have concerns regarding the convenience and accessibility of parking for their customers, as highlighted in the comments below, which were recorded during a public forum conducted by Walker and also during a subsequent meeting with representatives from the River District Association:

- Parking impacts the viability of retail development;
- The downtown parking structures are restricted to reserved monthly permits and use of these facilities by the general public for transient parking is prohibited;
- On-street parking is limited during daytime hours and is ample during nighttime hours;
- Signage that directs public users to available parking is non-existent; enhanced signage would be helpful in assisting visitors; add an international parking symbol [P], as an identifier, to all public lots and structures;
- Short-term parking spaces near commercial outlets are constantly abused by employees of merchants and tenants; vehicles are relocated throughout the day to avoid being ticketed;
- Customers prefer on-street vs. structured parking, especially on the west side of the river;
- The Concourse Garage is over utilized for employee parking leaving a minimum amount of space available for transient parking on jury call days;
- Perceived lack of security in the public parking structures, i.e. presence of homeless people;
- A pricing structure should be implemented and used to control demand in designated areas of downtown;
- Utilize the State/Main and/or Wyman Street parking structures for paid transient parking for merchant customers;
- While an excess supply of parking exists on many days, the spaces available are not convenient to the desired downtown destinations;

- The two surface lots near the Public Library are often full and most of the prime spaces within other surface lots are reserved for permit parking;
- Explore new ideas and ways to administer and manage the monthly permit program including: on-line registration, on-line purchase and permit renewal, implement either a bar-code or radio frequency identification (RFID) permit system that does not expire, is renewable on-line and managed as a database of active permits;
- A consensus opinion developed from local talk-radio shows infers that metered parking is needed in downtown;
- Any enhancements to the downtown parking system should be funded through revenue bonds or an increase in parking rates;
- Numerous comments were also recorded regarding poor accessibility when driving in the downtown area; attributed to the configuration of the one-way street system.

The following section discusses operational recommendations that could be implemented to assist Rockford in meeting their long-term goal of operating an effective, self sufficient parking system. In addition, many of the concerns voiced by the merchants and general public that utilize the Rockford parking system on a daily, monthly or annual basis are also addressed.

ON – STREET - PAY & DISPLAY METERS

Initially, we recommend the City consider installing multi-space pay and display meters in areas located within the sections of downtown that are consistently 85–95% occupied during peak hours (see Figure 7, in the Appendix). The map depicts a future scenario that assumes new development and growth will occur in the downtown community. The methodology used to develop the future scenario and others are discussed in a separate section of this report.

A number of manufacturers now offer solar powered, pay and display meters that can accommodate up to 12 on-street spaces. The meters are programmable and capable of charging variable rates by time of day accept payment via cash and credit card and contain cellular technology that facilitates real-time credit card transactions as well as alarm mechanisms that send a cellular signal to an e-mail address or PDA if a meter is malfunctioning or requires service.

Figure 16: Typical Pay & Display Unit and Signage

Source: Walker Parking Consultants – City of Chicago, Illinois

THEORY OF OPERATION – PAY & DISPLAY

Transient parkers would park in any open on-street space and walk to a pay and display meter conveniently located on the sidewalk near the on-street parking area. Each pay and display meter would be situated midway between the meter coverage area (i.e. between the 6th and 7th spaces, in a 12-space area). Customers would select their intended duration of stay from the meter's menu and insert the appropriate fee in cash or pay with a credit card. The meter would issue a receipt that contained a printed time of expiration and signage would direct customers to place the receipt on their dashboard in clear view for enforcement purposes. Enforcement officers would monitor the expiration time printed on each receipt displayed in vehicles throughout the metered locations and issue citations when required.

In the City of Chicago, research recently completed on multi-space, pay and display meters revealed that on routes where these types of meters replaced single-head meters, revenue increased as much as 30% on an annual basis. The City attributes the increase to the time purchased being printed on a receipt that is placed within the customer's vehicle rather than residing on the actual meter head. This function prohibits the next parker from using any of the remaining time once a parking space is vacated. In addition, most multi-space meters contain a button that allows customers to purchase a maximum amount of time. The maximum time option is chosen by a vast majority of parkers, which results in the maximum amount of revenue being collected for each use of the meter.

Utilizing the rate comparisons from other cities (Table 21 in the Appendix), we developed two short-term meter rate structures for consideration, which are detailed in Table 18. It is important to note

that we assume the recommended rates would be implemented only in areas with consistent occupancy rates greater than 85% of capacity.

Table 18: Pay & Display - Rate Recommendations – Short Term Parking

Option One				
Time of Day	<15 min.	<30 min.	<45 min.	<60 min.[1]
6 AM to 6 PM	$ 0.25	$ 0.50	$ 0.75	$ 1.00
6 PM to 6 AM	Free	Free	Free	Free
Option Two				
Time of Day	<15 min.	<30 min.	<45 min.	<60 min.[2]
6 AM to 10 AM		$ 0.25		$ 0.50
10 AM to 2 PM	$ 0.25	$ 0.50	$ 0.75	$ 1.00
2 PM to 6 PM		$ 0.25		$ 0.50
6 PM to 6 AM	Free	Free	Free	Free

[1] Option one assumes 2 hour maximum time limit for $2.00.
[2] Option two assumes no maximum rate, patron chooses length of stay duration.

Source: Walker Parking Consultants - 2008

OFF-STREET - PAY BY SPACE METERS

In addition to pay and display meters, we also recommend installing pay by space meters in selected surface lots within the high demand areas. Pay by space meters would allow transient parkers to purchase time in hourly increments without time restrictions.

Figure 17: Typical Pay by Space Unit and Signage

Source: Walker Parking Consultants – Village of Oak Park, Illinois

THEORY OF OPERATION – PAY BY SPACE

Rate signs would be posted and all of the spaces in each lot would be individually numbered (Figure 17). Customers would park and lock their vehicle in an open space, note their space number and walk to the area of the lot that contained a pay by space meter. The meter would display instructions that informed customers to enter their space number into the meter and purchase the desired amount of time. Customers would select the desired duration of stay from the meter's menu and insert the appropriate fee for the time selected in cash or

pay with a credit card. The meter would issue a receipt to the customer and log the amount of time purchased into an internal database for reconciliation and enforcement purposes.

With this type of meter, similar to the methodology discussed above for pay and display, the time purchased is contained in the meter memory and is not shown to the next customer that purchases time for the same numbered space; this results in the maximum amount of revenue being collected for each use of the meter. Utilizing this type of system, the City would continue to sell monthly permits for each location, and also be able to accommodate and enforce paid transient parking in any available open spaces on the lots throughout both the daytime and evening hours.

Since our rate recommendation for the Pay by Space meters mirrors our transient parking rate recommendations, we included this information in Table 19, which is included in the Transient Parking section that follows below. We reiterate that only high demand areas should be targeted for any meter installations and not the entire Rockford parking system.

If paid parking is implemented, the time limit spaces located adjacent to any newly metered spaces should be adjusted to shorter time limits to facilitate greater turn-over.

PARKING ACCESS AND REVENUE CONTROL SYSTEMS (PARCS)

The design of a parking access and revenue control system (PARCS) is critical to the profitability of any parking facility or system. Implementing a system that provides streamlined access, enhanced revenue control and a positive customer experience with ease of use are all influential factors in the system's ultimate success.

During the observation and review process, Walker considered the following questions:

- What type of PARCS system is best suited for each individual application?
- Are there any special design requirements such as validation programs or reduced rate structures?
- Are both access and revenue control required?

Specific to the Rockford system, a number of items were researched and considered for implementation; several of which are included in the list that follows:

- Pay on Foot (POF) technology;
- Pay in Lane (PIL) technology;

- Typical entry and exit lane configurations for either the POF and/or PIL options;
- A conceptual look for the Rockford parking sign system that would provide greater "curb appeal" for the lots and structures;
- Information on vehicular access control products that included: radio frequency identification devices (RFID) readers, and windshield tags, barcode readers and decals;
- Information on various types of enforcement products that could be implemented to maintain added control over the unattended and/or non-gated locations including; RFID and/or barcode handheld scanners.

Under current conditions, attendants (cashiers) are on duty Monday through Friday in the Concourse Garage from 6:00 a.m. to 6:00 p.m. The structure is controlled with ticket dispensers that issue tickets and allow transient and monthly permit holders to enter the facility. When exiting at one of the gated exits, an attendant allows permit holders to exit without charge, once the permit holder is recognized. Transient customers return their entrance ticket to an attendant and the attendant manually calculates the appropriate free (based upon duration of stay), accepts payment from the customer, issues a receipt and allows the customer to exit the facility. The parking fees are calculated manually because the cash registers in place are unable to calculate a fee based upon duration of stay.

The practice of allowing an employee to raise and lower the barrier gate and price tickets at their discretion is contrary to the revenue control policies and procedures typically in place at most managed parking facilities. In order to provide effective revenue control, we recommend this practice be eliminated and an effective revenue control system, (i.e. ticket dispensers, card readers and barrier gates) is installed and used as intended to control ingress and egress activity into and from any controlled parking locations.

Implementing these types of controls would ensure that an audit trail of the ingress and egress activity is created that could be tracked and reconciled at any time throughout the year by the city agency charged with parking management.

At the remaining structured parking locations, access is allowed only to monthly permit holders (transient parking is prohibited). Access into and from each facility is controlled by a variety of access control systems including: proximity and optic card readers, manufactured by an array of vendors.

TRANSIENT PARKING AND RATE RECOMMENDATIONS

We noted that while each of the parking structures is equipped with some form of PARCS equipment, the systems in place are nearing the end of their intended life cycle. With this in mind, we recommend that consideration be given to: 1). upgrading the PARCS in all of the parking structures, and 2). opening all of the parking structures to the general public for transient parking.

If the transient parking and pay by space methodologies discussed are implemented as proposed, we recommend the rate structure shown below for consideration.

Table 19: - Rate Recommendations – Transient & Pay by Space Locations

Duration	Current	Proposed 6AM - 4 PM	Proposed After 4 PM
< 1 hour	$ 1.00	$ 0.75	$ 0.75
< 2 hours	2.00	1.50	1.50
< 3 hours	3.00	2.25	2.25
< 4 hours	3.00	3.00	3.00
< 5 hours	3.00	3.75	3.00
< 6 hours	3.00	4.50	3.00
< 7 hours	3.00	5.25	3.00
Daily Max	3.00	6.00	3.00

Source: Walker Parking Consultants - 2008

The assumption that space is available for transient parking in each of the structures is based upon the results of occupancy count surveys conducted by Walker between the hours of 12:00 p.m. and 2:00 p.m. on January 8 and February 25, 2008. The survey results revealed that between 16% and 86% of the spaces were available in each respective parking structure during the observation periods (see Table 20):

Table 20: Parking Structures – Supply and Demand

Location	Capacity	Occupied	Available	% Occupied	% Open
Concourse Garage					
1/8/08	843	706	137	83.7%	16.3%
2/25/08		653	190	77.5%	22.5%
State/Main Garage					
1/8/08	290	152	138	52.4%	47.6%
2/25/08		114	176	39.3%	60.7%
Wyman/Elm Garage					
1/8/08	329	152	177	46.2%	53.8%
2/25/08		202	127	61.4%	38.6%
Pioneer Garage					
1/8/08	556	91	465	16.4%	83.6%
2/25/08		78	478	14.0%	86.0%

Source: Walker Parking Consultants - 2008

The section that follows provides an overview of the different types of PARCS available and discusses the technology we propose to upgrade the Rockford system and facilitate transient parking for the general public at each of the structured locations in the system.

PAY ON FOOT (POF) TECHNOLOGY

POF technology is logically defined as any revenue control system in which payment for parking is rendered "on-foot" rather than from a car. POF has been touted for a number of years as the future of PARCS. In fact, fully automated, cashier-less systems are widely used in many European cities and are rapidly being accepted and installed in major metropolitan markets throughout the United States. Walker reviewed the POF methodology as a possible solution to enhance both customer service and the collection of parking revenue generated at the Rockford parking structures.

To improve overall revenue control and provide the ability to allow transient parking in the Rockford structures, we recommend replacing the existing PARCS equipment with POF technology that would include POF kiosks or areas strategically located within the pedestrian elevator lobbies, along the most frequently traveled path used by transient parkers at each location. A full blown pay station would be installed in each kiosk area and would accept both cash and credit card payments. Custom signage would be added in conjunction with the installation. In addition to the POF kiosks, each location would also be equipped with entry and exit barrier gates, ticket dispensers, card readers and exit machines that accept tickets paid at the pay station or calculate the parking fee on unpaid tickets and accept payment in the

Existing PARCS Equipment

exit lane via credit card, before allowing a customer to exit the facility. This type of system would also provide controlled ingress and egress for monthly patrons with valid RFID windshield tags or bar coded decals.

THEORY OF OPERATION – PAY ON FOOT

Transient customers would take a ticket to gain access into the structure and then pay the pay station located in the POF kiosk upon returning to the structure. After satisfying their parking fee at the pay station, transient customers would return to their vehicle, and exit the facility by placing their paid ticket into an exit machine located in the exit lane before being allowed to exit. Monthly customers would purchase either a windshield tag or decal that would be read by side mounted readers located at the entry and exit points to each facility. Upon entering a facility, the monthly customer would approach the barrier gate and the windshield tag or decal would be read by the system (hands free) and once verified, the system would signal the barrier gate to open and allow the customer access into the facility; upon exit, the process would be repeated.

Some of the facilities, (i.e. Concourse and Pioneer) are located near special event venues (Metro Centre and Coronado Theatre) and are used to provide parking on special event dates throughout the year. With this type of system, during special events, the ticket dispensers would be converted to issue B-series or pre-paid tickets. An attendant would be stationed at the entrance ticket dispenser to collect the special event parking fee from each customer. Upon receiving payment of the designated parking fee, the attendant would issue a pre-paid (B series) ticket from the ticket dispenser and hand it to the customer, informing him or her to place the pre-paid ticket into an exit station upon leaving the location once an event ended.

Customers that entered the lot prior to the ticket dispenser being converted to issue B-series tickets would possess A-series tickets. Before exiting the facility all of the customers with A-series tickets would have to either pay at a pay station or in an exit lane, at an exit station with their credit card, before being allowed to exit the facility.

PAY IN LANE (PIL) TECHNOLOGY

PIL technology is defined as any revenue control system in which payment for parking is rendered from a car in an exit lane. This form of traditional exit cashiering has been utilized for years throughout the industry. However, the practice of replacing the exit cashier with an automated PIL station, especially during non-peak hours or at locations with a smaller number of daily cash transactions, is being seen with

much greater frequency at managed parking facilities.

Over time, Walker has observed and consulted on several PIL conversions and we relied on our experience to ascertain whether or not this technology provides a solution that would enhance both revenue collection and control at the attended and/or unattended garages in the Rockford system.

THEORY OF OPERATION – PAY IN LANE

A PIL system would allow controlled ingress and egress for all valid permit holders displaying a valid windshield tag or bar coded decal. Transient customers would take a ticket to gain access into the garage and then pay at the PIL machine located in the garage exit lane. Upon exiting, transient customers would insert their parking ticket into the PIL machine and the device would calculate the parking fee based upon the entrance time and duration of stay. The customer would tender payment by placing either cash or a credit card into the device to satisfy their parking fee. Once the parking fee payment is verified by the PARCS, the customer would be allowed to exit the facility. In this operating scenario, any special event revenue would be handled in the same manner as described in the POF section.

Figure 18: Typical Pay on Foot & Pay in Lane Stations

Source: Walker Parking Consultants - 2008

WHY INSTALL PAY-ON-FOOT OR PAY-IN-LANE?

Under any operating scenario, a person experienced in parking management would naturally ask the question, "Under the current operating conditions, is the entire amount of monthly, daily and special event cash parking revenue generated in the Rockford system being accounted for on a consistent basis?"

The following benefits are associated with implementing PARCS equipment to control access and revenue in the structured facilities:

- The number of weekly attendant hours may be reduced while still maintaining some attendant coverage during peak demand periods for customer service;
- The hours of operation could be expanded to 24 hours, 7 days per week at each location, as the equipment will remain in service long after the attendants go home;
- Transient revenue would be generated in all of the parking structures, while still servicing the existing monthly permit base;
- Historically, when PARCS is installed at uncontrolled locations the typical annual gain in revenue ranges from 5% to 20%.
- Any gain in revenue would be dependant upon the location and the percentage breakdown of the revenue generated from transient (cash) and monthly permit parking.
- Implementing either POF and/or PIL technology ensures that all customers entering the structures on a monthly, daily or special event basis are electronically tracked within the PARCS.

Installing PARCS equipment would provide the parking management team with the ability to track and reconcile every ticket issued on a daily and special event basis and to account for all monthly permit activity in each of the structures throughout the year; effectively adding several levels of control that do not exist today.

PARCS EQUIPMENT BENEFITS AND COST ESTIMATES

To show the capital investment associated with purchasing the PARCS equipment needed to effectively control access and revenue at the Rockford sites, Walker developed a PARCS estimate for each of the parking structures. The estimates are included in the Appendix of this report (see Table 22: PARCS Estimates).

ACCESS CONTROL

Access control can be defined as, "A system that allows the right person into the right place at the right time."[16] While access control has existed for centuries in some form, it has only been in the last few years that it has moved beyond the basics.

As with any project, the initial step is to develop a good idea of what the needs are and how they can best be met. Every access area will be different, but some questions are pertinent to most situations:

- How many access points are needed?
- How often are the access points used?

[16] Hedahl, Brian, The Basics of Access Control, Copyright 2007 by Virgo Publishing.

- Should the access points be linked together via a wired/wireless network, or would individual, stand alone controls work better?
- How many individual users will need to use the system?
- What type of controller should be used?
- What type of entry device (keypad, reader, or voice communication, etc.) should be used?

One of the key components of the access control design process is product selection. For example, a customer would like to use a proximity card reader to control entry because he wants a more secure facility or he may choose automatic vehicle identification (AVI) for hands-free ease of use.

For the Rockford project, we utilized industry experience to determine that radio frequency identification devices (RFID) (wireless windshield tags), provide a logical solution to control vehicle access for monthly permit holders. The tags would be utilized to control ingress and egress at the parking structures and also for permit enforcement on the system's surface parking lots.

RADIO FREQUENCY IDENTIFICATION DEVICES (RFID)

Wireless vehicle identification through RFID technology can provide efficient vehicle entry and exit control and improve customer service. Utilizing RFID for parking access control is widely accepted, and these types of systems are being sold as a practical, easy to use access control alternatives.

An extensive suite of products, tags and readers that are easily configured and adaptable with new and existing PARCS are currently on the market. The hands-free vehicle access can be used in many environments including:

- Corporate and university campuses;
- Hospitals;
- Commercial parking garages;
- Residential communities;
- Resorts.

Vehicle identification with RFID tags can help manage these challenges by offering enhanced security, increased gate throughput during peak hours, and the ability to regulate premium and restrictive parking.

We spoke with representatives from Amano/McGann and TransCore regarding the Rockford project to determine the advantages to implementing an RFID windshield tag system that could be seamlessly integrated into the Rockford parking system.

TransCore has an extensive network of dealers in the United States specializing in parking access control and also has the expertise to interface with common industry parking and access control systems, including Amano/McGann, Ascom, DataPark, Federal APD, GE Security System (formerly known as CASI-RUSCO), InfoGraphics, Lenel, Scheidt & Bachmann, Secom, SkiData, Software House WPS, ZEAG, and more.

While many types of access control systems (i.e. proximity, barcode, license plate recognition, etc.) are in use today and each performs at an acceptable industry-standard level, our consensus opinion is that RFID windshield tags may represent the most viable application.

Implementing a system-wide RFID tag program would afford Rockford the ability to control the following:

- Monthly permit access into the parking structures;
- Enhanced control over permit parking on the system's surface parking lots;
- The same RFID tags would be used to enter the structures and lots;
- RFID tags would identify valid permit holders on the system's surface lots and could be read with handheld scanners by enforcement officers;
- Enforcement officers would immediately identify unauthorized vehicles throughout the surface lot parking system and react accordingly when scofflaws were identified through the scanning process.
- RFID tags stay with the vehicle and could be renewed each month, eliminating the need to print and re-issue new permits each month.

ON-LINE PERMIT SALES

Prior to implementing PARCS and RFID technology, we recommend the City investigate the possibility of adding on-line parking permit sales through the Rockford web-site. On-line permit sales would provide a medium that allows the distribution of RFID windshield tags (permits) that would be used to provide access into and from the parking structures and to identify vehicles that utilize any of the system's permitted surface parking lots.

There are a variety of advantages to offering permit sales through an on-line automated system, including but not limited to:

- Customers would enjoy the convenience of a point-of-sale electronic system;

- Customers would no longer have to apply in person, fill out hand-written forms, or wait in line to purchase a parking permit;
- Customers would register their vehicles and purchase permits from home, either through an online computer purchase or by calling a toll-free telephone number;
- The City would only have to issue one original permit, as subsequent monthly permit renewals could be handled on-line or by offering customers the choice of having a credit card on file;
- All credit cards on file would be debited monthly and the associated permit accounts would be automatically renewed for the next month of parking;
- A portion of the required system upgrades and the initial costs of the RFID windshield tags could be paid for by service fees, ranging from $.50 cents to $1.00 that could be charged on all permit sales transactions each month.

In addition to customer convenience, the permit sales operation would be significantly enhanced by the following:

- Eliminating the waste associated with unsold preprinted permits;
- Providing an electronic database of each permit sale for accounting and reconciliation purposes;
- Providing an on-line database of all valid permits that would be uploaded daily to the hand-held enforcement scanners and used to enforce permit parking on the surface lots;
- Allowing enforcement officers to verify permit information in the field at anytime of the day or night;
- Allowing cross-checking of permits at the point of sale to prevent issuance of duplicate permits; and
- Finally, allowing real-time monitoring of permit sales so the parking system could be more efficiently managed.

The application process would be simple; customers would be asked to provide the following personal information: name, password, mailing address, e-mail address, work phone, as well as vehicle information including: make, model & year, plate number, state & expiration date. The windshield tags could be reused each month, as payment information and validity is contained in the on-line permit database and not on the windshield tag, which is used only to transmit information to the garage readers or to the hand-held scanners used for enforcement on the lots.

PERMIT AND FINE RATES

Based upon the parking rate comparison (Table 21); consideration should be given to increasing the monthly permit rates. We recommend increasing the monthly permit rates from the current range of $25.00 to $40.00 per month (dependant upon location) to a range of $30.00 to $50.00 per month. In addition, we also recommend the existing fine structure for parking citations be reviewed and consideration be given to increasing the fine for minor violations (i.e. time limit or meter violations) from the current level of $10.00 to $20.00 per occurrence.

SIGNS

The ideal design in any setting is one that requires no signage. Since that ideal is simply impossible to achieve, signage design plays an integral part in the development of a successful parking system and parking management plan[17].

Each parking system has its own characteristic set of requirements that present specific questions concerning the needs and concerns of the users that must be answered when designing a sign package. Pertaining specifically to the PARCS installations and changes discussed for the Rockford system, we prepared a series of conceptual signs that are shown below. A similar type of sign system could be developed to compliment the proposed changes, attract daily and special event customers, and improve the overall aesthetic appeal of the entire Rockford parking system.

Figure 19: Rate Signs – Ticket Dispenser & Free Standing

Existing Signage

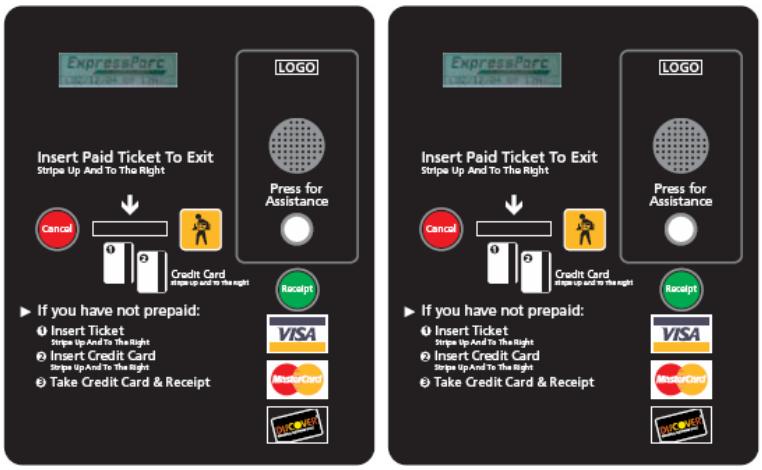
[17] Smith, Mary, Parking Structures – Third Edition, 2001

Source: Walker Parking Consultants – 2008

Figure 20: Site Identification Signs – Monument & Pole Mounted

Source: Walker Parking Consultants – 2008

Figure 21: Exit Station & Pay Station Face Plates



Source: Walker Parking Consultants - 2008

The signs included above provide information in proper sequence that is clear, concise and simple and could add "user friendly" appeal by creating a unique "look and feel" that hopefully would provide both visitors to Rockford and the daily users with a positive and memorable parking experience. The concepts are not intended to be a complete signage program, but rather to illustrate possibilities for consideration.

PARKING SYSTEM PRIVATIZATION

Walker Parking Consultants knows of two municipalities that recently privatized their parking operations. In 2006, the City of Chicago contracted with Morgan Stanley on a long-term concession and lease agreement to operate four underground garages (9,300 spaces) beneath Millennium and Grant Park in downtown Chicago. The $563 million generated from the agreement was used to retire debt, improve city parks and create a reserve fund for future City projects.

In 2007, the city of Minneapolis sold eight of the 24 parking ramps it operated under an $88.2 million long-term deal that promised, "to allow the city to retire about one-third of the debt on its parking facilities, and strengthen its cash flow on the remaining ramps[18]". According to projections, the privately held ramps would generate an estimated $3.4 million in property taxes annually for the city.

While sales of this nature have brought privatization to light, many cities have not considered the idea. As the Director of Parking for the City of Santa Monica recently expressed to a Walker employee, "The City maintains and manages the parking as a public resource. Because of the importance of well-run, shared parking resources to our economy, we do not recommend privatizing the parking system." Whether a city is willing to relinquish control of their parking system when many aspects of the city's economic development and land use policies are linked to its parking system, is a question that must be reviewed on an individual basis by local government officials.

This is not to say that privatizing a parking system does not offer some advantages to a city. These advantages may include:

- Reducing or eliminating city government's involvement in the discord associated with parking policies and politics;
- Lessening the impact of politics on the management of the parking system;
- Improving the ability (of private ownership) to raise parking rates, thereby increasing revenues, which could be used to fund future improvements to the parking system;
- Increasing the real estate tax base, as private owners may be obligated to pay real estate taxes the municipality may not incur;
- Allowing private ownership to use pricing to better regulate the parking supply and demand as well as encourage frequent turnover of transient parking spaces;
- Retiring existing debt on the parking assets or other city debt;

[18] Minneapolis – St. Paul Tribune, July 23, 2007

- Investing the proceeds in infrastructure or other city funded programs;
- Creating a reserve fund for future city projects.

It is interesting to note that in many cities the general fund, provides significant funding that supports public parking. In these types of cities, reducing public outlays could be a key benefit to privatization. However, in instances where the parking fund contributes to the general fund, privatization may not offer the same financial benefits that it would in the aforementioned municipalities.

A policy to privatize any parking system raises a number of important questions, the answers to which suggest some of the negatives that could result from such an undertaking. The questions include the following:

- Can the City legally privatize its parking resources?
- Is it necessary to ensure the privatized resources (surface parking lots, parking structures) remain as parking facilities?
- If not, from a practical standpoint, if the parking resources are used for other purposes, could parking in the CBD be effectively be eliminated?
- Could existing users that relied on public parking, which is typically priced less than private parking, afford the pricing implemented by the private operators, or would they be forced to retroactively seek alternative parking further from the CBD?
- Would the City need to require, as a provision of the sale of any parking assets, that rates remain affordable for use by the public?
- How would businesses or private property owners that have relied on public parking and are denied access through privatization handle the affects of the changes?
- Could these affected businesses make agreements with properties that have their own off-street parking to accommodate their customers?
- While some customers and visitors to the area might be willing to park further away from their destinations, is it likely that sufficient parking options would not be available?
- Would privatization lead to a battle between those businesses that have relied on and paid to develop the city's parking system and the City?
- Would privatization threaten the health of the economy in the CBD?
- What would be the impact of a reduction in the parking supply or increased pricing on the CBD, if employees seek free or available parking?

- Could a buyer be found who would maintain the parking system in a manner acceptable to the City?
- Is the City willing to relinquish control over the setting of parking rates?
- How would those property owners, who have been assessed in order to provide public parking, be treated with regard to the privatization of parking facilities?

While a buyer may be found for the Rockford parking system's assets, the more relevant question is whether or not such a buyer could maintain and operate the entity on the present revenue stream generated from the city parking system, which may not provide a sufficient financial return to justify such an undertaking. Whether raising the price charged for parking to market would provide such a return would require a detailed financial study conducted by the perspective buyer. In reality, only a handful of municipal off-street parking facilities in the United States generate enough revenue to cover both the capital and operating costs associated with managing and maintaining a parking system.

It is unrealistic to expect that a private party would not attempt to maximize profits by raising parking rates. Such a policy may conflict with a number of current city policies including, but not limited to; the desire to keep parking affordable, granting preferential parking rates to certain users, maintaining any validated discount rates provided to local business entities, monthly lease agreements for local government agencies, and lease agreements with any residential entities in the downtown community.

If the City relinquishes control of the parking system to private investors, it is in many respects putting the economic health of downtown into the hands of those individuals. While a wise investor(s) who purchased the parking property would realize that the health of his investment was dependent upon the health of downtown businesses, a shortsighted investor could possibly place the economic viability of the downtown area at risk.

Relying on the private sector to supply and operate a city's parking system presents opportunities, but also complex challenges. Privatizing an existing public system substantially increases the complexities, especially in cities that manage the majority of the parking spaces with little or no private ownership or management of other paid parking entities within the city system

While the potential benefits of privatization are significant, the potential drawbacks are as well, and it is likely the drawbacks might

not become apparent until the City and stakeholders were far along the policy path. Privatization provokes the question of whether the City is truly prepared to give up control over parking rates and also whether it is willing to tolerate what could be significantly higher rates and the resulting pushback from the community.

THIRD-PARTY MANAGEMENT

It is commonly thought that privatizing a government function can lead to increased efficiencies and reduced costs. In the case of the management of a parking system, the idea is that private or third-party management would be a means to reduce costs and increase efficiencies within the system. For example, third-party management companies may not be subject to many of the policies and regulations that govern municipalities and as a result, labor costs or benefit packages may be significantly lower.

Many cities presently utilize third-party management companies to operate their parking facilities or systems. Employing a third-party management company can in many cases, reduce costs, particularly for employees at the lower end of the pay scale. However, cities that use an outside contractor to manage their parking system must still oversee the contracted firm and should continue to remain actively involved in the management of the parking operation.

The following describes two basic types of agreements that a city can enter into with a third party operator to manage, operate and maintain their parking system.

MANAGEMENT AGREEMENT

The responsibilities of the contractor under a management agreement as the facility or system manager include:

- Hiring, training, and staffing parking personnel;
- Providing for the collection of daily and monthly receipts;
- Depositing of funds collected into a city account or into an interest bearing trust account opened in the name of the operator for the city;
- Reconciling daily bank and credit card deposits to monthly bank statements;
- Managing the monthly accounts receivables;
- Accounting and record keeping;
- Managing accounts payable for all parking system related expenses;
- Conducting audits, and reconciling accounts receivable, accounts payable, cash and credit card sales and deposits;
- Providing routine maintenance and custodial duties;

- Providing required insurance coverage's;
- Providing marketing services.

A third-party manager is typically not responsible for structural, mechanical or electrical maintenance or repairs, or for providing security services, which are typically sub-contracted with another third party firm.

The manager typically receives a base monthly fee for the management services provided and may receive additional fees for ancillary services such as, accounting or consulting. The manager could also negotiate a percentage of the system's annual revenue or net income above a base amount or threshold as an incentive to ensure best practices are adhered to when managing the city's parking system.

Under a typical management agreement, the owner is responsible for the minimum management fee and operating expenses including, but not limited to:

- Salaries and Wages for any assigned personnel;
- Payroll taxes and fringe benefits;
- Utilities;
- Real estate taxes;
- License and permit fees;
- Insurance coverage's;
- Accounts receivable, payable and credit card processing fees;
- Structural maintenance;
- Capital improvements.

The typical management agreement is for a term ranging from one to five years with renewable options and cancellation rights for both the owner and operator for cause. Some agreements are cancellable at the owner's discretion without cause, provided sufficient notice is given (typically 30 to 90 days) to the third party manager.

LEASE AGREEMENT

In contrast to management agreements, lease arrangement terms typically range from three to ten years, with a renewal term, and provide for a contractually established annual or monthly payment (rent) to the city or facility owner regardless of the operating earnings generated from the parking entity(s). The rent structure is generally comprised of a flat annual amount, a percentage of the gross revenues, or a combination of both and the operator typically would like to earn a higher fee since they are at risk. Under a lease agreement, the company (lessee) is responsible for all facets of the parking operations, including, but not limited to:

- Salaries and wages;
- Fringe benefits and payroll taxes;
- Insurance;
- Utilities;
- Routine maintenance;
- All other direct operating expenses.

In turn, the City (lessor) is typically responsible for the following:

- Major maintenance repairs;
- Structural repairs to buildings;
- Real estate taxes;
- Any other capital expenditures.

Leased facilities require a longer commitment and a larger capital investment by the third-party manager, but can provide a more stable source of revenue and a greater opportunity for long term revenue growth. Conversely, under a lease agreement the City has limited recourse other than legal action to nullify the arrangements should the third party manager violate the terms of the agreement.

It should also be noted that over 90% of the agreements negotiated by cities with third party parking operators result in the city choosing a management agreement over a lease, as management agreements typically contain language that will allow the city to terminate the agreement without cause provided sufficient notice is given to the third party operator.

WILL THIRD PARTY MANAGEMENT REDUCE COSTS?

The City of Rockford currently manages the City's parking system itself, and wanted us to investigate whether employing a third party parking operator to take over that role would make the operation more economically efficient. To that end, Walker evaluated the parking related expenses required to mange the City's parking system earlier in this section and compared them to our data base of private and public parking operations throughout the United States. Direct, apples-to-apples comparisons of the different operations are often difficult as the way in which parking operations group and categorize expenses varies significantly.

Employees of the Rockford system are unionized and as a result labor costs for operating the parking system are relatively high compared to the private sector when you factor in the cost of the union's wage rates and fringe benefit package. If a third party operator were to take over management of the Rockford parking system, would the operator have to grandfather in some of or the entire existing workforce and at the same time, also keep the workforce in the union? If true, this would

make it nearly impossible to reduce the labor costs associated with the union employees. At the same time, if allowed to operate in Rockford without the employees being in the union, the total labor costs for cashiers, attendants, clerical and facility managers could possibly be reduced.

Overall, except for the aforementioned issue with the union employee's salary and benefit packages, the City's expenses that were reviewed appear to be in line with what we typically see in audits performed throughout the industry.

Discussions of the potential savings related to a private company managing the parking system often focus on the cost of administering the system and the City may realize some savings resulting from a reduced role in administering parking. However, the City will still pay for the administration of the parking system in the form of a management fee, which could range from $50,000 to $100,000, as any parking company will expect to make a profit on the management and administration services provided to operate the system. In addition, it should also be noted that the City would still need to maintain some staff to oversee the parking company to ensure good customer service and accurate financial reporting throughout the term of a management or lease agreement and as a result, the administrative savings may not be as great as many people imagine.

Cities that use third party parking operators under the terms of a management or lease agreement tend to do so because the operators provide them with more flexibility in their labor practices. Having all of the parking system staff members as city employees presents significant human resource challenges, particularly when it comes to hiring or firing practices. Third party management offers advantages in this area with the trade-off being a reduction in the city's control over the parking operation.

Whether or not to utilize a third party operator depends on how important direct control of the parking system is to the City and the confidence the City has in the third party operator's ability to understand and carry out the City's wishes regarding the overall management of their parking system.

REQUEST FOR PROPOSAL (RFP)

Finally, to best assess the potential impact of third party management, the City could solicit proposals through a request for proposal (RFP) process. The City would issue an RFP to all qualified parking operators that serve the city's surrounding communities, and the RFP

would contain language that requested proposals to either manage or lease the Rockford system, while at the same time, did not obligate the City to award an agreement. The City would provide the operators with the historical revenue and expenses associated with the City's management of the parking system for use in preparing responses to the RFP. The RFP response would require the operators to provide both their best estimate of operating expenses and management fee to manage the system and also outline the terms of their best offer to lease the system from the City.

Upon receipt of the operator's submittals, the City would evaluate the proposed benefits of the management or lease proposals against the historical financial results of the city operated parking system. Based upon the results of the review process, the City would determine whether the benefits of privatization were worth exploring and whether it made sense to take the next step of interviewing a short-list of qualified operators to hear their oral presentation on their qualifications and future plans to operate and improve the Rockford parking system.

SUMMARY

Throughout this section we discussed several policy and management strategies that could assist the City to enhance the overall management of their parking system. The following list summarizes the recommendations discussed:

- Install pay and display meters in selected high demand areas (85% - 95% on-street occupancy, during peak periods);
- Implement the rate structure discussed in Option 1 ($.25/each 15 minutes, 2 hour maximum rate = $2.00, free from 6 p.m. until 6 a.m.), two hour time limit;
- Implement the rate structure outlined in Option 2 ($.25/each 30 minutes during off hours, $.25/each 15 minutes during peak hours, 10:00 a.m. until 2:00 p.m., free from 6 p.m. until 6 a.m.), in this variable rate structure, customers would pay for the length of stay based upon the cumulative duration selected, no time restrictions);
- Install pay by space meters in selected high demand surface lots (85-95% off-street occupancy, during peak periods);
- Implement a variable rate structure ($.75/hour, $6.00 maximum daily rate, for customers entering between 6 a.m. and 4 p.m. and $.75/hour, $3.00 maximum evening rate for customers entering after 4 p.m. and before 6 a.m.;
- Upgrade the PARCS equipment in all of the parking structures;

- Open the parking structures to the general public for transient parking and implement the same transient rates structure as proposed for the pay by space surface lot locations;
- Implement PARCS recommendations that include: ticket dispensers, RFID readers and RFID windshield tags, exit stations, POF stations, and PIL stations;
- Budget approximately $700,000 for the PARCS equipment required to upgrade the structures (this is only an estimate, cost will vary based upon actual bid proposal process conducted by the City);
- Budget approximately $15,000 to $20,000 per meter (The total cost to install meters throughout the system would also be dependant upon the quantity of meters purchased and the bid proposal process);
- Upgrade Rockford's web-site to accommodate on-line monthly parking permit sales;
- Allow customers the option of using credit card on file, automatic renewal of permits each month, effectively eliminating the need for customers to physically appear each month at City Hall to renew parking permits;
- Incorporate RFID windshield decal tags into the monthly permit system, which can be read electronically;
- Implement RFID tags that would be used by customers to gain access into the parking structures and for parking enforcement officers to enforce parking regulations on the system's surface parking lots;
- Increase the existing monthly permit rates from the current level of $25.00 - $40.00 per month to $30.00 - $50.00 per month (dependant upon location);
- Increase the existing fine structure for minor violations from $10.00 to $20.00 per occurrence and investigate possible increases in other fine categories;
- Upgrade the existing sign system used to identify the Rockford parking structures and lots;
- Weigh the merits of privatization and third party management of the Rockford system;
- Determine whether it makes sense, based upon the review process, to issue a Request for Proposal that would not commit the City to award a contract to manage or lease the system;
- After the RFP submittals were submitted and reviewed, determine if the benefits of privatization were worthy of additional exploration;
- If yes, interview a short-list of qualified operators that would present their qualifications and future plans to operate and

improve the Rockford parking system for evaluation, before making a final decision on privatization.

We have discussed several types of PARCS equipment and it should be noted that when making a decision to purchase any type of system one of the most important items to compare is the quality and level of maintenance service that will be available after the equipment installation is completed. A key to successful equipment selection is often selecting a local distributor that can professionally install the equipment, provide effective training, and also provide adequate service long after the installation and training process are completed.

In conclusion, we have provided an array of options and made several recommendations for the Rockford parking system. If implemented, the recommendations would provide the following:

- The ability to utilize all of the available spaces within the system;
- Greater control over the spaces located in the high demand areas of downtown;
- Enhanced revenue generation to better fund the City's parking enterprise fund.

Finally, our recommendations are founded in the principle that a parking system in which the spaces in the high demand areas are priced the highest, less convenient spaces are priced lower, and the least convenient parking spaces are located on the periphery and priced the cheapest (or free), can effectively spread out parking demand and better utilize all of the spaces within the system.

Table 21: Parking Rates Comparison

	Monthly Rates		Daily Rates				Meter Rates			Fines/Citations	
City	Low/Month	High/Month	Free	Hourly	Max/Day	Commuter /Day	1 HR.	2 HR.	4 HR.	Minor	Severe
Aurora	$ 14.00	$ 35.00		$ 0.25	$ 2.50	$ 2.00	$ 0.25	$ 0.50	$ 1.00	$ 20.00	$ 250.00
Downers Grove	$ 30.00	$ 65.00		$ 3.00	$ 3.00	$ 3.00	$ 0.25	$ 0.50	$ 1.00	$ 5.00	$ 150.00
Elgin	$ 30.00	$ 30.00								$ 20.00	$ 500.00
Joliet	$ 15.00	$ 25.00		$ 0.50	$ 3.00	$ 1.00	$ 0.25	$ 0.50	$ 1.00	$ 10.00	$ 250.00
Naperville	$ 50.00	$ 65.00				$ 2.00				$ 30.00	$ 250.00
Waukegan	$ 30.00	$ 40.00	1 hour	$ 1.00			$ 0.50	$ 1.00	$ 2.00	$ 20.00	$ 250.00
Evanston	$ 80.00	$ 80.00	1 hour	$ 1.00	$ 13.00	$ 1.00	$ 0.50	$ 1.00	$ 2.00	$ 10.00	$ 250.00
Oak Park	$ 31.66	$ 53.33	2 hours	$ 1.00	$ 20.00		$ 1.00	$ 2.00	$ 4.00	$ 10.00	$ 250.00
Peoria	$ 37.00	$ 75.00		$ 1.50	$ 6.00		$ 0.50	$ 1.00	$ 1.75	$ 10.00	$ 350.00
Rockford - Current[1]	$ 25.00	$ 40.00		$ 1.00	$ 3.00					$ 10.00	$ 250.00
Rockford - Proposed[2]	$ 30.00	$ 50.00		$ 0.75	$ 6.00		$ 1.00	$ 2.00		$ 20.00	$ 250.00
High	$ 80.00	$ 80.00		$ 3.00	$ 20.00	$ 3.00	$ 1.00	$ 2.00	$ 4.00	$ 30.00	$ 500.00
Low	14.00	25.00		0.25	2.50	1.00	0.25	0.50	1.00	5.00	150.00
Average	35.30	52.04		1.18	7.92	1.80	0.46	0.93	1.82	15.00	277.78
25th Percentile	30.00	35.00		0.75	3.00	1.00	0.25	0.50	1.00	10.00	250.00
50th Percentile	30.00	53.33		1.00	4.50	2.00	0.50	1.00	1.75	10.00	250.00
75th Percentile	37.00	65.00		1.25	11.25	2.00	0.50	1.00	2.00	20.00	250.00

[1] The current Rockford rates were not used in the high, low, average or percentile calculations.

[2] The proposed rates were not used in the high, low, average or percentile calculations.

Source: Walker Parking Consultants, Field Research 2008

Figure 7: Proposed Meter Location – Future Scenario Two

Source: Walker Parking Consultants, Field Research 2008

Table 22: PARCS Estimates

Concourse Garage			
Description	Qty.		Est. Price
AVI (RFID) Reader	2	$ 5,500	$ 11,000
Ticket Dispenser (Mag-Stripe)	3	10,000	30,000
CC Exit Machine	4	17,000	68,000
Gates w/Detector	7	3,000	21,000
Entrance Detector Loops (3 per lane)	9	400	3,600
Exit Detector Loops (2 per lane)	8	400	3,200
Pay-on-Foot Station	1	55,000	55,000
Pay-in-Lane Station	1	35,000	35,000
[1] Cashier Booths (Custom)	0	15,000	-
Intercom	7	750	5,250
Count Input Controller (per 2 lanes)	3	3,000	9,000
Full Sign	2	2,000	4,000
Total - Estimated Cost			$ 245,050

State/Main Garage			
Description	Qty.		Est. Price
AVI (RFID) Reader	2	$ 5,500	$ 11,000
Ticket Dispenser (Mag-Stripe)	1	10,000	10,000
CC Exit Machine	0	17,000	-
Gates w/Detector	2	3,000	6,000
Entrance Detector Loops (3 per lane)	3	400	1,200
Exit Detector Loops (2 per lane)	2	400	800
Pay-on-Foot Station	0	55,000	-
Pay-in-Lane Station	1	35,000	35,000
Cashier Booths (Custom)	0	15,000	-
Intercom	2	750	1,500
Count Input Controller (per 2 lanes)	1	3,000	3,000
Full Sign	1	2,000	2,000
Total - Estimated Cost			$ 70,500

[2]Additional Requirements - All Options			
Description	Qty.		Est. Price
FMS and Software	1	$ 10,000	$ 10,000
CC Server & Software	1	$ 25,000	$ 25,000
ACS Server and Software	1	$ 10,000	$ 10,000
System Server and Software	1	$ 10,000	$ 10,000
Sub-total			$ 55,000
RFID Decals @ $13.00/Decal x 3000			$ 39,000
Total - Estimated Cost			$ 94,000

Wyman/Elm Garage			
Description	Qty.		Est. Price
AVI (RFID) Reader	4	$ 5,500	$ 22,000
Ticket Dispenser (Mag-Stripe)	2	10,000	20,000
CC Exit Machine	1	17,000	17,000
Gates w/Detector	4	3,000	12,000
Entrance Detector Loops (3 per lane)	6	400	2,400
Exit Detector Loops (2 per lane)	4	400	1,600
Pay-on-Foot Station	0	55,000	-
Pay-in-Lane Station	1	35,000	35,000
Cashier Booths (Custom)	0	15,000	-
Intercom	4	750	3,000
Count Input Controller (per 2 lanes)	2	3,000	6,000
Full Sign	1	2,000	2,000
Total - Estimated Cost			$ 121,000

Pioneer Garage			
Description	Qty.		Est. Price
AVI (RFID) Reader	6	$ 5,500	$ 33,000
Ticket Dispenser (Mag-Stripe)	3	10,000	30,000
CC Exit Machine	2	17,000	34,000
Gates w/Detector	6	3,000	18,000
Entrance Detector Loops (3 per lane)	9	400	3,600
Exit Detector Loops (2 per lane)	6	400	2,400
Pay-on-Foot Station	0	55,000	-
Pay-in-Lane Station	1	35,000	35,000
Cashier Booths (Custom)	0	15,000	-
Intercom	4	750	3,000
Count Input Controller (per 2 lanes)	2	3,000	6,000
Full Sign	1	2,000	2,000
Total - Estimated Cost			$ 167,000

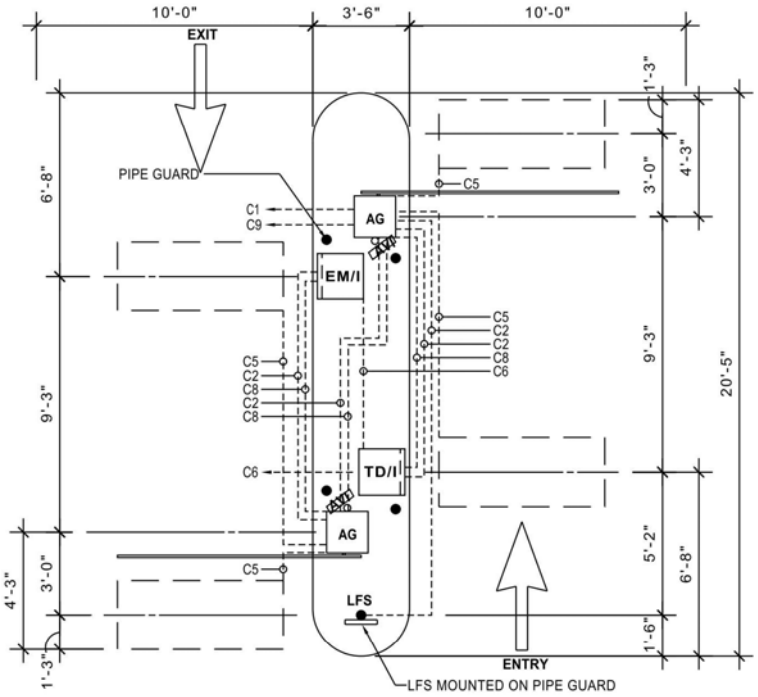
Meters			
Type			Est. Price
Pay and Display	5	$ 15,000	$ 75,000
Pay by Space	5	20,000	100,000
Total - Estimated Cost			$ 175,000

Walker - PARCS Recommendations	
Concourse Garage	$ 245,050
State/Main Garage	70,500
Wyman/Elm Garage	121,000
Pioneer Garage	167,000
Additional Equipment	94,000
[4] Meters	175,000
Estimated Capital Investment	**$ 872,550**

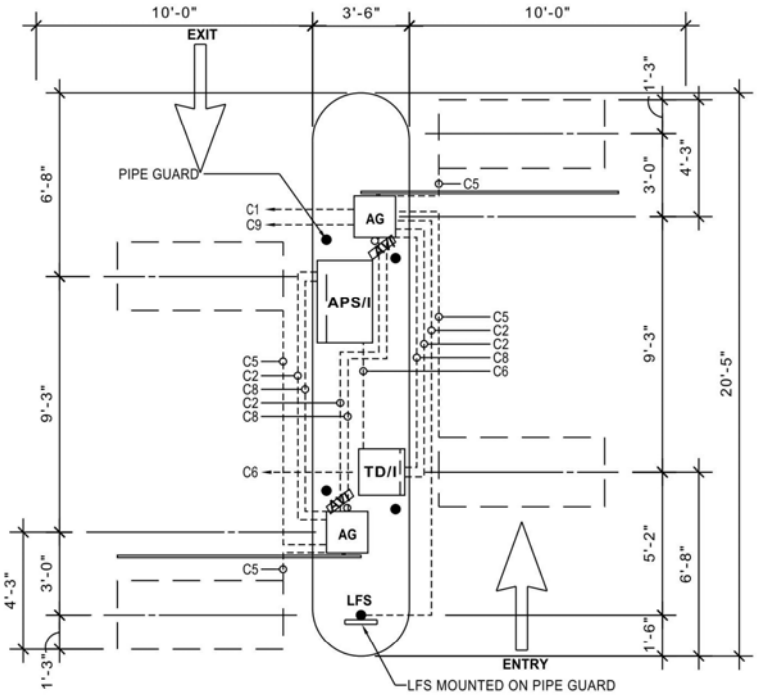
Notes:
Site work, excavation, concrete islands, not included;
assumes assistance required from local ITS to complete network communications and connectivity for PARCS and intercoms.

[1] Existing booths will be remain, parking office located in this structure.
[2] The additional equipment is required to operate the PARCS system.
If other locations are converted to similar PARCS, this will represent a one-time charge,
as this equipment will control multiple systems provided all of the Rockford facilities are on-line.
[3] PARCS estimates assume retail pricing, a 10% - 30% discount can often be
negotiated based upon the vendor chosen and equipment quantities.
[4] The actual number of meters purchased is an unknown quantity at this time, this is only an estimated quantity.

Exhibit 1: Pay-on-Foot and Pay-in-Lane Configurations



PAY-ON-FOOT



PAY-IN-LANE

EQUIPMENT LEGEND

LFS	=	LOT FULL SIGN
TD	=	TICKET DISPENSER
I	=	INTERCOM
AVI	=	RFID READER (POLE MOUNTED)
AG	=	AUTOMATIC GATE
EM	=	EXIT MACHINE OR VERIFIER
APS	=	AUTOMATIC PAY STATION

DEVELOPMENT OF PUBLIC INFORMATION TOOLS

Walker developed a web-based public information tool for the City of Rockford that can be integrated with the City's existing web site. In an effort to improve upon the information offered to the public on parking that already existed on the City's web site, Walker collaborate with the project team to create an interactive map of the downtown parking system. This map allows the viewer to scroll over various public lots and garages and obtain pertinent operating information that will help familiarize the view with the number of available spaces, hours of operation, directions, a photograph of the site, proximate attractions, rates (if applicable), and any user restrictions.

The public parking web site is intended to complement the City's existing web site and be easily linked to web sites of nearby area attractions. The delivery of this work product to the City of Rockford is separate from this document. The following figure provides a view of the general layout of the parking information website.

Figure 22: Downtown Public Parking System Map

OVERVIEW OF FINANCING MECHANISMS AND TIME TABLES FOR PLAN EXECUTION

INTRODUCTION

Multiple methods are available for financing the downtown parking system. Historically, municipal and county governments rely on user revenues through meter systems, event surcharges for on-street parking, and violation revenues. These sources of revenue are sustainable sources to financing operations and maintenance. However, these sources are also constraints to modifying and/or expanding parking supply. Historically, general obligation bonds provide public agencies immediate injection of cash through repayment over an established period of time. Debt servicing ratios, as a result of issuing bonds, can limit future opportunities as demand requires modified or expanded supply. Further, as a non-home rule City, Rockford is limited to only those statutory mechanisms provided by law to raise additional capital.

A combination of traditional and alternative models will allow the City of Rockford to implement report recommendations for improvements to the downtown parking system. This section contains an overview of Traditional and Non-Traditional Financing Models, as well as Recommendations for the City to implement to establish the goals as outlined in this report.

TRADITIONAL FINANCING MODELS

User Revenues

Most communities rely on customers to finance operations and maintenance of parking systems. Currently, the City of Rockford assesses a fee to customers at the Concourse parking garage located at the northwest quadrant of Church and Chestnut Streets. On-street parking is currently free to customers with expressed time limits on allotted time to park in a space. Currently, the City of Rockford charges a $5.00 fee for special events at the Concourse parking garage, Pioneer parking garage, and the parking structure located at the northwest corner of Wyman and Elm Streets. In 2006, the City received $909,990 in total parking fees and charges for services. For the same revenue source, the city averaged $951,240.00 between 2000 and 2006.

On-Street Parking Fees

Some communities rely on on-street revenues through parking meters and or sale of permits. The City of Rockford does not currently collect revenue from customers for on-street parking. As noted earlier in the study, meters were in place prior to 1983. Ceasing meters for time limits was a method to retain and attract customers to downtown for general business and commercial retail activity.

Violations Revenue

Another source of revenue for communities is citation of invalid use of parking (improper parking, overtime, and illegal parking in handicapped spaces). In 2006, the City of Rockford collected $618,495 in parking fine revenues, approximately 40% of total revenues.

General Obligation Bonds

General Obligation Bonds involve the use of City of Rockford issued non-voted or voted bonds to develop parking facilities, subject to overall debt limit requirements. Typically, General Obligation Bonds are not issued if there are other financing mechanisms available, as the use of the GO bonds for parking structure creation and improvements limits the other items the City can use these bonds for and put the City at risk should the project not come to fruition. However, given the current status of the municipal bond market, it may be necessary to require some sort of municipal backing to secure a favorable rate.

Grants

Federal and state grants augment revenue sources and are generally awarded for a targeted project. Grants are generally one-time revenue streams. Furthermore, given the current environment of more limited state/federal funding, grants are not stable sources of revenue.

Non-Traditional Financing Models

Business-based Fee

Zoning ordinances require business and property owners to provide parking based on the land/building use. To balance land constraints with maintain a preferred urban pattern, cities implement parking systems for management and encourage the cycling of spaces for

customers. As a result, some communities have successfully implemented a fee assessment to businesses based on a number of measurable factors including, but not limited to:

- Number of employees
- Square footage
- Gross sales
- Business assessed value

For example, the City of Rockford might assess a fee of $0.25 per square foot for a business with a total square footage of 12,500 square feet. Based on this calculation, a business of this sized is assessed $3,125.00 annually. The owner contributes to the parking system operations, maintenance, and improvements in exchange for continued provision of free parking for its customers.

Special Taxing Districts

Four different types of special taxing districts are commonly used to finance public improvements: a Special Assessment ("SA"), a Special Service Area ("SSA"), a Tax Increment Financing District ("TIF") and a Business District ("BD"). Each of these mechanisms can be implemented through a statutory process initiated by the City.

A Special Assessment works by allocating the cost of an improvement over those properties benefitted by the improvement, typically in the amount of the increase in fair market value of the property following the improvement. State property may be included in the assessment and the municipality will pay for the public portion of the improvements. A statutory process must be followed to implement a Special Assessment that involves public hearings.

A Special Service Area may also be used to pay for the new improvements. The Special Service Area assesses a special tax on the property within the area. The municipality is not required to pay for the public benefit portion of the improvements. This special tax is a lien on the property, and the municipality is not obligated on any bond issuance if the tax is not paid. The special tax is allocated proportionally to the property owners within the SSA.

A TIF relies on the property tax increment generated by the new improvements to pay for the eligible project costs. TIF revenues can be used to finance rehabilitation, public works and other items; however private new construction cannot be financed by a TIF.

It is also important to remember that the TIF statute requires that a finding of "blight" be made before qualifying the property. In addition, it is necessary that the property would not develop "but-for" the establishment of the TIF District. Additional special considerations arise when development occurs in an established TIF District. These considerations are discussed later in this report.

A Business District works by assessing an additional sales tax or hotel or motel tax to the property within the district. To establish a hotel or sales tax within the district, the municipality must make a showing that the property meets the definition of "blight" as outlined in the statute. In areas where there are already high sales or hotel taxes, a Business District may not be a good fit for the project.

Developer Exaction (Fee-in-Lieu):

An alternative approach to maintain and/or increase parking supply is offer an *opt-out* or *cash-out* provision. The property developer pays a fee in place of providing partial or full parking as required by zoning. The result is encouraged minimum rather than maximum property. In urbanized areas, the focus is less on motorized vehicular movement in exchange for pedestrian and bike accessibility. Typical fee structures range from a fee assessed at less than the actual cost of construction to the full cost of parking construction. The advantage to the City of Rockford is less outlay of public dollars in the construction of parking structures or utilizing land for surface parking.

Project Specific Public-Private Partnership

As rehabilitation of existing structures occurs and new buildings are constructed in the downtown area, the City could establish partnerships with project developers is an approach to reduce costs to investors in providing parking and defray public cost in increasing the parking supply. Generally, this approach is applied to mixed-use developments where land use intensity is the strongest. Methods include, but are not limited to:

- Integrated sale or lease-back of public parking – Municipality or Developer construction parking with a fixed sale or lease-back of individual parking spaces. Parking becomes available at project completion.

- Land/Air Rights – Municipality sells or leases air-rights where parking is not required to accommodate supportive private use.

Viable Options for Rockford

Policy Recommendation
Our recommendation to implement recommended improvements to the downtown parking system consists of various action steps to be taken when certain milestones are met. The goals of this recommendation is to increase the parking enterprise fund, allow for future needed parking structures and reduce the burden on the City in bearing the total funding cost.

It has been assumed that the City will take certain actions while development is not occurring, and when certain needs arise, will take additional steps to provide parking to the new users.

Analysis of Traditional Financing Models:

Financing Model: User Revenues
Action Step 1: Increase Fees for Garage Use
Timeframe: Immediately

Current user revenues are derived from monthly parking and transient use of parking lots or garage structures. This report recommends implementation of higher rates for both monthly parking users and transient lot/garage users. The monthly user increase is 20-25% higher than the current monthly rates and the transient maximum rate is 200% higher than current rates. The City currently averages approximately $306 per space in user fees per year.

The recommended increases in rates for monthly and transient parking will help to increase the parking enterprise fund. It is recommended that the rates be increased as follows:

Garage	Proposed Rate - Monthly	Proposed Maximum Rate - Transient	Spaces Occupied	Anticipated Daily Revenue	Anticipated Yearly Revenue
Concourse	$ 50.00	$ 6.00	683	$ 2,618	$ 816,665
Pioneer	$ 30.00	$ 6.00	83	$ 292	$ 91,073
State/Main	$ 40.00	$ 6.00	133	$ 489	$ 152,610
Wyman/Elm	$ 40.00	$ 6.00	178	$ 651	$ 203,243
				$ 4,050	$ 1,263,590

The anticipated yearly revenue will result in a surplus of $353,600 over current revenues from fees and monthly rentals that can be added

to the parking enterprise fund. The revenue per space will increase to $346 per year. This revenue projection assumes that the parking demand remains consistent with the advent of the new rates.

Once new development occurs and additional monthly and transient parkers enter the system, it will be important to ensure the rates are set at a level that will cover the operation costs for these new lots and spaces. Recommended rate structure for the proposed new parking facilities are as follows:

Parking Area	Proposed Rate - Monthly	Proposed Maximum Rate - Transient	Spaces Occupied	Anticipated Yearly Revenue	Yearly Operation Expense
Main Street	n/a	$2.00	47	$29,172	$ 4,675
Old Post Office	$ 30.00	$6.00	422	$460,387	$ 157,232
Lot T	$ 30.00	$6.00	102	$111,384	$ 38,040
Water Street	n/a	$2.00	37	$22,807	$ 3,655
Lot M	$ 30.00	$6.00	258	$282,173	$ 96,368

Even at lower rates and assuming 85% occupancy, these garages will generate sufficient revenues to cover their operating expenses. The additional revenue can be used to cover the costs of any bond issuance or additional parking improvements. To the extent an SSA is in place, the additional revenues can be used to abate the required SSA payments. Should the City desire, it could increase the monthly rates if demand will support the increase to generate even higher revenues.

Financing Model: Fines
Action Step 2: Increase Fines
Timeframe: Immediately

Currently, the average fine amount is $35 if paid within 30 days. Current fines should be increased from $10.00 for minor fines (overtime) to $20.00, and all $20.00 fines should be increased to $25.00. This will generate approximately an additional $87,759 per year in revenue.

Financing Model: User and Fine Revenues
Action Step 3: Meter Installation and Rate Increase
Timeframe: 1-2 years

Based on the Turnover Rate Calculated in Table 3, it was determined that there is an average of 2.86 cars per space over a 10 hour period. This is the equivalent of 17.13 minutes spent at the meter per car. Two options for Meter Rates were presented. Based on the time

spent per car, Option 1 will result in average revenue per space of $3.27 per day, whereas Option 2 will result in average revenue of $2.45 per space per day.

The costs to install the meters will not be covered by the revenues generated by their use. Meters average $15,000 - $20,000 per installation, and will likely generate around $1,000 per year in fees and $200 per year in fines based on current usage patterns. Therefore, the installation of the meters should also be financed using one of the non-traditional methods outlined below as pure revenues will not be sufficient to cover the installation costs.

Financing Model: Increase Efficiency
Action Step 4: Install new PARCS Equipment
Timeframe: 1-2 years

Installation of the PARCS equipment will cost approximately $700,000. The City can either begin installation of the PARCS Equipment by using a special method (outlined below) or by waiting until the parking enterprise fund has sufficient revenues to install this equipment, anticipated at approximately 2 years based on the revenue generation for the garages as outlined above.

Even if the City decides to finance the PARCS installation upfront, the non-traditional methods typically take 6-9 months to implement, and an additional 3-6 months to secure financing. Therefore, the City may be better served by waiting until the revenues increase before beginning installation. It is not anticipated that any additional operational cost will be incurred to operate and maintain the garages once the PARCS equipment is installed.

Traditional Financing Models Conclusion

The above steps will allow the City to make minimal improvements to the current parking system while increasing overall revenues and incurring minimal cash outlay. As there is not currently a deficit in parking, it is anticipated that the above steps will allow the City to serve current parking needs until the anticipated development occurs.

Analysis of Non-Traditional Financing Models

Following the upgrade of the current structures and the increase in fines and fees, the City will likely need to add additional parking to accommodate anticipated growth. These additional structures are described in the Development of Supply-Side Solutions of this report.

This additional construction can be financed through a number of mechanisms, and will likely be best financed through a combination of sources.

The sources examined in this report are:

1. Commercial Property Tax and Sales Tax Revenues Created by Additional Development
2. Special Taxing District: SA, SSA, TIF and BD
3. Fee-in-lieu of Parking

Financing Method: Commercial and Sales Tax Revenue
Action Step 5: Retain Commercial Property Tax and Sales Tax Revenues Created by Additional Development
Timeframe: Once development begins

The City has identified certain areas as likely to spur additional development (see Appendix E). Additional development will result in increased property taxes to the City, as well as additional sales taxes.

Currently, the City's property tax rate that is included in the general fund is 1.8082%. However, much of the property that is likely to be developed is in either the Eastside or Westside TIF Districts. Therefore, the property tax revenue from these improvements would be diverted into the TIF Fund for use as specified in the Redevelopment Plan. Use of these funds is discussed in Action 2B, below.

An examination of buildings in the downtown Rockford area resulted in an estimated EAV of $7.08 per square foot for office/retail mix. Applying this EAV to the projected 116,000 square feet of office and retail space results in yearly property taxes of approximately $40,000 for the identified developments.

The City receives 2% of the 8.25% sales tax that is levied by the state; this 2% includes the 1% dedicated to infrastructure improvements. Based on the projected new development located in Appendix E, approximately 116,039 square feet of retail space will be constructed. The International Council of Shopping Centers reports an average of $347 of sales per square foot per year for the State of Illinois. As the new development in downtown Rockford will likely only be serving a population during the workday, this amount was discounted by 10%, to $312 per square foot. Once all developments are completed, assuming they are completed as contemplated, approximately $725,000 in sales tax will be generated yearly for the City from these retail stores.

Overall, the City will likely incur expenses of approximately $25,000,000, and will net approximately $1,000,000 per year from increased property and sales taxes, and approximately $500,000 in additional fee and fine revenue as outlined above. Therefore, the City would be in a difficult financial position to justify the additional improvements without additional options available for funding. It is for that reason that the additional improvements should be financed through a special mechanism, as outlined below.

Financing Method: Special Taxing District
Action Step 6: Establish a special taxing district to finance certain improvements
Timeframe: Once development begins

Action 6A: Special Service Area

Special Service Areas could be established to help cover the costs for the improvements throughout the area that will be benefitted by the new parking structures and infrastructures. The benefit to using an SSA is that the total costs will be paid for by those users that receive the benefit. Additionally, the tax can be imposed as needed, and if the development does not occur as planned there would be no upfront cost to the City, nor would the City be required to put its backing behind any bonds issued.

There will be certain buildings within the identified area that will have sufficient parking for their workers and customers. These buildings can be excluded from the SSA. Additionally, if desired, governmental buildings can be excluded from the SSA.

An additional benefit to the use of an SSA is that the additional tax will be levied on buildings that already have a fairly low EAV due to the state of the downtown market. Thus, in comparison to other property within the area, the total investment will not be such to discourage development. An additional benefit is that additional sales tax will not be added to the City's current high rate, as increasing this rate could make the area uncompetitive for development.

Examining the recommended improvements, opening the Main Street Mall and the additional parking stalls along Water Street would be ideal uses of an SSA. The improvement cost could be spread amongst those businesses along Main Street and Water Street respectively, and being that the cost is relatively low ($316,000 and $218,000), there

would not be an unreasonable burden on these businesses. The SSA payment could be spread over a number of years as well, thus reducing the amount these businesses would have to pay.

An SSA could also be used to cover the costs of the meter installation. Areas with high meter use have been targeted for installation, and the service area could include all businesses that would benefit from the new meters. As outlined above, the user revenues from the meters will not be sufficient to cover their installation. Therefore, the SSA could be initiated to cover the entire meter installation cost, and be abated by the revenues generated from the meter usage.

Since these costs are relatively low, a bank note could be issued upfront to pay for installation costs. Business owners would have the option of paying upfront or over a time period negotiated with the bank. The lien on their property would be the security for the note. It is recommended that an SSA be formed for each targeted area, and that each SSA includes the businesses that would be gaining parking in the project area.

Action 6B: Special Assessment

In this instance, the entire parking system is a public benefit, and therefore the entire cost of improvements would be applied to the City's debt limit. Thus, there is not a benefit to the City to use a Special Assessment over issuing General Obligation Bonds, and this option is not recommended for further analysis.

Further, given the City's ability to use a Special Service Area, Special Assessments are not as advantageous as they require a lengthier process and can result in the City being responsible for payment of some of the public improvement costs.

Action 6C: Tax Increment Financing

A TIF is another special financing mechanism available to the City. In this situation, as the parking garages are government-owned property that is exempt from property taxes, there would be no increment generated unless a private developer is used as a partner in the project. In the alternative, an area larger than the parking garage only could be used to create the TIF, relying on incidental growth in commercial property in the area. However, two concerns arise: publicly owned property and existing TIF districts.

Publicly owned property is exempt from property taxes, and, therefore, does not generate an increment that can be used to fund TIF eligible costs. Due to the large number of buildings in the downtown Rockford area, it becomes difficult to generate enough increment to finance improvements. Based on the City's current tax rate of 10.2842%, an increase in EAV of approximately $8,000,000 would be needed. Should the current average EAV continue ($7.08 per square foot), over one million square feet of space would need to be constructed to cover the improvement costs. As a basis for comparison, projected development totals 394,751 square feet of space.

Additionally, there are multiple TIFs already in place in the downtown area, the Eastside TIF, the Westside TIF, the Westside TIF #2 and State and Kilburn TIF. To the extent the TIF revenues in these TIFs are not pledged for other uses, increment generated by additional development in the TIF areas can be used to finance new parking structures. However, it will need to be confirmed that the objective outlined in the Redevelopment Plans for the selected TIFs conforms to the construction or rehabilitation of the parking structures and that these costs could be added to the list of eligible project costs.

Lot T (Alternative 10) and Lot M (Alternative 13A) are in the East Side TIF. This TIF ends in 2016, and includes in its goals development/redevelopment of the area. Traditionally, 77% to 101% of the annual budget has been used. It is important to make sure that the Redevelopment Plan outlines sufficient eligible project costs such that the rehabilitation of these structures could be financed.

The Old Post Office Site is in the Westside TIF #1. This TIF also ends in 2016, but has traditionally spent a good deal of its revenue on an annual basis. Should the City decide to make the redevelopment of this site a priority, TIF funds could be used to cover some of the rehabilitation costs.

In addition, increment will likely be generated by the incidental development on and around the parking lots. For example, if Lot T develops as planned, the new residential and retail/office space will generate additional increment that can be used to offset some of the costs of resurfacing and rehabilitation of the lot.

Lot T creates a more complex scenario as it will contain a mix of City and Private property. Therefore, this mechanism should be used in conjunction with the Private-Public Partnership Action 7B, outlined below.

The use of the TIF revenues is a viable option that the City should explore by investigating the TIF uses and the additional increment that would be available from any private development on or around these two lots.

Action 6D: Business Development District

A Business Development District could be established in the area benefitted by the new parking infrastructure to pay for the additional construction costs. However, the City currently has a high sales tax of 8.25%, plus additional hotel and restaurant tax, making this option less desirable.

In addition, considering the overall goal of increasing investment in the downtown district, a high sales tax may discourage business from relocating and investing in the area. Should the City reduce existing taxes, the use of a Business District could be re-examined as a viable option.

Financing Method: Public-Private Partnership
Action Step 7: Establish a Public-Private Partnership gradient scale based on proposed land use.
Timeframe: Once development begins

A public-private partnership could be structured in a variety of ways, but any structure would provide the same benefits: (i) decrease the burden on the City to cover improvement costs; and (ii) allow the City to regulate parking and encourage responsible use of parking lots and structures.

Public-private partnerships should be evaluated on a project by project basis. For certain businesses, customers will not be willing to walk extra blocks to reach parking, nor will customers want to enter garages for short trips into a store (i.e. dry cleaners). However, the City should examine the use of these mechanisms as a means to encourage development and provide the City with additional revenue. Given the correct use of these mechanisms, a positive private-public balance can be struck.

Action 7A: Developer Exaction / Fee-In-Lieu

An Exaction or Fee-In-Lieu works by providing parking facilities for businesses in conjunction with public parking. These facilities can be either joined (i.e. 20 spaces to be shared between 4 businesses) or partitioned in a larger structure (i.e. of a 200 space garage, 20

spaces are allocated for business A). These spaces are then marked with reserved signs for patrons of the participating businesses.

It is important to ensure that any "Cooperative" Parking Facility will provide enough parking for the businesses included. A good ratio is that the Cooperative Parking should not include less than 60% of the parking that would be required for the businesses individually.

The business will then pay a fee to the City per year based on the number of spaces. This is often calculated based on the cost to the City to construct and maintain the space. This amount should be adjusted annually to account for increases in cost to the City. Additionally, should the use of the building change, the City will need to reassess the number of spaces required.

Based on the current recommendations, businesses may wish to obtain parking in Lot T, M or the Old Post Office Site. This option can also assist the City in bridging the gap between costs and revenues once the new construction has been completed but the full demand is not in place.

Action 7B: Sale/Leaseback

Sale/Leaseback works by either the City or a private developer leasing the parking lot from the other. It will continue to be owned by one party, but the other will have a leasehold on some or all of the parking structure.

This option is a viable solution for Lot T. As discussed above, Lot T is currently in a Tax Increment Financing District. Government property is exempt from property taxes, and, therefore, does not generate increment. By providing an additional incentive to a developer, such as a pad-ready lot with adjacent City-owned parking, the City can increase the likelihood of investment in this property.

Therefore, the City could construct the Lot and lease the air-rights to the developer for construction. In the alternative, the City could sell the Lot to a developer and lease back a portion of the lot for public use. The benefit to the second alternative is that the TIF increment would increase as the entire project would be owned by the developer and therefore generate property taxes. The final structure should be determined during negotiations with the developer of this property.

CONCLUSIONS & RECOMMENDATIONS

The following are conclusions that summarize the findings of the Downtown Parking Study:

PARKING SUPPLY/DEMAND ANALYSIS

- There are currently a total of 14,598 parking spaces within Downtown Rockford's study area.
- When the parking supply is adjusted to reflect the necessary cushion, the effective parking supply is determined to be 12,961 spaces.
- Occupancy data was collected on Tuesday, October 16, 2007 (10:00 a.m. to 8:00 p.m.).
- The occupancy counts taken on Tuesday, October 16, 2007 reflected 43% or 6,336 spaces of the parking supply to be occupied at peak which occurred at 10:00 a.m.
- Overall, public and private parking are equally utilized with both having a 49% occupancy rate.
- For the purpose of this report, the "sum of the peaks demand" total is used when estimating the existing parking demand. The "sum of the peaks demand" is equal to 7,140 or 49% of the total spaces.
- When comparing the sum of the peaks demand to the effective parking supply of 12,961 spaces, the parking adequacy is determined to be a 5,821-space surplus. The following table illustrates the parking adequacy on a Thursday and a Saturday by activity center and overall:

Sum of the Peaks Demand Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskel Neighborhood	827	259	568
West Industrial	1,445	935	510
Federal Courthouse/Davis Park	841	379	462
Riverfront/Museum	1,736	736	1,000
Main Street Mall	3,313	2,064	1,249
Westside Total	8,163	4,373	3,790
Eastside:			
Madison Street	604	214	390
St. James Neighborhood	1,351	666	685
East State Historic District	1,361	1,005	356
East Gateway Theater District	716	435	281
Haight Village	407	177	230
Ingersol/ComEd	360	270	90
Eastside Total	4,798	2,767	2,031
Study Area Total	12,961	7,140	5,821

- The future parking supply is not projected to increase for Scenario One.

- The future parking demand is expected to increase to 8,814 spaces based on the developments of Scenario One.

- When comparing the Scenario One demand (8,814 spaces) to the effective parking supply of 12,961 spaces, the parking adequacy is determined to be a 4,147-space surplus. The following table illustrates the Scenario One parking adequacy by activity centers and overall:

Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskel Neighborhood	827	259	568
West Industrial	1,445	955	490
Federal Courthouse/Davis Park	841	1,085	(243)
Riverfront/Museum	1,736	736	1,000
Main Street Mall	3,313	2,416	898
Westside Total	8,163	5,450	2,713
Eastside:			
Madison Street	604	424	180
St. James Neighborhood	1,351	666	685
East State Historic District	1,361	1,005	356
East Gateway Theater District	716	816	(100)
Haight Village	407	177	230
Ingersol/ComEd	360	276	84
Eastside Total	4,798	3,364	1,434
Study Area Total	12,961	8,814	4,147

- The future parking supply is expected to increase slightly by approximately 72 spaces with the additional parking planned as part of the development projects of Scenario Two and the loss of two parking lots. The future parking supply is estimated to be 14,670.

- The effective parking supply for Scenario Two is projected to be 13,026 spaces.

- The future parking demand for Scenario Two is projected to increase to 10,393 spaces based on the proposed developments.

- When comparing the parking demand for Scenario Two (10,393 spaces) to the effective parking supply of 12,940 spaces, the parking adequacy is determined to be a 2,547-space surplus. The following table illustrates the Scenario Two parking adequacy by activity centers and overall:

Parking Zone/Activity Center	Effective Parking Supply	Parking Demand	Surplus/ (Deficit)
Westside:			
Coronado-Haskell Neighborhood	827	259	568
West Industrial	1,445	955	490
Federal Courthouse/Davis Park (1)	841	1,190	(348)
Riverfront/Museum	1,736	736	1,000
Main Street Mall (2)	3,293	3,706	(413)
Westside Total	8,142	6,846	1,297
Eastside:			
Madison Street	604	413	191
St. James Neighborhood	1,351	666	685
East State Historic District (3)	1,360	1,285	75
East Gateway Theater District	716	462	254
Haight Village	407	177	230
Ingersol/ComEd	360	545	(184)
Eastside Total	4,797	3,547	1,250
Study Area Total	12,940	10,393	2,547

(1) Does not include projected demand for Davis Park Events.
Includes porjected demand for the New Federal Courthouse.
(2) Lost to Development Lot CC/23 spaces
(3) Lost to Development Lot Q/55 spaces; Plus proposed 150-space parking facility
Lost to development Lot T/96 spaces.

- The Davis Park events parking demand is not included in the parking adequacy shown above. The estimated parking demand for the outdoor events is projected to be 3,125 spaces when all seats are filled.

- The future parking demand projection assumes that all of the noted developments will come to fruition. If all of the noted developments are completed as proposed, additional parking may be needed to offset shortages in certain activity centers or blocks. We suggest the City revisit parking occupancy levels once developments are complete.

DEVELOPMENT OF SUPPLY-SIDE SOLUTIONS

An overall parking surplus of 5,821 spaces currently exists. It would appear that better utilization of the existing parking supply, especially the private parking supply, would meet the existing parking needs of most parkers within the downtown area.

- Presently, many of the existing downtown buildings are underutilized or vacant, which accounts for much of the large parking surplus that now exists in the downtown. The City of Rockford and the Riverfront District have developed a plan to revitalize the downtown area. Walker has utilized that plan to develop two future parking Master Plan scenarios. Scenario Two is the more aggressive scenario; an overall surplus of 2,547 spaces is projected for the overall study area under that scenario. However, there are three Activity Centers that are projected to have substantial parking deficits and they as follows:

Activity Center	Parking Deficit
Westside	
Federal Courthouse	348
Main Street Mall	413
Sub-Total	761
Eastside	
Ingersol/Comed	184
Total	945

- Therefore, if the downtown redevelops as projected, there will be a need for about an additional 840 spaces (761 x 110%) on the west side of the Rock River and 200 spaces (184 x 110%) on the east side of the river.

- Nineteen parking alternatives were evaluated on the basis of eight criteria to meet the future parking needs.

- A parking garage on Lot M and providing diagonal parking on Water Street appear to be the best solutions for additional parking on the east side of the Rock River. On the west side of the river, a new parking garage on the block of the Old Post Office along with diagonal parking on a reopened Main Street between Elm and Mulberry Streets are the best solutions.

The recommended solutions are summarized in the table below.

	Alternative	Spaces Added	Total Spaces	Project Cost per Space	Project Cost Total
	Westside				
1	Open Main St.	55	55	$5,700	$316,000
2B	Old Post Office Site	496	496	$23,600	$11,720,000
				Total	$12,036,000
	Eastside				
10	Lot T	24	120	$24,500	$2,936,000
11	Water St.	25	43	$5,100	$218,000
13A	Lot M	213	304	$29,900	$9,088,000
				Total	$12,242,000

Source: Walker Parking Consultants, 2008

- In almost all areas of the downtown, the parking supply is adequate, but, all of the spaces are not available to many of the motorists seeking a parking space. There is a need to make better use of the available parking supply by including as many spaces as possible in a common pool of shared, publicly available spaces.

- Rockford should work to make existing private parking lots available to the public when they are not being used by nearby commercial uses.

- Walker recommends that the City of Rockford begin negotiating lease arrangements with the owners of private parking facilities that would allow the general public to park in those private parking facilities during non-peak parking times. A high priority area should be the East State Historical District activity center. If existing resources can be used more effectively, the City may not need to build as much new parking

- One-way streets can be confusing to the occasional downtown visitor thus making it difficult to locate business and access parking facilities. The need for one way streets needs to be reexamined by the City with the goal being converting a number of roadways back to two way traffic flow.

DEMAND SIDE SOLUTIONS

Under development Scenario Two, the City of Rockford will need approximately 10,393 parking spaces. A comprehensive Transportation Demand Management (TDM) plan could potentially reduce that demand by as much as 4%. With the average cost of a parking space at $16,500, this reduction could potentially translate into a savings of $6.86 million of construction costs.

To establish a comprehensive TDM plan, we recommend that the City strongly consider the creation of the position of Transportation Demand Management Coordinator. This coordinator would be tasked with supporting the development, marketing, and implementation of a comprehensive TDM plan that takes into account the specific needs and resources of the area.

Moreover, we recommend that the TDM plan be comprehensive and that the plan should end the practice of free on-street parking in the City of Rockford. Additionally, we recommend that the plan prominently feature parking cash out programs, ridesharing programs, telecommuting options, unbundled parking, and increased participation in mass transit programs.

PARKING MANAGEMENT – POLICIES & STRATEGIES

Throughout this section we discussed several policy and management strategies that could assist the City to enhance the overall management of their parking system. The following list summarizes the recommendations discussed:

- Install pay and display meters in selected high demand areas (85% - 95% on-street occupancy, during peak periods);
- Implement the rate structure discussed in Option 1 ($.25/each 15 minutes, 2 hour maximum rate = $2.00, free from 6 p.m. until 6 a.m.), two hour time limit;
- Implement the rate structure outlined in Option 2 ($.25/each 30 minutes during off hours, $.25/each 15 minutes during peak hours, 10:00 a.m. until 2:00 p.m., free from 6 p.m. until 6 a.m.), in this variable rate structure, customers would pay for the length of stay based upon the cumulative duration selected, no time restrictions);
- Install pay by space meters in selected high demand surface lots (85-95% off-street occupancy, during peak periods);
- Implement a variable rate structure ($.75/hour, $6.00 maximum daily rate, for customers entering between 6 a.m.

and 4 p.m. and $.75/hour, $3.00 maximum evening rate for customers entering after 4 p.m. and before 6 a.m.;

- Upgrade the PARCS equipment in all of the parking structures;
- Open the parking structures to the general public for transient parking and implement the same transient rates structure as proposed for the pay by space surface lot locations;
- Implement PARCS recommendations that include: ticket dispensers, RFID readers and RFID windshield tags, exit stations, POF stations, and PIL stations;
- Budget approximately $700,000 for the PARCS equipment required to upgrade the structures (this is only an estimate, cost will vary based upon actual bid proposal process conducted by the City);
- Budget approximately $15,000 to $20,000 per meter (The total cost to install meters throughout the system would also be dependant upon the quantity of meters purchased and the bid proposal process);
- Upgrade Rockford's web-site to accommodate on-line monthly parking permit sales;
- Allow customers the option of using credit card on file, automatic renewal of permits each month, effectively eliminating the need for customers to physically appear each month at City Hall to renew parking permits;
- Incorporate RFID windshield decal tags into the monthly permit system, which can be read electronically;
- Implement RFID tags that would be used by customers to gain access into the parking structures and for parking enforcement officers to enforce parking regulations on the system's surface parking lots;
- Increase the existing monthly permit rates from the current level of $25.00 - $40.00 per month to $30.00 - $50.00 per month (dependant upon location);
- Increase the existing fine structure for minor violations from $10.00 to $20.00 per occurrence and investigate possible increases in other fine categories;
- Upgrade the existing sign system used to identify the Rockford parking structures and lots;
- Weigh the merits of privatization and third party management of the Rockford system;
- Determine whether it makes sense, based upon the review process, to issue a Request for Proposal that would not commit the City to award a contract to manage or lease the system;
- After the RFP submittals were submitted and reviewed, determine if the benefits of privatization were worthy of additional exploration;

- If yes, interview a short-list of qualified operators that would present their qualifications and future plans to operate and improve the Rockford parking system for evaluation, before making a final decision on privatization.

We have discussed several types of PARCS equipment and it should be noted that when making a decision to purchase any type of system one of the most important items to compare is the quality and level of maintenance service that will be available after the equipment installation is completed. A key to successful equipment selection is often selecting a local distributor that can professionally install the equipment, provide effective training, and also provide adequate service long after the installation and training process are completed.

In conclusion, we have provided an array of options and made several recommendations for the Rockford parking system. If implemented, the recommendations would provide the following:

- The ability to utilize all of the available spaces within the system;
- Greater control over the spaces located in the high demand areas of downtown;
- Enhanced revenue generation to better fund the City's parking enterprise fund.

Finally, our recommendations are founded in the principle that a parking system in which the spaces in the high demand areas are priced the highest, less convenient spaces are priced lower, and the least convenient parking spaces are located on the periphery and priced the cheapest (or free), can effectively spread out parking demand and better utilize all of the spaces within the system.

OVERVIEW OF FINANCING MECHANISMS, STAGES TIME TABLES FOR PLAN EXECUTION

The City of Rockford is not currently experiencing a parking deficit, as 12,961 effective spaces are available for a peak demand of 7,140. To better utilize current parking, the turnover rate needs to be increased, parking operations streamlined and parking made more identifiable. Therefore, the recommendations to effectively utilize the current parking consist of the following:

- Increase Transient Rates in Parking Garages and Surface Lots to a maximum of $6.00 for the daily rate and $3.00 for the nightly rate.

- Increase Monthly Rates in Parking Garages to a range of $30.00-50.00
- Increase Fines from $10 for minor violation to $20, and increase all $20 fines to $25.
- Install on-street parking (pay by space or pay and display) and implement one of two rate structures based upon demand at that location.
- Install PARCS equipment and other technology in existing garages to increase traffic flow and efficiency.
- Begin on-line permit sales.
- Upgrade existing signage to create more readily identifiable parking.

The City has also anticipated additional growth and a corresponding need for additional parking. Numerous areas were identified as possible sites for additional parking, and, based upon a ranking system five were identified as the best candidates. These improvements and the recommended financing mechanism are as follows:

- Main Street: Open the pedestrian mall and add metering, increasing spaces by 55. Finance through the use of a Special Service Area that will be paid by the businesses along the mall and abated by any meter revenues.
- Old Post Office Site: Construct a new 4 level parking structure, adding 496 new spaces. Finance through the use of any TIF funds available from the Westside TIF #1.
- Lot T: Construct a new parking structure combined with the anticipated development of row homes and office/retail space, adding 24 new spaces. Finance through the use of any funds available from the Eastside TIF and a Sale/Leaseback partnership with the developer of the row homes.
- Water Street: Open up Water Street by converting it to a one-way street and adding parking meters, for a total of 25 new spaces. Finance through the use of a Special Service Area that will be paid by the businesses along the street and abated by any meter revenues.
- Lot M: Construct a new four level structure, adding 213 spaces. Finance through the use of any funds available from the Eastside TIF.

The above recommendations will allow the City to improve the current use of the available parking while increasing revenues to support upgrades and absorb additional growth. A the time when development reaches a point where a parking deficit is observed, the City should begin the construction of new structures and lots as outlined above.

APPENDIX A

SCOPE OF SERVICES

The basic services to be provided by Walker Parking Consultants for the City of Rockford will be performed in nine tasks as follows:

SCOPE OF SERVICES

TASK 1: PROJECT MANAGEMENT

1. Meet with representatives of the City of Rockford to further clarify study objectives, review the work plan, set work session dates, and finalize the project schedule. At this meeting, the lines of communication and a schedule of deliverables will also be established.

2. Provide the City of Rockford with a monthly status report on the 15th of each month summarizing progress on the project, the project's tasks, and deliverables.

3. Prepare draft task reports of Tasks 2 through 9 as the parking study progresses.

4. Prepare a final Downtown Parking Management Plan report that documents the overall study process, data collected, research and analysis completed, and transmits recommended action steps and policies including a strategic parking management plan for Tasks 2 through 9. That report will provides specific goals and action steps for the short term (six months to two years after the report is issued) and for the long term (consisting of three years after the report is issued and beyond). The report will include maps, forms, and other supporting documents. That report will also encompass the comments received at the final presentation. Final report will be provided in digital format copies in Microsoft Word and Adobe PDF format along with 12-printed hard copies of the report.

Three (3) site visits are planned for this task.

TASK 2: EXISTING CONDITIONS

1. Obtain from the City a base map for the study area in an electronic format.

2. Obtain from the City and review available reports, studies, planning documents and statistical data regarding the study area.

3. Meet with various key Downtown stakeholders, who could include Chamber of Commerce, the city's business community, elected officials, concerned citizens and others so designated by the City to hear their parking concerns from their perspective for the downtown area. Walker will conduct two listening sessions which occur over a one-day period. A standardized written agenda will be prepared for both stakeholder interviews.

4. Meet with Rockford Mass Transit officials to discuss ridership and incentives to increase ridership for downtown employees and patrons.

5. Prepare task report summarizing the existing conditions, stakeholders meetings.

One (1) site visit is planned for this task.

TASK 3: PHYSICAL INVENTORY AND UTILIZATION

1. Obtain an existing inventory of on- and off- street parking spaces in the study area.

2. Field verify the off-street inventory, tabulate and summarize on a parcel-by-parcel basis, block-by-block basis and activity center basis in a spread sheet format. Tabulation will include block identification, capacity by space category, user type (residential, office, commercial/retail, special event, etc.), public vs. private, parking rates, method of payment, time restrictions, hours of operation, vehicle overhead clearance requirements for structures, enforcement operations, safety and security characteristics, estimate of age of facility, presence and condition of lighting, overall condition of surface, cleanliness, parcel numbers, street address, owner information, Walker will prepare a standardized form for the collection of this existing data. The inventory will be in spread sheet Excel format, GIS software compatible with the City's software and PDF format.

3. Field verify the on-street inventory, tabulate and summarize on a block-by-block basis and activity center basis[19] in a spread sheet format. Tabulation will include block identification, capacity by space category, user type (residential, office, commercial/retail,

[19] The study area will be divided into geographical areas "Activity Centers" as

special event, etc.), parking rates, method of payment and time restrictions. Walker will prepare a standardized form for the collection of this existing data. The inventory will be in spread sheet Excel format, GIS software compatible with the City's software and PDF format.

4. Perform a parking occupancy study within the downtown study area to determine peak occupancy of all on and off-street parking facilities. The field survey shall be performed on a peak weekday from 10:00 a.m. to 8:00 p.m. at two-hour increments.

5. Perform a parking turnover survey for selected off-street and on-street facilities. The City will determine the parking facilities to be selected. Walker will conduct the parking turnover survey for up to 500 parking spaces. If the City wishes to have more or all the parking spaces survey that will be considered an additional service.

6. Determine existing parking utilization for the downtown study area by block and activity center basis within the study area.

7. Prepare task report summarizing the existing physical inventory and utilization analysis findings which shall include as a minimum: a description of the nature of the uses, parking rates, prioritization of the parking user groups, hours of operation,, parking requirements, allocation of parking spaces, and high and low-utilization parking locations. That task report will include a mapped inventory including parking duration for both on and off-street on a block-by-block basis.

Three (3) site visits are planned for this task.

TASK 4: PARKING SUPPLY AND DEMAND ANALYSIS

1. Using shared parking methodology, calculate existing parking demand on a block-by-block and activity center basis for the study area based upon parking ratios determined from Walker's database, ITE Parking Generation[20] and ULI Shared Parking[21] for similar land uses. Adjust parking ratios for employee drive ratio,

[20] Institute of Transportation Engineers (ITE), *Parking Generation, 3rd Edition*, 2004
[21] Urban Land Institute (ULI), *Shared Parking, Second Edition*, 2005.

seasonal factors, and captive market effects. Develop a computer model of existing parking demand in Excel and calibrate against field observations for the downtown study area. That parking model will utilize parking utilization, parking generation rates, building occupancy, and transit/alternative mode usage.

2. Compare the calculated parking demand to the existing parking supply to determine the existing parking surplus or deficit on a block-by-block and activity center basis in the downtown study area.

3. Contact City of Rockford Planning and Zoning Department representatives to identify potential planned developments, up to three different developments will be analyzed (2, 5 and 10 year horizons). Assess the impact of these developments on future parking conditions.

4. Utilizing the Excel model developed for existing parking conditions determine future parking surpluses and deficiencies (through 2017) for the downtown study area by block and activity center basis within the study area based on available local data, national averages, Walker Parking Consultants' experience and shared use methodology.

5. Provide and instruct (four (4) hours of instruction) City of Rockford staff the developed computer parking model. That model will be in Excel format.

6. Locate and discuss hard-to-find parking facility locations (perceived and real)

7. Evaluate alternatives for staging of delivery trucks, school buses, and motor coaches that currently park on the street.

8. Discuss the impact of future developments projects on parking needs.

9. Discuss the impact of transit enhancements on future parking demand including future intercity and commuter rail enhancements.

10. Recommend specific strategies that increase existing parking utilization without reducing parking revenues.

11. Prepare task report summarizing the supply/demand analysis.

12. Discuss the draft report with the City, incorporate their comments one-time into the final report

One (1) site visit is planned for this task.

TASK 5: DEVELOPMENT OF SUPPLY-SIDE SOLUTIONS

1. Review existing vehicular and pedestrian access and circulation patterns for their relationship to existing and proposed parking facilities in the study area.

2. Determine if different land uses can share parking facilities.

3. Determine if different parking management strategies could better utilize the existing and proposed parking supply such as shared parking, use of satellite parking, restriping existing parking facilities, valet parking, modifications to existing parking regulations, improved wayfinding, improved collection systems, overbooking of existing parking facilities and elimination of monthly parking permits for long term, multi-year permits.

4. Identify on-street locations were diagonal parking could be utilized.

5. Research best practices, develop and propose alternative approaches to accommodate special event parking. Review and evaluate the effectives and applicability of varies strategies that include but are not limited to the following:

    - Shared parking arrangements;
    - Use of remote parking facilities;
    - Identify overflow parking facilities;
    - Pricing to encourage peak-period motorists to use remote parking;
    - Promotion of alternative modes such as public transit or alternative modes during peak periods;
    - Special parking regulations for priority vehicles (emergency; service, delivery, high occupancy vehicles, disabled, etc.); and
    - Improved walk-ability between destinations and nearby parking facilities.

6. Identify multiple new off-street parking solutions (surface and/or structured) to resolve any parking deficits as determined in Task 4. Up to five (5) locations will be identified and evaluated. Additional locations will be considered additional services.

7. Determine conceptual construction and project costs including estimated operational expenses to enable a comparison of the costs of each alternative on an "apples-to-apples" basis.

8. Prepare a location site plan showing the footprint of each parking solution.

9. Evaluate the various alternative plans on the basis of qualitative criteria to be mutually agreed upon with the City of Rockford. The criteria may include, but are not limited to, capital cost, life cycle cost, ability to generate revenue, location, visibility, pedestrian access, vehicular access, traffic impact, aesthetics, implementation time, security, utilization of public transit, and future versatility. A weighted matrix will be used to achieve more objectivity and to rank the alternatives.

10. Prepare conceptual functional renderings, if authorized by the City of Rockford, of selected potential solutions. This task will be considered an additional service and would be billed on an hourly rate plus reimbursable expense basis.

11. Meet with the City to discuss the conceptual designs and present the matrix analysis to agree upon weighting and other considerations.

12. Develop a recommended plan for improvements, including phasing of components corresponding to projected needs

13. Identify alternative sources of revenue (bond, special assessment areas (SSAs), business improvement districts (BIDs), grants, private ownership, tax increment financing, capital improvement program funds, etc) including the costs to obtain these revenue sources and any needed marketing campaigns to assure the success of the revenue strategy or strategies.

14. Prepare task report summarizing the alternatives analysis.

15. Discuss the draft report with the City; incorporate their comments one-time into the final report.

One (1) site visit is planned for this task.

TASK 6: DEVELOPMENT OF DEMAND-SIDE SOLUTIONS

1. Discuss potential reduction in parking demand as a result of utilizing transportation demand management (TDM) tools, including improved transit service, to modify user group and/or land use parking requirements. The results of this discussion will be an overall percent reduction in the future parking demand.

2. Evaluate other Transportation Demand Management (TDM) strategies by estimating their capital and annual operating costs. Compare those solutions (strategies) with constructing new facilities. Those strategies include, but are not limited to the following:

    - Car pooling;
    - Van pooling;
    - Parking incentives;
    - Wayfinding improvements;
    - Peak hour parking;
    - Reserved high occupancy parking;
    - Parking cash-out;
    - In-lieu development fees;
    - Remote park & ride lots on the fringe of the downtown area;
    - Pricing of parking to reduce parking demand;
    - Financial incentives to increase transit ridership;
    - Real-time transit information and other technology based solutions;
    - Transit discounts;
    - Real-time ridesharing;
    - Walking; and
    - Bicycling.

3. Summarize the results of the TDM strategies in a spread sheet format listing the following:

    - Goals and issues addressed by alternative;
    - Associated implementation plans;
    - Phasing and schedule for improvements
    - Key considerations
    - Challenges

- Cost estimates (capital and operational)
- Potential revenue sources
- Level of effectiveness, applicability and feasibility.

4. Survey Five (5) other similar cities to Rockford including Peoria, Illinois as to their downtown parking policies.

5. Identify and discuss opportunities for shared parking among the various user groups to maximize parking utilization.

6. Identified unbundled parking facilities and their opportunities as shared parking and parking cash-out facilities.

7. Identify locations for implementation of peak-hour pricing concepts and shared parking facilities.

8. Prepare a task report that summarizes the results of Task 6.

One (1) site visit is planned for this task.

TASK 7: DEVELOPMENT OF PARKING POLICY AND MUNICIPAL NEEDS

1. Meet with the representatives of the city to analyze current

   - On- and off-street parking policies;
   - Parking enforcement policies;
   - Rate and fines structures;
   - Parking system financial statements;
   - Parking system strategic and business plans;
   - Logistical problems;
   - Program administration; and
   - Departmental organization and staffing.

2. Compare current parking system rates and fines against other similarly-sized cities and Walker's database and recommend new rates and/or fines as needed. Up to five (5) cities will be surveyed including Peoria, Illinois.

3. Develop a comprehensive strategic and business plan that will address and make recommendations regarding:

- Proper function of a department to handle on-street and off-street parking;
- Expense reduction scenarios;
- Reporting procedures that such a department can best function;
- Staffing requirements necessary to handle the administrative logistics;
- Methods of handling parking revenues;
- How such revenues might be used to enhance the city's parking program;
- Data management procedures; and
- Enforcement policies.

4. Investigate outsourcing all or a portion of the Cities parking operations.

5. Investigate a strategy to fund downtown parking through impact parking fees.

6. Present business and strategic plans to the City for review. The revised strategic and business plans will be included in the final report.

7. One site visit is planned for this task. The site visits will include a review of current departmental policies and procedures, operational procedures.

8. Prepare a parking management plan that recommends changes to parking management strategies and methods of operation.

9. Prepare task report summarizing the parking system analysis.

One (1) site visit is planned for this task.

TASK 8: DEVELOPMENT OF PUBLIC INFORMATION TOOLS

1. Develop a parking information tool consisting of a map of current public parking locations in Downtown Rockford that are available to businesses, residents, customers, special events, and/or downtown employees. That map will be an interactive map of parking information covering day, night and weekend parking for the above user groups. This information shall be designed to assist people parking in Downtown Rockford to identify monthly, daily, and hourly parking options based on location, price and trip

purpose. The map will also identify significant downtown destinations and provide information on public transit once people have parked in the down town.

2. Install web links on the River District Association, the Rockford Area Convention and Visitors' Bureau, Metro Centre/Centre Events, and Coronado Theater websites to provide a direct from of these websites to the parking information website on the City of Rockford's website.

One (1) site visit is planned for this task.

TASK 9: OVERVIEW OF FINANCING MECHANISMS, STAGES TIMETABLES FOR PLAN EXECUTION

1. In conjunction with the scheduled kick-off meeting, discuss relevant background information and review approach with City of Rockford Finance Department representatives.

2. Evaluate and prepare financing alternatives concurrently with preparation of the Task 5 Analysis.

3. Evaluate possible alternate financing alternatives including but not limited to general property taxes, home rule sales tax, food and beverage tax, special service area taxes, real estate transfer taxes, fee-in-lieu, fee-based financing structure, and negotiated arrangement (although TIF is not mentioned, the project team has the expertise and experience to perform TIF related services including conducting eligibility studies and projecting the future tax increment of individual projects).

4. Review possible options and mutually agree with City representatives on the four strategies to be studied in more detail.

5. Study four financing strategies, identifying pros and cons, opportunities, and limitations.

6. Identify the cost benefit associated with various financing strategies that support on-site parking exemptions, reductions or fee-in-lieu of conditions compared with land development costs for providing on-site parking.

7. Analyze opportunity cost associated with increased commercial development (i.e., sales tax and property tax revenue) balanced against the use of land for parking.

8. Recommend methods of financing for the City's consideration.

9. Develop a basic business plan for the development and operation of the City Rockford's downtown parking system.

10. Discuss the draft report with the City; incorporate their comments one-time into the final report.

One (1) site visit is planned for this task.

APPENDIX B

PARKING TERMINOLOGY

DEFINITION OF TERMS

The following definitions are provided to clarify the terms used in this document:

- *Demand*: The number of parking spaces required to satisfy visitor and customer needs on any given day. This is estimated by comparing the observed number of vehicles actually parked in the study area with the number of vehicles that would be expected given the building sizes and uses.

- *Occupancy*: The number of parking spaces occupied by vehicles compared to the number of available spaces for a parking system. This information is gathered by performing parked vehicle counts in each parking area located in the study area and comparing it to the supply.

- *Parking Adequacy*: The difference between the effective parking supply and the estimated parking demand. A negative adequacy indicates a deficit while a positive result shows a surplus.

- *Supply*: The total number of parking spaces in the study area.

- *Survey Day*: The day that the parking occupancy counts were conducted in downtown Rockford. This day should represent a typical busy day.

- *Design Day*: The day that represents the level of parking demand the parking system is designed to accommodate. This level of activity is approximately the 85th percentile of absolute peak activity. A parking supply designed to handle the absolute peak level of demand typically contains too many spaces that remain unused most of the time.

- *Effective Supply*: The total supply of parking spaces adjusted to reflect a cushion needed to provide for vehicles moving in and out of spaces, spaces unavailable due to maintenance/snow removal, and to reduce the time necessary for parking patrons to find the last few available spaces. The adjustment varies as to the amount and type of parking, but typically the effective supply is 85 to 95% of the total number of spaces.

- *Demand Ratio*: The ratio of the number of vehicles observed to occupy parking spaces compared to a reference number. For example, if there are 15,000 square feet in a retail facility and observed peak occupancy of 30 vehicles in the customer parking lot, the Demand Ratio is 0.002 (30/15,000) for customers.

APPENDIX C

CONSENSUS BUILDING

CITY OF ROCKFORD

CUSTOMER SURVEY

505 Davis Road
Elgin, IL 60123

Voice: 847.697.2640
Fax: 847.697.7439
www.walkerparking.com

MARCH 2008

10/4/07: City of Rockford, IL – Public Forum

MINUTES BY: Phill Schragal

A hard copy of these meeting minutes will not be sent.

CITY OF ROCKFORD AND WALKER PARTICIPANTS:

NAME	COMPANY	E-MAIL ADDRESS
Rich Klatt	Walker Parking	Rich.Klatt@walkerparking.com
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Phill Schragal	Walker Parking	Phill.schragal@walkerparking.com
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Reid Montgomery	City of Rockford	Reid.montgomery@rockford.gov

On Thursday October 4, 2007, Walker Parking Consultants conducted two public forum sessions to solicit input from Rockford community members regarding the current state of Rockford's downtown parking system. The sessions were held at 2:00 p.m. and 6:00 p.m. in the Rockford Public Library. The 2:00 p.m. session was attended by approximately 25 community members and the 6:00 p.m. session had approximately 8 attendees. R. Klatt opened each session with a discussion of the planned "scope of services" developed by the City for the parking study. Rich ended his brief explanation with a series of questions devised to solicit input from the attendees. The following comments offered by the attendees and recorded by Walker's representative at the meeting.

	ITEMS DISCUSSED	ACTION TO BE TAKEN
1.	The parking study should focus on both the East and West side of downtown, as each section has a unique demographic make-up.	
2.	On-street parking is limited during day-time hours.	
3.	On-street is ample and available during evening hours.	
4.	On special event dates at the Metro Center or Coronado Theatre traffic back-ups occur, which possibly result from the one-way street configuration that currently exists.	
5.	Signage that directs public users to the available parking structures is non-existent or under utilized.	
6.	Metro Centre and Coronado events result in parking problems.	
7.	Short-term parking is adequate, long-term parking is lacking.	
8.	River District perceives constant abuse of short-term parking spaces (2 hrs. or less) by employees of local merchants or commercial tenants that constantly relocate their vehicles throughout the day to avoid being ticketed, while using premium spaces near local merchant outlets.	
9.	The Concourse Garage (840 sp.) is over-utilized by employees, no room for public parking on jury call dates	
10.	Is there a common comfortable distance that people will walk for available transient parking?	
11.	Enhanced parking signage and development of a downtown way-finding	

	ITEMS DISCUSSED	ACTION TO BE TAKEN
	system would be very helpful in assisting visitors.	
12.	Add international P to all lots and structures.	
13.	Perceived lack of security in all of the public parking structures (i.e. homeless people in elevator vestibules, on surrounding streets).	
14.	Customers of merchants prefer parking on-street vs. parking in a structure, especially on the west side of the river.	
15.	A pricing structure should be implemented and pricing should be used to control demand in designated areas of downtown.	
16.	Walker should explore implementation of both pay-and-display and pay-by-space meters for the surface lots and pay-on-foot with centrally located pay-stations for the parking structures.	
17.	Provide more customer parking spaces while implementing an on-street payment system to off-set parking related costs.	
18.	Utilize the State/Main or Wyman parking structures for paid parking for merchant customers.	
19.	Under current conditions an excess supply of spaces exists, however, the spaces available are not convenient to the desired downtown destinations.	
20.	I prefer using a parking structure for long-term parking.	
21.	I prefer more parking structures and on-street parking over adding surface parking lots, as too many surface lots exist today in downtown Rockford.	
22.	Capacity issues exist on weekends during events, which force patrons to park over 1 to 2 blocks from their desired destination.	
23.	The two surface lots near the Library or often full.	
24.	I'm reluctant to using structure parking due to; poor maintenance, not accessible, lack appropriate way-finding, poor signage, homeless squatters in the elevators and around the facility and lack of security.	
25.	Under current conditions, the parking structures are used primarily for employee contract parking.	
26.	The prime spaces within the surface parking lots are used for reserved permit parking.	
27.	New development must be geared toward promoting evening, night and weekend business.	
28.	Available parking in the 400-500 block of State Street is insufficient to serve the evening business on many nights.	
29.	Many of the private lots will tow vehicles using the lot even though patrons are parking "after hours", which feeds the perception that private owners are "out to get" the end-users or unwilling to cooperate with the City to relieve the parking shortage in these areas of congestion.	
30.	There is a lack of parking on the East side on special event dates (particular dates were never defined).	
31.	The downtown area is not user friendly; poor signage, no way-finding system.	
32.	Three (3) large surface lot parcels were developed over the last ten (10)	

	ITEMS DISCUSSED	ACTION TO BE TAKEN
	years; the City needs to decide if a parking problem exists.	
33.	I feel that there are ample parking spaces; however, people are unwilling to walk more than 1 to 2 blocks to use the ancillary available spaces. In addition, the poor climate dictates the need for people to park within close proximity to their destination.	
34.	A full-service hotel does not exist today in downtown Rockford.	
35.	Is over-booking of monthly spaces an option for the existing parking structure.	Practice is in place per the Steven Ernst (Rockford).
36.	Most employees attempt to park directly in front of their place of work, which causes a moving parking problem daily when they move their vehicles from space to space to avoid exceeding the 2 or 3 hour time-limits and receiving a parking ticket.	
37.	City should explore new ideas and ways to administer the permit parking program which include; an on-line registration and renewal option, bar-coded decals that are good for one-year and can be checked with hand-held devices for expiration in lieu of having to purchase decals in-person on a monthly basis, allow registration of multiple vehicles on the same permit.	
38.	Parking lot maintenance is on a downward spiral.	
39.	The area around the State of Illinois building experiences parking problems on a regular basis.	
40.	The City of Madison, WI has implemented satellite parking lots for long-term parking combined with a shuttle service to help alleviate downtown parking congestion.	
41.	Based upon a consensus opinion developed from local talk-radio shows; metered parking is needed in downtown Rockford.	
42.	Many employers are forced to subsidize or pay for the entire cost to purchase parking permits to retain employees or when recruiting perspective employees.	
43.	The razed hotel at the Midway Theatre will provide an excellent location for surface lot expansion on the East side.	
44.	The parking study should be completed in conjunction with the City's Master Plan.	This has been discussed between Walker and the City in our early meetings.
45.	Enhancements to the downtown parking system should be funded through revenue bonds or an increase in the parking rates.	
46.	Study should identify areas of consolidation, i.e. a Restaurant District and Courthouse District).	
47.	Free parking should be offered to all employees if they park in a parking structure and not on-street.	
48.	Ease of accessibility is poor due to one-way street configuration; the report	

ITEMS DISCUSSED	ACTION TO BE TAKEN
should address some action oriented steps to improve this condition.	

APPENDIX D

EXISTING STATISTICAL DATA

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

Coronado-Haskell Neighborhood

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
1				12	12	10	1	0	0	1	2	0	2	17%	
2				14	14	12	6	4	3	3	3	1	6	43%	
3				12	12	10	0	3	6	4	1	1	6	50%	
4				18	18	15	2	2	2	2	2	1	2	11%	
4	A	35			35	32	35	30	29	15	8	3	35	100%	
5				34	34	29	13	13	12	10	14	4	14	41%	
6				31	31	26	9	9	12	14	15	8	15	48%	
7				18	18	15	6	8	8	6	4	3	8	44%	
13				42	42	36	13	17	16	13	13	4	17	40%	
13	A				0	0	0	0	0	0	0	0	0	0%	Apartments
14				47	47	40	10	11	6	7	5	2	11	23%	
15				46	46	39	5	5	3	2	7	0	7	15%	
16				40	40	34	4	7	5	5	1	0	7	18%	
17				22	22	19	2	1	2	3	1	0	3	14%	
17	A	72			72	65	41	37	23	19	0	0	41	57%	Country Kitchen INC
18				28	28	24	4	5	1	0	1	1	5	18%	
18	A	78			78	70	15	17	18	7	2	0	18	23%	School
19				40	40	34	4	3	2	1	2	0	4	10%	
20				38	38	32	8	6	8	8	6	2	8	21%	
21				32	32	27	3	5	4	4	3	0	5	16%	
22				35	35	30	4	1	5	3	3	0	5	14%	
23				26	26	22	3	2	4	1	3	1	4	15%	
24				40	40	34	5	5	3	4	3	1	5	13%	
25				18	18	15	6	6	6	6	5	6	6	33%	
26				22	22	19	4	4	1	2	1	1	4	18%	
27				30	30	26	2	3	2	2	2	3	3	10%	
28				24	24	20	4	3	3	3	1	0	4	17%	
28	A	70			70	63	9	7	6	5	4	0	9	13%	Pre School House of Grace
29				34	34	29	3	4	4	5	3	2	5	15%	
Sub-Total		255	0	703	958	827	221	218	194	155	115	44	259	27%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

West Industrial

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
38				18	18	15	8	6	7	7	7	4	8	44%	
38	A	15			15	14	0	0	0	0	1	0	1	7%	
38	B	54			54	49	0	0	0	0	0	0	0	0%	
38	C	21			21	19	11	10	10	3	2	0	11	52%	320 Strope
38	D	50			50	45	25	25	25	25	25	25	25	50%	Used Car Lot
39				34	34	29	7	5	3	1	1	1	7	21%	
39	A	115			115	104	27	27	27	27	27	27	27	23%	Chrysler
40				32	32	27	5	8	8	6	6	4	8	25%	
40	A	50			50	45	10	8	8	0	0	0	10	20%	Bill Doron
40	B			10	10	9	3	1	1	0	0	0	3	30%	Pay Ins. Lic.
41				20	20	17	1	3	3	2	2	1	3	15%	
42				28	28	24	5	6	4	6	4	2	6	21%	
42	A	5			5	5	2	2	2	1	0	0	2	40%	Mandrod Electric
43				26	26	22	10	10	10	10	0	0	10	38%	Construction on Block
43	A	32			32	29	35	36	32	15	7	0	36	113%	Talecris
43	B	35			35	32	35	35	35	35	35	35	35	100%	Chrysler
44				37	37	31	11	6	8	5	4	2	11	30%	
44	A	125			125	113	46	57	40	23	19	24	57	46%	COR Lot A
44	B	33			33	30	27	24	20	15	3	1	27	82%	Firestone
44	C	26			26	23	6	4	4	3	0	0	6	23%	RMTD
52				36	36	31	13	24	20	12	8	10	24	67%	
53				23	23	20	9	15	10	2	0	0	15	65%	
53	A	18			18	16	17	12	8	7	2	0	17	94%	Mass Transit
53	B	30			30	27	10	8	8	0	0	0	10	33%	Vacant
53	C	21			21	19	7	11	10	3	0	0	11	52%	Vacant
54				31	31	26	5	12	10	6	3	3	12	39%	
54	A	27			27	24	26	26	23	12	8	10	26	96%	Women's Care Center
54	B	12			12	11	4	5	6	2	0	0	6	50%	Jay Tronics
55				21	21	18	0	1	1	1	0	0	1	5%	
55	A	30			30	27	10	7	5	3	3	2	10	33%	Vacant
56				27	27	23	12	14	14	7	2	0	14	52%	
56	A	342			342	308	310	275	281	233	141	137	310	91%	Justice Center
56	B	38			38	34	26	21	26	22	11	10	26	68%	Rockford Housing
64				19	19	16	9	6	12	9	8	6	12	63%	
64	A		80		80	72	44	36	45	32	10	10	45	56%	COR Lot I
64	B	40			40	36	38	28	34	34	4	1	38	95%	Federal Building
64	C	65			65	59	65	57	55	44	6	2	65	100%	Vacant
Sub-Total		1,184	80	362	1,626	1,445	879	831	815	613	349	317	935	58%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

Federal-Courthouse/Davis Park

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
66				31	31	26	0	0	0	0	0	0	0	0%	
66	A	19			19	17	15	13	13	10	0	0	15	79%	Excelsior
67				2	2	2	0	0	0	0	0	0	0	0%	
67	A	58			58	52	23	28	19	16	11	8	28	48%	Rockford Housing
67	B	36			36	32	15	12	10	7	1	0	15	42%	
67	C	15			15	14	10	10	9	10	5	5	10	67%	Joe's Transmission
68				26	26	22	12	8	6	15	5	3	15	58%	
68	A	50			50	45	34	37	35	35	2	0	37	74%	Vacant
68	B	7			7	6	0	0	0	0	0	0	0	0%	Vacant
68	C	42			42	38	8	5	7	3	3	3	8	19%	Food Equipment
68	D	10			10	9	5	5	4	3	1	0	5	50%	
69				45	45	38	9	6	7	0	0	0	9	20%	
70				31	31	26	10	10	10	10	8	3	10	32%	
70	A		129		129	116	76	63	57	59	11	5	76	59%	COR Lot SS
70	B	20			20	18	20	20	19	4	2	2	20	100%	
71				13	13	11	7	7	6	5	2	1	7	54%	
71	A	45			45	41	8	10	10	10	2	0	10	22%	
71	B	48			48	43	26	23	24	21	12	15	26	54%	Amcore Bank
72				8	8	7	0	0	0	0	0	0	0	0%	
72	A	38			38	34	0	0	0	0	0	0	0	0%	Vacant
73				24	24	20	8	2	4	7	0	3	8	33%	
73	A	41			41	37	30	36	26	18	7	2	36	88%	Rockford Park Dist.
74				20	20	17	1	0	0	0	0	0	1	5%	
75				26	26	22	12	6	4	4	2	4	12	46%	
75	A	120			120	108	20	24	21	18	9	7	24	20%	
76				22	22	19	3	5	4	2	0	0	5	23%	
77				24	24	20	1	0	1	2	2	2	2	8%	
78															
79															
80															
Sub-Total		549	129	272	950	841	353	330	296	259	85	63	379	40%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

Riverfront Museum

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
8				0	0	0	0	0	0	0	0	0	0	0%	
8	A	46			46	41	30	24	26	17	14	4	30	65%	Holmserom Kennedy
8	B	80			80	72	34	18	6	6	2	1	34	43%	
8	C	40			40	36	18	10	6	7	2	0	18	45%	US Bank
9				8	8	7	8	8	6	6	5	2	8	100%	
9	A	29			29	26	20	16	12	6	5	0	20	69%	Arnold Lundgren
9	B	25			25	23	7	7	5	1	0	0	7	28%	Affiliated
9	C	40			40	36	3	1	2	1	2	0	3	8%	Construction
9	D	13			13	12	10	11	7	4	0	0	11	85%	Child Care
9	E	10			10	9	0	0	2	2	0	0	2	20%	Church
9	F	5			5	5	3	2	2	1	0	0	3	60%	Adams Laflower
9	G	7			7	6	4	4	3	3	1	0	4	57%	Attorney
9	H	9			9	8	0	0	0	0	0	0	0	0%	Spirts
10				0	0	0	0	0	0	0	0	0	0	0%	
10	A	349			349	314	57	53	50	51	42	12	57	16%	Museum
10	B	33			33	30	3	11	7	12	16	4	16	48%	Museum
10	C	92			92	83	69	63	51	68	64	59	69	75%	Apartment Towers
11				14	14	12	11	10	4	6	8	3	11	79%	
11	A	15			15	14	6	7	8	7	3	1	8	53%	Law Office
11	B	8			8	7	3	1	3	0	0	0	3	38%	Bridal Shop
11	C	21			21	19	13	9	9	12	5	2	13	62%	Red Cross
11	D	67			67	60	49	39	23	21	4	4	49	73%	Stepping Stone
11	E	55			55	50	27	26	28	12	8	1	28	51%	Easter Seals
11	F	77			77	69	31	30	26	18	5	0	31	40%	Associated Bank
11	G	11			11	10	1	0	2	0	0	0	2	18%	Office Building
12				18	18	15	18	15	5	10	13	4	18	100%	
12	A	46			46	41	38	18	21	31	44	28	44	96%	Rockford Business College
12	B	17			17	15	11	11	12	10	1	0	12	71%	Rockford MELD
12	C	36			36	32	9	13	6	8	0	0	13	36%	Heritage Credit Union
12	D	30			30	27	8	9	11	9	4	1	11	37%	Gesmer Law Office
12	E	31			31	28	21	23	15	6	1	0	23	74%	Human Service Dept.
12	F	38			38	34	10	9	11	11	7	5	11	29%	Harbor House
30				35	35	30	1	1	1	1	0	0	1	3%	
30	A	132			132	119	23	25	27	28	12	6	28	21%	City Plaza
30	B	7			7	6	3	5	6	5	1	1	6	86%	Saavedra Archietels
30	C	38			38	34	14	11	9	6	5	4	14	37%	Law Office Shrivel O'Neil
31				50	50	43	3	3	2	1	0	0	3	6%	
31	A	34			34	31	13	14	16	13	0	0	16	47%	Emmanuel Church
32				24	24	20	2	9	13	8	7	4	13	54%	
32	A	129			129	116	2	1	0	0	0	0	2	2%	First Presbyterian Church
32	B	36			36	32	5	6	10	10	9	8	10	28%	Preforming Arts
32	C	72			72	65	37	36	34	37	33	32	37	51%	Olsen Plaza
32	D	35			35	32	9	9	11	11	0	0	11	31%	Associated Bank
32	E	32			32	29	4	3	5	3	1	2	5	16%	St Angel Realtor
33				0	0	0	0	0	0	0	0	0	0	0%	
33	A	43			43	39	30	31	31	29	31	31	31	72%	
Sub-Total		1,788	0	149	1,937	1,736	668	602	534	498	355	219	736	38%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

Main Street Mall

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
34				17	17	14	1	0	0	0	0	0	1	6%	
34	A		168		168	151	27	34	32	8	4	2	34	20%	COR Lot C
35				21	21	18	5	3	4	1	1	0	5	24%	
35	A		775		775	698	100	93	84	38	6	4	100	13%	COR Lot Y
36				27	27	23	12	10	10	11	5	5	12	44%	
36	A	26			26	23	7	6	5	3	4	2	7	27%	Milestone
37				31	31	26	2	1	1	3	1	1	3	10%	
37	A	101			101	91	50	32	30	25	11	14	50	50%	2nd Church
45				38	38	32	21	14	16	18	16	14	21	55%	
45	A	27			27	24	0	0	0	0	0	0	0	0%	Winnebego Court
46				40	40	34	13	24	21	14	18	6	24	60%	
46	A	23			23	21	7	10	10	5	6	3	10	43%	Salon
46	B	24			24	22	18	18	17	10	0	0	18	75%	Pete Sullivan
47				32	32	27	11	9	6	4	2	2	11	34%	
47	A		52		52	47	30	34	26	22	36	21	36	69%	COR Lot WW
48				27	27	23	15	3	6	4	5	2	15	56%	
48	A		23		23	21	10	15	10	17	11	14	17	74%	COR Lot CC
48	B	32			32	29	22	20	18	22	18	16	22	69%	Rockford Library
49				5	5	4	4	3	4	2	5	3	5	100%	
49	A	49			49	44	44	45	42	37	26	39	45	92%	Luther Center
49	B	28			28	25	20	25	22	20	22	20	25	89%	
50				33	33	28	18	14	15	18	10	11	18	55%	
50	A		59		59	53	49	53	51	44	26	28	53	90%	COR Lot W
50	B	69			69	62	44	54	50	27	15	6	54	78%	
50	C	291			291	262	169	141	142	78	29	14	169	58%	Parking Garage
51				38	38	32	26	21	19	6	9	3	26	68%	
51	A	190			190	171	118	92	97	73	4	0	118	62%	One Court Plaza
58				57	57	48	42	32	37	25	15	14	42	74%	
58	A	38			38	34	38	23	30	31	20	26	38	100%	Police Station
59				33	33	28	23	24	21	24	13	12	24	73%	
59	A		329		329	296	210	203	197	157	33	5	210	64%	COF Lot B
60	A	47			47	42	12	17	14	18	1	0	18	38%	National City Bank
61				12	12	10	8	8	4	7	5	3	8	67%	
61	A	58			58	52	37	36	39	36	13	4	39	67%	Metro Center
63				10	10	9	9	9	10	8	7	5	10	100%	
63	A		843		843	759	745	663	674	592	217	159	745	88%	COR Lot S
63	B	32			32	29	31	25	24	25	14	1	31	97%	Winnebego County Admin.
Sub-Total		1,035	2,249	421	3,705	3,313	1,998	1,814	1,788	1,433	628	459	2,064	56%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

Madison Street

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
102				32	32	27	7	8	0	1	0	0	8	25%	
102	A	56			56	50	2	2	2	5	7	9	9	16%	Verdi Club
102	B	16			16	14	7	8	5	8	1	0	8	50%	Cullinan
103				43	43	37	9	12	7	9	7	5	12	28%	
103	A	10			10	9	6	6	2	4	4	4	6	60%	Chemical Products
103	B	30			30	27	19	16	13	14	6	3	19	63%	Springfield Electric
107				38	38	32	9	8	7	7	9	7	9	24%	
108				8	8	7	4	4	3	2	4	1	4	50%	
108	A	96			96	86	11	30	17	16	12	18	30	31%	Lombardi
108	B	56			56	50	10	11	12	12	6	6	12	21%	River District Catering
109				35	35	30	7	8	8	4	4	5	8	23%	
120				40	40	34	15	13	16	9	7	8	16	40%	
120	A	11			11	10	7	5	6	6	1	0	7	64%	McClean Architects
120	B	45			45	41	18	15	16	6	3	0	18	40%	Celusuede Products
121				8	8	7	1	1	1	1	0	0	1	13%	
122	A	143			143	129	10	12	9	14	42	9	42	29%	Train Depot
123				16	16	14	3	3	5	3	2	1	5	31%	
Sub-Total		463	0	220	683	604	145	162	129	121	115	76	214	31%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

St. James Neighborhood

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
100				25	25	21	6	5	8	15	11	11	15	60%	
100	A	24			24	22	4	3	1	1	1	0	4	17%	John Cook & Assoc.
100	B	8			8	7	4	3	5	1	1	0	5	63%	Hyzer & Hyzer
101				15	15	13	11	9	10	8	9	13	13	87%	
104				60	60	51	14	18	16	20	13	14	20	33%	
105				27	27	23	2	3	8	5	3	4	8	30%	
106				38	38	32	9	7	7	8	11	9	11	29%	
110				30	30	26	5	5	5	5	8	7	8	27%	
110	A			45	45	38	4	4	5	3	4	2	5	11%	St John's Parish
111				26	26	22	5	5	5	3	1	0	5	19%	
112				6	6	5	5	6	6	2	6	3	6	100%	
113	A	91			91	82	58	62	64	63	53	67	67	74%	Park Terrace
114				15	15	13	0	0	0	0	0	0	0	0%	
114	A	85			85	77	63	58	62	54	40	34	63	74%	Rock River Blood Center
114	B	85			85	77	4	3	4	3	1	0	4	5%	Amcore Bank
115				25	25	21	8	10	9	11	8	6	11	44%	
115	A	22			22	20	5	6	7	5	5	3	7	32%	Will Moist Realtor
116				18	18	15	2	2	7	6	8	8	8	44%	
117				29	29	25	2	2	2	5	5	5	5	17%	
117	A	26			26	23	7	9	5	2	1	1	9	35%	Climate Control
118				13	13	11	4	5	5	8	2	6	8	62%	
119				30	30	26	7	4	19	7	4	3	19	63%	
119	A	113			113	102	21	23	82	10	24	32	82	73%	Church
124				24	24	20	3	4	9	3	1	0	9	38%	
125				12	12	10	0	0	0	0	0	0	0	0%	
125	A	60			60	54	30	30	30	30	30	30	30	50%	Downtown Motor Sales
125	B	63			63	57	35	47	44	9	0	0	47	75%	Social Security Office
125	C	31			31	28	19	18	11	1	1	1	19	61%	Courier Printing
126				16	16	14	3	6	4	2	0	0	6	38%	
126	A	35			35	32	2	3	2	2	1	0	3	9%	Chase Bank
126	B	48			48	43	43	39	45	11	0	0	45	94%	Midland Management
127				16	16	14	3	7	5	6	1	1	7	44%	
127	A	18			18	16	2	5	4	4	0	0	5	28%	Rockford Bell Credit Union
127	B	17			17	15	15	15	15	4	0	0	15	88%	Hootman Dental
127	C	50			50	45	2	2	5	3	2	1	5	10%	Julian Funeral Home
128				30	30	26	8	8	2	0	8	7	8	27%	
128	A	90			90	81	2	0	0	2	0	0	2	2%	Sunderg funeral Home
128	B	33			33	30	10	8	9	12	13	15	15	45%	Family Counseling
129				10	10	9	1	3	6	3	5	5	6	60%	
129	A	40			40	36	12	10	10	5	3	1	12	30%	Oldhand Group
129	B	38			38	34	22	31	17	13	16	21	31	82%	Mac D
144	A	42			42	38	16	18	16	17	12	8	18	43%	Longwood Plaza
Sub-Total		1,019	0	510	1,529	1,351	478	506	576	372	312	318	666	44%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

East State Historic District

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
134				27	27	23	1	1	1	1	1	1	1	4%	
134	A	95			95	86	42	42	42	42	42	42	42	44%	Fan Kral Used Cars
135				28	28	24	5	1	5	3	4	16	16	57%	
135	A	111			111	100	61	66	56	53	26	21	66	59%	Trinity Activity Center
136				37	37	31	11	9	8	4	1	1	11	30%	
136	A	86			86	77	41	32	36	22	10	1	41	48%	Trinity Church
137				22	22	19	7	4	3	4	0	1	7	32%	
137	A		15		15	14	0	1	0	0	0	0	1	7%	COR Lot TT
137	B	31			31	28	22	23	22	10	1	1	23	74%	
137	C	90			90	81	78	80	74	43	26	16	80	89%	
138				27	27	23	20	23	23	25	17	8	25	93%	
138	A		96		96	86	34	43	43	41	18	8	43	45%	COR Lot T
138	B	24			24	22	13	9	7	8	0	0	13	54%	
138	C	8			8	7	7	6	7	5	1	0	7	88%	Precision Group
139				32	32	27	7	17	11	7	1	9	17	53%	
139	A		55		55	50	30	37	39	32	9	12	39	71%	COR Lot Q
139	B	31			31	28	27	25	22	20	7	5	27	87%	Surf Lounge
140				22	22	19	10	13	9	15	13	11	15	68%	
140	A	60			60	54	48	54	55	35	28	57	57	95%	Coyle Varlana
140	B	21			21	19	6	9	7	5	1	1	9	43%	Noah's Ark
140	C	8			8	7	3	3	3	4	4	9	9	113%	Orthopedic
141				35	35	30	18	24	19	15	15	21	24	69%	
141	A		17		17	15	11	14	8	15	13	15	15	88%	COR Lot R
141	B	63			63	57	61	61	61	61	61	61	61	97%	Volvo Fran Kral Cars
150				16	16	14	9	15	9	8	9	15	15	94%	
150	A		25		25	23	8	23	8	5	23	25	25	100%	COR Lot N
150	B	20			20	18	8	8	6	9	11	11	11	55%	Rockford City Lot
150	C	5			5	5	4	3	3	3	2	0	4	80%	Vecchil
151				5	5	4	1	1	3	2	0	3	3	60%	
151	A		70		70	63	52	52	44	40	24	46	52	74%	COR Lot D
151	B	10			10	9	9	7	8	8	10	7	10	100%	Old City Hall Building
151	C	29			29	26	8	11	14	18	9	4	18	62%	Chase Bank
152				20	20	17	7	6	7	4	3	6	7	35%	
152	A		91		91	82	71	50	64	46	37	61	71	78%	COR Lot M
152	B	80			80	72	40	46	37	29	12	13	46	58%	Office building
153				12	12	10	9	5	7	8	5	6	9	75%	
153	A	78			78	70	53	69	64	70	53	51	70	90%	Rockford Paper
153	B	26			26	23	12	15	12	8	9	7	15	58%	Wilson Electric
Sub-Total		876	369	283	1,528	1,361	854	908	847	728	506	572	1,005	66%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

East Gateway Theater District

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the e Peaks Demand	Peak Occupancy	Comments
130				9	9	8	3	4	3	8	4	1	8	89%	
130	A	6			6	5	4	4	4	4	4	1	4	67%	Concord Custom Cleaners
131				13	13	11	9	7	6	5	6	5	9	69%	
131	A	15			15	14	7	7	7	8	0	0	8	53%	PostOffice
131	B	11			11	10	1	4	1	0	1	3	4	36%	Uncle Nicks
132				36	36	31	7	8	5	6	9	10	10	28%	
132	A	34			34	31	0	0	0	0	0	0	0	0%	St. Constantine Church
132	B	29			29	26	7	7	7	4	5	5	7	24%	Apartment/ Arnold
133				19	19	16	2	3	2	3	4	5	5	26%	
133	A	18			18	16	6	4	4	6	7	23	23	128%	810 Building
133	B	13			13	12	1	1	1	2	3	2	3	23%	Apartment Building
133	C	20			20	18	2	5	2	6	4	1	6	30%	Vacant
133	D	20			20	18	20	20	20	20	20	20	20	100%	Ferry's Autobody
142				20	20	17	16	17	17	16	10	12	17	85%	
142	A	80			80	72	58	51	46	52	40	37	58	73%	Faust Landmark
143				14	14	12	8	6	4	4	4	1	8	57%	
143	A	22			22	20	20	17	14	12	15	5	20	91%	810 East Parking
145				14	14	12	0	3	1	4	2	1	4	29%	
146				25	25	21	8	6	7	8	12	14	14	56%	
146	A	16			16	14	7	9	7	11	4	3	11	69%	Quick Sign
147				17	17	14	3	3	1	4	6	4	6	35%	
147	A	52			52	47	15	17	15	24	18	4	24	46%	Save-a-Lot
148				15	15	13	9	9	9	6	8	2	9	60%	
148	A	15			15	14	6	6	4	4	4	0	6	40%	Payloans
148	B	26			26	23	17	20	18	12	16	13	20	77%	Beauty School
149				15	15	13	10	14	9	7	7	4	14	93%	
149	A		112		112	101	84	76	77	73	46	51	84	75%	COR Lot J
149	B	76			76	68	15	18	16	13	13	10	18	24%	Aztec Jewerly
149	C	44			44	40	12	15	14	14	0	0	15	34%	Loyd's
Sub-Total		497	112	197	806	716	357	361	321	336	272	237	435	54%	

TABLE D-1

EXISTING PARKING SUPPLY & OCCUPANCY DATA

WALKER PARKING CONSULTANTS

Haight Village

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the Peaks Demand	Peak Occupancy	Comments
156				25	25	21	9	8	12	7	7	6	12	48%	
156	A	29			29	26	9	7	3	6	5	10	10	34%	Methodist Church
156	B	10			10	9	6	7	2	2	0	0	7	70%	Labor Temple
157				25	25	21	1	2	2	0	0	1	2	8%	
157	A		122		122	110	68	65	67	67	9	1	68	56%	COR Church Lot
157	B	10			10	9	3	1	2	1	3	3	3	30%	Apartment
158				14	14	12	4	2	1	2	4	7	7	50%	
159				32	32	27	7	5	6	6	4	16	16	50%	
160				44	44	37	4	4	3	0	2	3	4	9%	
161				40	40	34	4	6	7	6	7	6	7	18%	
164				34	34	29	9	8	9	11	13	12	13	38%	
165				32	32	27	4	5	7	5	8	7	8	25%	
165	A	12			12	11	2	2	1	2	5	4	5	42%	Apartments
166				28	28	24	5	8	8	5	5	10	10	36%	
167				11	11	9	5	3	4	4	1	2	5	45%	
Sub-Total		61	122	285	468	407	140	133	134	124	73	88	177	38%	

Ingersol/ComEd

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	Sum of the Peaks Demand	Peak Occupancy	Comments
154				30	30	26	26	22	24	23	4	2	26	87%	
154	A	66			66	59	51	54	46	47	21	4	54	82%	Board Of Ed
154	B	86			86	77	24	24	24	2	0	0	24	28%	Board Of Ed
155				29	29	25	4	22	22	17	7	8	22	76%	
155	A	120			120	108	95	74	62	75	32	23	95	79%	Salvation Army
162				48	48	41	25	31	23	22	4	2	31	65%	Ingersoll Centennial Park
163				29	29	25	18	13	11	6	7	4	18	62%	
Sub-Total		272	0	136	408	360	243	240	212	192	75	43	270	66%	
Grand Total		**7,999**	**3,061**	**3,538**	**14,598**	**12,961**	**6,336**	**6,105**	**5,846**	**4,831**	**2,885**	**2,436**	**7,140**	**49%**	
					Percentage of Capacity		**43%**	**42%**	**40%**	**33%**	**20%**	**17%**			

TABLE D-2

DOWNTOWN PARKING STUDY

WALKER PARKING CONSULTANTS

MAY 2008

PROJECT # 31-6792.00

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Sum of the Peaks Demand	Peak Occupancy	Comments
64				19	19	16	3	10	6	8	7	10	53%	
64	A		80		80	72	10	22	38	48	43	48	60%	COR Lot I
64	B	40			40	36	2	2	2	0	0	2	5%	Federal Building
64	C	65			65	59	2	2	0	0	0	2	3%	Vacant
Sub-Total		105	80	19	204	183	17	36	46	56	50	62	30%	
67				2	2	2	0	0	0	0	0	0	0%	
67	A	58			58	52	8	8	10	10	10	10	17%	Rockford Housing
67	B	36			36	32	4	4	0	0	0	4	11%	
67	C	15			15	14	6	6	5	5	5	6	40%	Joe's Transmission
68				26	26	22	5	4	14	15	9	15	58%	
68	A	50			50	45	0	0	0	0	0	0	0%	Vacant
68	B	7			7	6	0	0	1	1	1	1	14%	Vacant
68	C	42			42	38	0	0	0	0	0	0	0%	Food Equipment
68	D	10			10	9	2	2	2	2	2	2	20%	
69				45	45	38	12	14	48	49	49	49	109%	
70				31	31	26	10	12	28	21	21	28	90%	
70	A		129		129	116	54	53	129	114	114	129	100%	COR Lot SS
70	B	20			20	18	2	2	20	27	26	27	135%	
71				13	13	11	11	11	14	15	14	15	115%	
71	A	45			45	41	2	3	1	2	2	3	7%	
71	B	48			48	43	13	14	15	17	15	17	35%	Amcore Bank
73				24	24	20	0	2	24	22	22	24	100%	
73	A	41			41	37	3	3	12	14	12	14	34%	Rockford Park Dist.
74				20	20	17	20	20	25	24	23	25	125%	
75				26	26	22	1	2	6	8	8	8	31%	
75	A	120			120	108	5	5	5	5	4	5	4%	
Sub-Total		492	129	187	808	718	158	165	359	351	337	382	47%	
31				50	50	43	4	4	4	17	21	21	42%	
31	A	34			34	31	14	14	14	15	18	18	53%	Emmanuel Church
32				24	24	20	5	5	20	22	23	23	96%	
32	A	129			129	116	55	60	70	75	80	80	62%	First Presbyterian Church
32	B	36			36	32	3	3	2	2	2	3	8%	Preforming Arts
32	C	72			72	65	33	33	32	33	33	33	46%	Olsen Plaza
32	D	35			35	32	0	0	0	0	0	0	0%	Associated Bank
32	E	32			32	29	3	3	1	2	2	3	9%	St Angel Realtor
Sub-Total		338	0	74	412	367	117	122	143	166	179	181	44%	
34				17	17	14	5	6	10	16	16	16	94%	
34	A		168		168	151	75	80	72	40	40	80	48%	COR Lot C
35				21	21	18	5	6	21	18	18	21	100%	
35	A		775		775	698	6	6	360	409	420	420	54%	COR Lot Y
36				27	27	23	4	4	27	27	25	27	100%	
36	A	26			26	23	4	4	25	25	25	25	96%	Milestone
37				31	31	26	1	1	4	22	22	22	71%	
37	A	101			101	91	4	4	8	37	37	37	37%	2nd Church
45				38	38	32	20	21	16	27	27	27	71%	
45	A	27			27	24	6	6	20	23	24	24	89%	Winnebego Court
46				40	40	34	18	18	37	40	37	40	100%	
46	A	23			23	21	5	6	6	5	5	6	26%	Salon
46	B	24			24	22	7	8	9	9	6	9	38%	Pete Sullivan
47				32	32	27	10	12	27	28	22	28	88%	
47	A		52		52	47	10	12	52	52	52	52	100%	COR Lot WW
48				27	27	23	0	0	0	2	3	3	11%	
48	A		23		23	21	10	10	2	15	0	15	65%	COR Lot CC
48	B	32			32	29	12	12	4	25	25	25	78%	Rockford Library
49				5	5	4	0	0	0	5	3	5	100%	
49	A	49			49	44	42	45	39	47	45	47	96%	Luther Center
49	B	28			28	25	15	18	18	24	20	24	86%	

Continued on next page

TABLE D-2

DOWNTOWN PARKING STUDY

MAY 2008

PROJECT # 31-6792.00

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Parking Occupancy Counts 5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Sum of the Peaks Demand	Peak Occupancy	Comments
50				33	33	28	20	22	33	20	31	33	100%	
50	A		59		59	53	38	40	58	58	58	58	98%	COR Lot W
50	B	69			69	62	0	0	0	0	0	0	0%	Private-gated surface lot
50	C	291			291	262	22	26	73	78	79	79	27%	Parking Garage
51				38	38	32	15	17	19	36	28	36	95%	
51	A	190			190	171	4	4	3	4	4	4	2%	One Court Plaza
58				57	57	48	13	19	19	23	21	23	40%	
58	A	38			38	34	28	28	23	21	22	28	74%	Police Station
59				33	33	28	15	25	36	35	33	36	109%	
59	A		329		329	296	54	82	193	271	252	271	82%	COF Lot B
60	A	47			47	42	2	2	2	2	2	2	4%	National City Bank
61				12	12	10	10	12	12	13	10	13	108%	
61	A	58			58	52	20	32	44	67	67	67	116%	Metro Center
63				10	10	9	5	10	10	10	9	10	100%	
63	A		843		843	759	325	362	701	745	739	745	88%	COR Lot S
63	B	32			32	29	5	2	2	5	15	15	47%	Winnebego County Admin.
Sub-Total		1,035	2,249	421	3,705	3,313	835	962	1,985	2,284	2,242	2,373	64%	
134				27	27	23	5	5	1	1	1	5	19%	
134	A	95			95	86	31	16	9	0	0	31	33%	Fan Kral Used Cars
135				28	28	24	5	1	3	0	0	5	18%	
135	A	111			111	100	92	79	22	20	19	92	83%	Trinity Activity Center
136				37	37	31	24	20	15	15	16	24	65%	
136	A	86			86	77	26	21	16	20	12	26	30%	Trinity Church
137				22	22	19	11	11	10	9	3	11	50%	
137	A		15		15	14	12	10	5	7	0	12	80%	COR Lot TT
137	B	31			31	28	20	14	14	9	9	20	65%	
137	C	90			90	81	72	54	26	20	21	72	80%	
138				27	27	23	20	7	9	5	5	20	74%	
138	A		96		96	86	53	38	30	33	23	53	55%	COR Lot T
138	B	24			24	22	10	10	15	4	0	15	63%	
138	C	8			8	7	4	2	4	4	2	4	50%	Precision Group
139				32	32	27	25	20	20	11	8	25	78%	
139	A		55		55	50	47	43	40	29	28	47	85%	COR Lot Q
139	B	31			31	28	20	18	10	3	1	20	65%	Surf Lounge
140				22	22	19	10	7	11	7	4	11	50%	
140	A	60			60	54	29	33	11	9	9	33	55%	Coyle Varlana
140	B	21			21	19	6	6	4	4	2	6	29%	Noah's Ark
140	C	8			8	7	3	3	1	2	1	3	38%	Orthopedic
141				35	35	30	16	10	11	12	9	16	46%	
141	A		17		17	15	7	4	7	4	2	7	41%	COR Lot R
141	B	63			63	57	11	9	2	0	5	11	17%	Volvo Fran Kral Cars
150				16	16	14	12	15	15	6	3	15	94%	
150	A		25		25	23	19	9	11	10	6	19	76%	COR Lot N
150	B	20			20	18	19	9	9	7	7	19	95%	Rockford City Lot
150	C	5			5	5	2	2	1	0	0	2	40%	Vecchil
151				5	5	4	2	0	0	1	0	2	40%	
151	A		70		70	63	62	40	17	15	11	62	89%	COR Lot D
151	B	10			10	9	6	6	7	0	0	7	70%	Old City Hall Building
151	C	29			29	26	20	22	18	18	15	22	76%	Chase Bank
152				20	20	17	9	2	7	7	5	9	45%	
152	A		91		91	82	70	50	52	46	30	70	77%	COR Lot M
152	B	80			80	72	60	41	28	23	26	60	75%	Office building
153				12	12	10	9	9	3	5	3	9	75%	
153	A	78			78	70	63	60	48	40	30	63	81%	Rockford Paper
153	B	26			26	23	17	14	10	10	7	17	65%	Wilson Electric
Sub-Total		876	369	283	1,528	1,361	929	720	522	416	323	945	62%	
					Percentage of Capacity		61%	47%	34%	27%	21%			
Grand Total		2,846	2,827	984	6,657	5,942	2,056	2,005	3,055	3,273	3,131	3,943	59%	
					Percentage of Capacity		31%	30%	46%	49%	47%			

Source: Walker Parking Consultants, February 29, 2008

APPENDIX E

FUTURE STATISTICAL DATA

TABLE E-1

FUTURE DEVELOPMENTS – SCENARIO ONE

WALKER PARKING CONSULTANTS

Future Building Developments Building/Activity Center	Block Number	Building Square Feet	Land Use Assumptions	Demand Ratio (1)	Parking Demand
Westside:					
Security Building/Main Street Mall	48	21,660	Office	3.33	72
227 North Wyman Street					
Times Theatre/Main Street Mall	46	12,000	Office	3.33	40
226 North Main Street		12,000	Retail	4.00	48
Allen Chapel/West Industrial	64	5,000	Retail	4.00	20
206 South Winnebago Street					
319 Jefferson/Main Street Mall	46	11,380	Office	3.33	38
319 West Jefferson Street		11,380	Retail	4.00	46
Chick Hotel/Main Street Mall	59	13,728	Office	3.33	46
121 - 123 South Main Street		6,864	Retail	4.00	27
C.F. Henry Building/Main Street Mall	59	10,500	Office	3.33	35
213 West State Street					
315 South Court/Federal Courthouse	68	20,100	Office	3.33	67
315 South Court Street					
TAPCO-Burson Building/Davis Park	80	100,000	Office	3.33	333
222 Cedar Street		54,546	Retail	4.00	218
Hanley Furniture/Davis Park	70	12,500	Retail	4.00	50
301 South Main Street		37,500	Residential	1.50	38
Westside Total		329,157			1,077
Eastside:					
Rockford Brewery/Madison Street	109	24,549	Office	3.33	82
200 East Prairie Street		30,000	Residential	1.50	30
		24,549	Retail	4.00	98
Watch Factory/Ingersol/ComEd	154	5,995	Residential	1.50	6
325 South Madison Street					
Midway Theater/East Gateway Theater District	149	6,000	Residential	1.50	6
721 East State Street		1,500	Theater (seats)	0.25	375
Eastside Total		91,093			597
Study Area Total Available S.F.		420,250	Estimated Demand		1,674

(1) Per City of Rockford Parking Requirements:

Retail: 1 space per 250 square feet (4 spaces per 1,000 square feet)
Office: 1 space per 300 square feet (3.33 spaces per 1,000 square feet)
Residential: 1.5 spaces per unit (Units based on 1,500 s.f. per unit)
Theater: 1 space for each 4 seats (0.25 spaces per seat)

TABLE E-2

FUTURE DEVELOPMENTS – SCENARIO TWO

WALKER PARKING CONSULTANTS

Future Building Developments ~ Scenario 2 Building/Development	Block Number	Building Square Feet	Land Use Assumptions	Demand Ratio (1)	Parking Demand
Westside:					
303 North Main Street	35	123,000	Office	3.33	410
The Rock Box	36		Nightclub		
Currently Satellite Jail	45	50,000	Commercial	3.33	167
Elks Club	47				
Banquet / 300 seats @ 34.15 sf per seat (2)		10,245	Banquet	13.33	137
Restaurant / 100 seats @ 34.15 sf per seat (2)		3,415	Restaurant	13.33	46
Security Building/Main Street Mall	48	21,660	Office	3.33	72
227 North Wyman Street					
Times Theatre/Bliss Building	46	20	Residential	1.50	30
		8,000	Retail	4.00	32
New Federal Courthouse	69/74	140,000	Office	3.33	466
William Brown	61	100,000	Office Residential	3.33	333
New American Theater	50	300	Theater (seats)	0.25	75
Allen Chapel/West Industrial	64	5,000	Retail	4.00	20
206 South Winnebago Street					
319 Jefferson/Main Street Mall	46	11,380	Office	3.33	38
319 West Jefferson Street		11,380	Retail	4.00	46
Chick Hotel/Main Street Mall	59	13,728	Office	3.33	46
121 - 123 South Main Street		6,864	Retail	4.00	27
		150	Hotel (rooms)	1.00	150
C.F. Henry Building/Main Street Mall	59	10,500	Office	3.33	35
213 West State Street					
315 South Court/Federal Courthouse	68	20,100	Office	3.33	67
315 South Court Street					
TAPCO Building	72	40	Residential	1.50	60
North(2,500) & South (10,000) Stage/Davis Park		12,500	Event Capacity	0.25	3,125
Amrock Building	80	60	Residential	1.50	90
		10,000	Retail	4.00	40
Hanley Furniture/Davis Park	70	12,500	Retail	4.00	50
301 South Main Street		37,500	Residential	1.50	38
Westside Total		608,341			5,598

(1) Per City of Rockford Parking Requirements:

Retail: 1 space per 250 square feet (4 spaces per 1,000 square feet)
Office: 1 space per 300 square feet (3.33 spaces per 1,000 square feet)
Residential: 1.5 spaces per unit (Units based on 1,500 s.f. per unit)
Theater: 1 space for each 4 seats (0.25 spaces per seat)

(2) Restaurant/Banquet: 34.15 s.f. per seat

TABLE E-2

FUTURE DEVELOPMENTS – SCENARIO TWO

WALKER PARKING CONSULTANTS

Future Building Developments ~ Scenario 2 Building/Development	Block Number	Building Square Feet	Land Use Assumptions	Demand Ratio (1)	Parking Demand
Eastside:					
Rockford Brewery/Madison Street	108	8,000	Office	3.33	27
200 East Prairie Street		28,000	Residential	1.50	28
		36,000	Retail	4.00	144
200 Block of East State Street	138	5,000	Office	3.33	17
214 East State Street	139	3,000	Retail	4.00	12
		6	Residential	1.50	9
300 Block of East State	140	20,000	Office	3.33	67
		3,000	Retail	4.00	12
325 East State Development		12	Residential	1.50	18
		6,000	Retail	4.00	24
408 - 414 East State Street	141	10	Residential	1.50	15
		7,000	Restaurant	13.33	93
Watch Factory	162	32	Residential	1.50	48
Ingersoll Redevelopment	154	40	Residential	1.50	60
		50,000	Commercial	3.33	167
Indoor White Water Park		60,000		0.00	0
100 Block of South Madison Street	152	4,000	Office	3.33	13
Midway Theater/East Gateway Theater District	149	18	Residential	1.50	27
721 East State Street					
Eastside Total		230,118			780
Study Area Total Available S.F.		838,459	Estimated Demand		6,378

(1) Per City of Rockford Parking Requirements:

Retail: 1 space per 250 square feet (4 spaces per 1,000 square feet)
Office: 1 space per 300 square feet (3.33 spaces per 1,000 square feet)
Residential: 1.5 spaces per unit (Units based on 1,500 s.f. per unit)
Theater: 1 space for each 4 seats (0.25 spaces per seat)

(2) Restaurant/Banquet: 34.15 s.f. per seat

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

Coronado-Haskell Neighborhood

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street Private Surplus/(Deficit)	Off-Street Public Surplus/(Deficit)	On-Street Public Surplus/(Deficit)
1				12	12	10	2	17%		12	2	17%			8
2				14	14	12	6	43%		14	6	43%			6
3				12	12	10	6	50%		12	6	50%			4
4				18	18	15	2	11%							13
4	A	35			35	32	35	100%		53	37	70%	(4)		
5				34	34	29	14	41%							15
6				31	31	26	15	48%							11
7				18	18	15	8	44%							7
13				42	42	36	17	40%							19
13	A				0	0	0	0%	Apartments	42	17	40%			
14				47	47	40	11	23%							29
15				46	46	39	7	15%							32
16				40	40	34	7	18%							27
17				22	22	19	3	14%							16
17	A	72			72	65	41	57%	Country Kitchen INC	94	44	47%	24		
18				28	28	24	5	18%							19
18	A	78			78	70	18	23%	School	106	23	22%	52		
19				40	40	34	4	10%							30
20				38	38	32	8	21%							24
21				32	32	27	5	16%							22
22				35	35	30	5	14%							25
23				26	26	22	4	15%							18
24				40	40	34	5	13%							29
25				18	18	15	6	33%							9
26				22	22	19	4	18%							15
27				30	30	26	3	10%							23
28				24	24	20	4	17%							16
28	A	70			70	63	9	13%	Pre School House of Grace	94	13	14%	54		
29				34	34	29	5	15%							24
Sub-Total		**255**	**0**	**703**	**958**	**827**	**259**	**27%**					**126**	**0**	**442**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

West Industrial

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street Private Surplus/(Deficit)	Off-Street Public Surplus/(Deficit)	On-Street Public Surplus/(Deficit)
38				18	18	15	8	44%							7
38	A	15			15	14	1	7%					13		
38	B	54			54	49	0	0%					49		
38	C	21			21	19	11	52%	320 Strope				8		
38	D	50			50	45	25	50%	Used Car Lot	158	45	28%	20		
39				34	34	29	7	21%							22
39	A	115			115	104	27	23%	Chrysler	149	34	23%	77		
40				32	32	27	8	25%							19
40	A	50			50	45	10	20%	Bill Doron				35		
40	B			10	10	9	3	30%	Pay Ins. Lic.	92	21	23%			6
41				20	20	17	3	15%							14
42				28	28	24	6	21%							18
42	A	5			5	5	2	40%	Mandrod Electric	33	8	24%	3		
43				26	26	22	10	38%	Construction on Block						12
43	A	32			32	29	36	113%	Talecris				(7)		
43	B	35			35	32	35	100%	Chrysler	93	81	87%	(4)		
44				37	37	31	11	30%							20
44	A	125			125	113	57	46%	COR Lot A				56		
44	B	33			33	30	27	82%	Firestone				3		
44	C	26			26	23	6	23%	RMTD	221	101	46%	17		
52				36	36	31	24	67%							7
53				23	23	20	15	65%							5
53	A	18			18	16	17	94%	Mass Transit				(1)		
53	B	30			30	27	10	33%	Vacant				17		
53	C	21			21	19	11	52%	Vacant	92	53	58%	8		
54				31	31	26	12	39%							14
54	A	27			27	24	26	96%	Womens Care Center				(2)		
54	B	12			12	11	6	50%	Jay Tronics	70	44	63%	5		
55				21	21	18	1	5%							17
55	A	30			30	27	10	33%	Vacant	51	11	22%	17		
56				27	27	23	14	52%							9
56	A	342			342	308	310	91%	Justice Center				(2)		
56	B	38			38	34	26	68%	Rockford Housing	407	350	86%	8		
64							**20**		**Allen Chapel Redevelopment**				(20)		
64				19	19	16	12	63%							4
64	A		80		80	72	45	56%	COR Lot I					27	
64	B	40			40	36	38	95%	Federal Building				(2)		
64	C	65			65	59	65	100%	Vacant	204	180	88%	(7)		
Sub-Total		**1,184**	**80**	**362**	**1,626**	**1,445**	**955**	**59%**					**290**	**27**	**174**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

Federal-Courthouse/Davis Park

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street: Private Surplus/(Deficit)	Off-Street: Public Surplus/(Deficit)	On-Street: Public Surplus/(Deficit)
66				31	31	26	0	0%							26
66	A	19			19	17	15	79%	Excelsior	50	15	30%	2		
67				2	2	2	0	0%							2
67	A	58			58	52	28	48%	Rockford Housing				24		
67	B	36			36	32	15	42%					17		
67	C	15			15	14	10	67%	Joe's Transmission	111	53	48%	4		
68							**67**		**315 South Court Redevelopment**				(67)		
68				26	26	22	15	58%							7
68	A	50			50	45	37	74%	Vacant				8		
68	B	7			7	6	0	0%	Vacant				6		
68	C	42			42	38	8	19%	Food Equipment				30		
68	D	10			10	9	5	50%		135	132	98%	4		
69							**466**		**New Federal Courthouse**				(466)		
69				45	45	38	9	20%		45	475	1056%			29
70							**88**		**Hanley Furniture Building Redevelopment**				(88)		
70				31	31	26	10	32%							16
70	A		129		129	116	76	59%	COR Lot SS					40	
70	B	20			20	18	20	100%		180	194	108%	(2)		
71				13	13	11	7	54%							4
71	A	45			45	41	10	22%					31		
71	B	48			48	43	26	54%	Amcore Bank	106	43	41%	17		
72							**60**		**TAPCO Building Redevelopment**				(60)		
72							**3,125**		**Davis Park Events**				(3,125)		
72				8	8	7	0	0%							7
72	A	38			38	34	0	0%	Vacant	46	3,185	6924%	34		
73				24	24	20	8	33%							12
73	A	41			41	37	36	88%	Rockford Park Dist.	65	44	68%	1		
74				20	20	17	1	5%							16
75				26	26	22	12	46%							10
75	A	120			120	108	24	20%		146	36	25%	84		
76				22	22	19	5	23%							14
77				24	24	20	2	8%							18
78					0	0									
79					0	0									
80					0	0	**130**		**Amrock Building Redevelopment**				(130)		
Sub-Total		**549**	**129**	**272**	**950**	**841**	**4,315**	**454%**					**(3,676)**	**40**	**162**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

Riverfront Museum

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street: Private Surplus/(Deficit)	Off-Street: Public Surplus/(Deficit)	On-Street: Public Surplus/(Deficit)
8				0	0	0	0	0%							
8	A	46			46	41	30	65%	Holmserom Kennedy				11		
8	B	80			80	72	34	43%					38		
8	C	40			40	36	18	45%	US Bank	166	82	49%	18		
9				8	8	7	8	100%							(1)
9	A	29			29	26	20	69%	Arnold Lundgren				6		
9	B	25			25	23	7	28%	Affilliated				16		
9	C	40			40	36	3	8%	Construction				33		
9	D	13			13	12	11	85%	Child Care				1		
9	E	10			10	9	2	20%	Church				7		
9	F	5			5	5	3	60%	Adams Laflower				2		
9	G	7			7	6	4	57%	Attorney				2		
9	H	9			9	8	0	0%	Spirts	146	58	40%	8		
10				0	0	0	0	0%							
10	A	349			349	314	57	16%	Museum				257		
10	B	33			33	30	16	48%	Museum				14		
10	C	92			92	83	69	75%	Apartmant Towers	474	142	30%	14		
11				14	14	12	11	79%							1
11	A	15			15	14	8	53%	Law Office				6		
11	B	8			8	7	3	38%	Brital Shop				4		
11	C	21			21	19	13	62%	Red Cross				6		
11	D	67			67	60	49	73%	Stepping Stone				11		
11	E	55			55	50	28	51%	Easter Seals				22		
11	F	77			77	69	31	40%	Associated Bank				38		
11	G	11			11	10	2	18%	Office Building	268	145	54%	8		
12				18	18	15	18	100%							(3)
12	A	46			46	41	44	96%	Rockford Business College				(3)		
12	B	17			17	15	12	71%	Rockford MELD				3		
12	C	36			36	32	13	36%	Heritage Credit Unoin				19		
12	D	30			30	27	11	37%	Gesmer Law Office				16		
12	E	31			31	28	23	74%	Human Service Dept.				5		
12	F	38			38	34	11	29%	Harbor House	216	132	61%	23		
30				35	35	30	1	3%							29
30	A	132			132	119	28	21%	City Plaza				91		
30	B	7			7	6	6	86%	Saavedra Archietels				0		
30	C	38			38	34	14	37%	Law Office Shrivel Oniel	212	49	23%	20		
31				50	50	43	3	6%							40
31	A	34			34	31	16	47%	Emmauel Church	84	19	23%	15		
32				24	24	20	13	54%							7
32	A	129			129	116	2	2%	First Prespert Church				114		
32	B	36			36	32	10	28%	Preforming Arts				22		
32	C	72			72	65	37	51%	Olsen Plaza				28		
32	D	35			35	32	11	31%	Associated Bank				21		
32	E	32			32	29	5	16%	St Angel Realitor	328	78	24%	24		
33				0	0	0	0	0%							0
33	A	43			43	39	31	72%		43	31	72%	8		
Sub-Total		**1,788**	**0**	**149**	**1,937**	**1,736**	**736**	**38%**					**927**	**0**	**73**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

Main Street Mall

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street: Private Surplus/(Deficit)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street: Public Surplus/(Deficit)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) On-Street: Public Surplus/(Deficit)
34				17	17	14	1	6%							13
34	A		168		168	151	34	20%	COR Lot C	185	35	19%		117	
35				21	21	18	5	24%							13
35	A		775		775	698	100	13%	COR Lot Y	796	515	65%		598	
35							**410**		**303 N. Main Development**				(410)		
36				27	27	23	12	44%							11
36	A	26			26	23	7	27%	Milestone	53	19	36%	16		
37				31	31	26	3	10%							23
37	A	101			101	91	50	50%	2nd Church	132	53	40%	41		
45							**167**		**Current Satellite Jail**				(167)		
45				38	38	32	21	55%							11
45	A	27			27	24	0	0%	Winnebego Court	65	188	288%	24		
46							**62**		**Times Theater/Bliss Building Redevelopment**				(62)		
46							**83**		**319 Jefferson Redevelopment**				(83)		
46				40	40	34	24	60%							10
46	A	23			23	21	10	43%	Salon				11		
46	B	24			24	22	18	75%	Pete Suilivan	87	197	226%	4		
47							**182**		**Elks Club**				(182)		
47				32	32	27	11	34%							16
47	A		52		52	47	36	69%	COR Lot WW	84	229	273%		11	
48							**72**		**Security Building Redevelopment**				(72)		
48				27	27	23	15	56%							8
48	A		**0**		0	0	17	#DIV/0!	**Lot CC/lost 23 spaces to development**					(17)	
48	B	32			32	29	22	69%	Rockford Library	59	126	214%	7		
49				5	5	4	5	100%							(1)
49	A	49			49	44	45	92%	Luther Center				(1)		
49	B	28			28	25	25	89%		82	75	91%	0		
50							**75**		**New American Theater**				(75)		
50				33	33	28	18	55%							10
50	A		59		59	53	53	90%	COR Lot W					0	
50	B	69			69	62	54	78%					8		
50	C	291			291	262	169	58%	Parking Garage	452	294	65%	93		
51				38	38	32	26	68%							6
51	A	190			190	171	118	62%	One Court Plaza	228	144	63%	53		
58				57	57	48	42	74%							6
58	A	38			38	34	38	100%	Police Station	95	80	84%	(4)		
59							**223**		**Chick Hotel**				(223)		
59							**35**		**C.F. Henry Building**				(35)		
59				33	33	28	24	73%							4
59	A		329		329	296	210	64%	COF Lot B	362	492	136%		86	
60	A	47			47	42	18	38%	National City Bank				24		
61							**333**		**William Brown**				(333)		
61				12	12	10	8	67%							2
61	A	58			58	52	39	67%	Merto Center	70	380	543%	13		
63				10	10	9	10	100%							(2)
63	A		843		843	759	745	88%	COR Lot S					14	
63	B	32			32	29	31	97%	Winnebego County Admin.	885	786	89%	(2)		
Sub-Total		**1,035**	**2,226**	**421**	**3,682**	**3,293**	**3,706**	**101%**					**(1,354)**	**808**	**133**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

Madison Street

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street Private Surplus/(Deficit)	Off-Street Public Surplus/(Deficit)	On-Street Public Surplus/(Deficit)
102				32	32	27	8	25%							19
102	A	56			56	50	9	16%	Verdi Club				41		
102	B	16			16	14	8	50%	Cullinan	104	25	24%	6		
103				43	43	37	12	28%							25
103	A	10			10	9	6	60%	Chemical Products				3		
103	B	30			30	27	19	63%	Springfield Electric	83	37	45%	8		
107				38	38	32	9	24%							23
108				8	8	7	4	50%							3
108	A	96			96	86	30	31%	Lombardi				56		
108	B	56			56	50	12	21%	River District Catering	160	245	153%	38		
108							**199**		**Rockford Brewery Redevelopment**				(199)		
109				35	35	30	8	23%		35	8	23%			22
120				40	40	34	16	40%							18
120	A	11			11	10	7	64%	McClean Arcitects				3		
120	B	45			45	41	18	40%	Celusuede Products	96	41	43%	23		
121				8	8	7	1	13%							6
122	A	143			143	129	42	29%	Train Depot				87		
123				16	16	14	5	31%							9
Sub-Total		**463**	**0**	**220**	**683**	**604**	**413**	**60%**					**67**	**0**	**124**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

St. James Neighborhood

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street: Private Surplus/(Deficit)	Off-Street: Public Surplus/(Deficit)	On-Street: Public Surplus/(Deficit)
100				25	25	21	15	60%							6
100	A	24			24	22	4	17%	John Cook & Assoc.				18		
100	B	8			8	7	5	63%	Hyzer & Hyzer	57	24	42%	2		
101				15	15	13	13	87%							(0)
104				60	60	51	20	33%							31
105				27	27	23	8	30%							15
106				38	38	32	11	29%							21
110				30	30	26	8	27%							18
110	A			45	45	38	5	11%	St John's Parrish	75	13	17%			33
111				26	26	22	5	19%							17
112				6	6	5	6	100%							(1)
113	A	91			91	82	67	74%	Park Terrace				15		
114				15	15	13	0	0%							13
114	A	85			85	77	63	74%	Rock River Blood Center				14		
114	B	85			85	77	4	5%	Amcore Bank	185	67	36%	73		
115				25	25	21	11	44%							10
115	A	22			22	20	7	32%	Will Moist Realitor	47	18	38%	13		
116				18	18	15	8	44%							7
117				29	29	25	5	17%							20
117	A	26			26	23	9	35%	Climate Control	55	14	25%	14		
118				13	13	11	8	62%							3
119				30	30	26	19	63%							7
119	A	113			113	102	82	73%	Church	143	101	71%	20		
124				24	24	20	9	38%							11
125				12	12	10	0	0%							10
125	A	60			60	54	30	50%	Downtown Motor Sales				24		
125	B	63			63	57	47	75%	Social Security Office				10		
125	C	31			31	28	19	61%	Courier Printing	166	96	58%	9		
126				16	16	14	6	38%							8
126	A	35			35	32	3	9%	Chase Bank				29		
126	B	48			48	43	45	94%	Midland Management	83	48	58%	(2)		
127				16	16	14	7	44%							7
127	A	18			18	16	5	28%	Rockford Bell Credit Union				11		
127	B	17			17	15	15	88%	Hootman Dental				0		
127	C	50			50	45	5	10%	Julian Funeral Home	101	32	32%	40		
128				30	30	26	8	27%							18
128	A	90			90	81	2	2%	Sunderg funeral Home				79		
128	B	33			33	30	15	45%	Family Counsieling	153	25	16%	15		
129				10	10	9	6	60%							3
129	A	40			40	36	12	30%	Oldhand Group				24		
129	B	38			38	34	31	82%	Mac D	88	49	56%	3		
144	A	42			42	38	18	43%	Longwood Plaza				20		
Sub-Total		**1,019**	**0**	**510**	**1,529**	**1,351**	**666**	**44%**					**429**	**0**	**256**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

East State Historic District

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street Private Surplus/(Deficit)	Off-Street Public Surplus/(Deficit)	On-Street Public Surplus/(Deficit)
134				27	27	23	1	4%							22
134	A	95			95	86	42	44%	Fan Kral Used Cars	122	43	35%	44		
135				28	28	24	16	57%							8
135	A	111			111	100	66	59%	Trinity Activity Center	139	82	59%	34		
136				37	37	31	11	30%							20
136	A	86			86	77	41	48%	Trinity Church	123	52	42%	36		
137				22	22	19	7	32%							12
137	A		15		15	14	1	7%	COR Lot TT					13	
137	B	31			31	28	23	74%					5		
137	C	90			90	81	80	89%		158	111	70%	1		
138							**17**		**Office Building**				(17)		
138				27	27	23	25	93%							(2)
138	A		96		96	86	43	45%	COR Lot T					43	
138	B	24			24	22	13	54%					9		
138	C	8			8	7	7	88%	Precision Group	155	105	68%	0		
139							**21**		**214 E. State Street**				(21)		
139				32	32	27	17	53%							10
139	A		**0**		0	0	39	#DIV/0!	**Lot Q/Lost 55 spaces to development**					(39)	
139	B	31			31	28	27	87%	Surf Lounge	63	104	165%	1		
140		**150**			**150**	**135**			**Proposed p/s**				135		
140							**121**		**300 Block E State St.**				(121)		
140				22	22	19	15	68%							4
140	A	60			60	54	57	95%	Coyle Varlana				(3)		
140	B	21			21	19	9	43%	Noah's Ark				10		
140	C	8			8	7	9	113%	Orthopedic	261	211	81%	(2)		
141							**108**		**408 - 414 East State Street**				(108)		
141				35	35	30	24	69%							6
141	A		17		17	15	15	88%	COR Lot R					0	
141	B	63			63	57	61	97%	Volvo Fran Kral Cars	115	208	181%	(4)		
150				16	16	14	15	94%							(1)
150	A		25		25	23	25	100%	COR Lot N					(3)	
150	B	20			20	18	11	55%	Rockford City Lot				7		
150	C	5			5	5	4	80%	Vecchil	66	55	83%	1		
151				5	5	4	3	60%							1
151	A		70		70	63	52	74%	COR Lot D					11	
151	B	10			10	9	10	100%	Old City Hall Building				(1)		
151	C	29			29	26	18	62%	Chase Bank	109	80	73%	8		
152							**13**		**100 Block Main Street**				(13)		
152				20	20	17	7	35%							10
152	A		91		91	82	71	78%	COR Lot M					11	
152	B	80			80	72	46	58%	Office building	191	137	72%	26		
153				12	12	10	9	75%							1
153	A	78			78	70	70	90%	Rockford Paper				0		
153	B	26			26	23	15	58%	Wilson Electric	116	94	81%	8		
Sub-Total		**1,026**	**314**	**283**	**1,623**	**1,447**	**1,285**	**79%**					**34**	**37**	**91**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

East Gateway Theater District

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street: Private Surplus/(Deficit)	Off-Street: Public Surplus/(Deficit)	On-Street: Public Surplus/(Deficit)
130				9	9	8	8	89%							(0)
130	A	6			6	5	4	67%	Concord Custom Cleaners	15	12	80%	1		
131				13	13	11	9	69%							2
131	A	15			15	14	8	53%	PostOffice				6		
131	B	11			11	10	4	36%	Uncle Nicks	39	21	54%	6		
132				36	36	31	10	28%							21
132	A	34			34	31	0	0%	St. Constantine Church				31		
132	B	29			29	26	7	24%	Apartment/ Arnold	99	17	17%	19		
133				19	19	16	5	26%							11
133	A	18			18	16	23	128%	810 Building				(7)		
133	B	13			13	12	3	23%	Apartment Building				9		
133	C	20			20	18	6	30%	Vacant				12		
133	D	20			20	18	20	100%	Ferry's Autobody	90	57	63%	(2)		
142				20	20	17	17	85%							0
142	A	80			80	72	58	73%	Faust Landmark	100	75	0.75	14		
143				14	14	12	8	57%							4
143	A	22			22	20	20	91%	810 East Parking	36	28	78%	(0)		
145				14	14	12	4	29%							8
146				25	25	21	14	56%							7
146	A	16			16	14	11	69%	Quick Sign	41	25	61%	3		
147				17	17	14	6	35%							8
147	A	52			52	47	24	46%	Save-a-Lot	69	30	43%	23		
148				15	15	13	9	60%							4
148	A	15			15	14	6	40%	Payloans				8		
148	B	26			26	23	20	77%	Beauty School	56	35	63%	3		
149							**27**		**Midway Theater Redevelopment**				(27)		
149				15	15	13	14	93%							(1)
149	A		112		112	101	84	75%	COR Lot J					17	
149	B	76			76	68	18	24%	Aztec Jewerly				50		
149	C	44			44	40	15	34%	Loyd's	247	158	64%	25		
Sub-Total		**497**	**112**	**197**	**806**	**716**	**462**	**57%**					**173**	**17**	**63**

TABLE E-3

FUTURE PARKING SUPPLY/DEMAND – SCENARIO TWO

WALKER PARKING CONSULTANTS

Haight Village

Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street Private Surplus/(Deficit)	Off-Street Public Surplus/(Deficit)	On-Street Public Surplus/(Deficit)
156				25	25	21	12	48%							9
156	A	29			29	26	10	34%	Methodist Church				16		
156	B	10			10	9	7	70%	Labor Temple	64	29	45%	2		
157				25	25	21	2	8%							19
157	A		122		122	110	68	56%	COR Church Lot					42	
157	B	10			10	9	3	30%	Apartment	157	73	46%	6		
158				14	14	12	7	50%							5
159				32	32	27	16	50%							11
160				44	44	37	4	9%							33
161				40	40	34	7	18%							27
164				34	34	29	13	38%							16
165				32	32	27	8	25%							19
165	A	12			12	11	5	42%	Apartments	44	13	30%	6		
166				28	28	24	10	36%							14
167				11	11	9	5	45%							4
Sub-Total		**61**	**122**	**285**	**468**	**407**	**177**	**38%**					**30**	**42**	**158**

Ingersol/ComEd

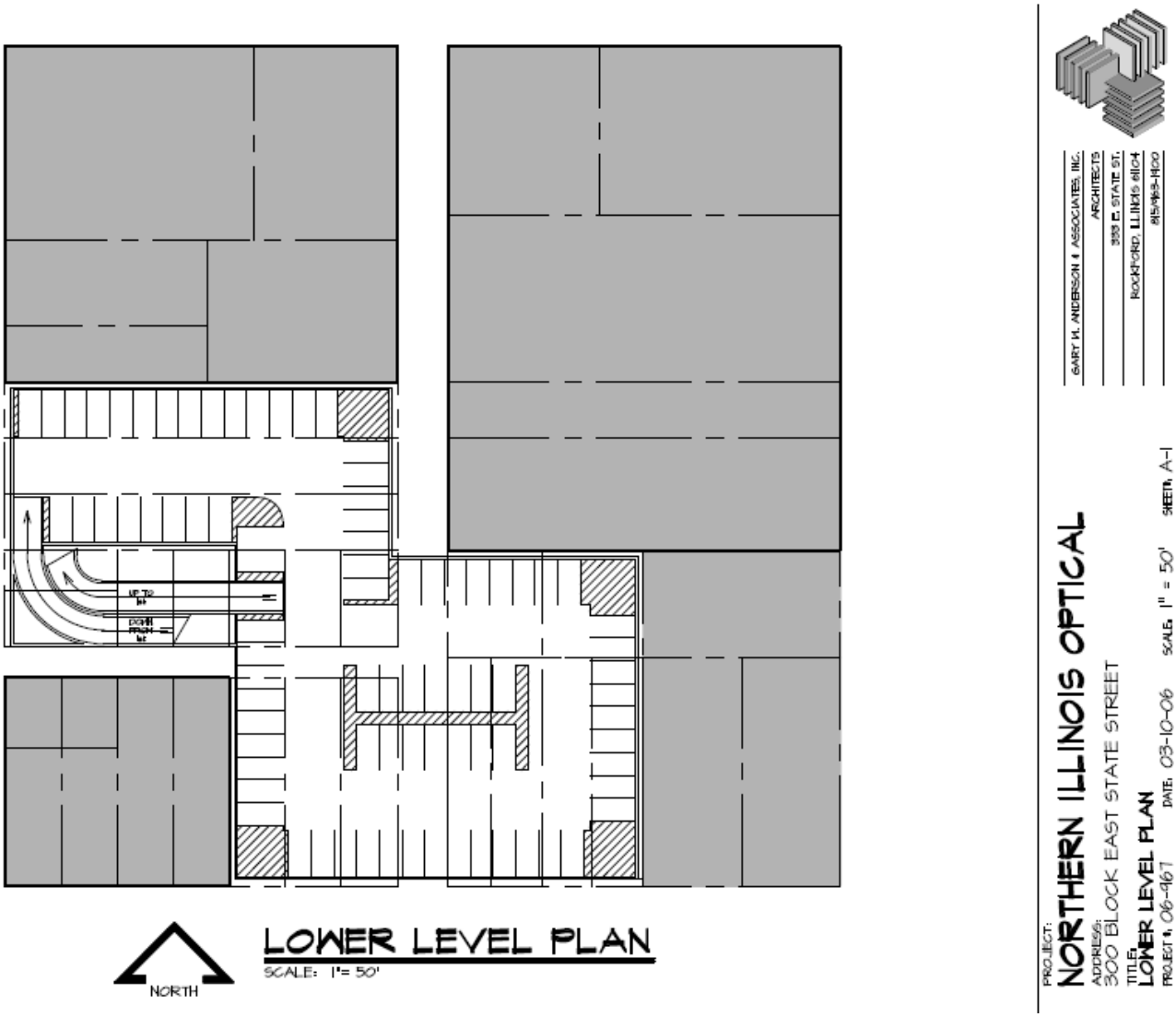
Block #	Facility ID#	0.90 Private	0.90 Public	0.85 On-Street	Capacity	Effective Supply	Projected Future Parking Demand	Peak Occupancy	Comments	Combined Capacity(1)	Combined Peak Demand(1)	Combined Occupancy(1)	Parking Adequacy (Effective Supply less the Sum of the Peaks Demand) Off-Street Private Surplus/(Deficit)	Off-Street Public Surplus/(Deficit)	On-Street Public Surplus/(Deficit)
154							**227**		**Ingersoll Redevelopment**				(227)		
154				30	30	26	26	87%							(1)
154	A	66			66	59	54	82%	Board Of Ed				5		
154	B	86			86	77	24	28%	Board Of Ed	182	331	182%	53		
155				29	29	25	22	76%							3
155	A	120			120	108	95	79%	Salvation Army	149	117	79%	13		
162							**48**		**Watch Factory Redevelopment**				(48)		
162				48	48	41	31	65%	Ingersoll Centennial Park	48	79				10
163				29	29	25	18	62%							7
Sub-Total		**272**	**0**	**136**	**408**	**360**	**545**	**133%**					**(203)**	**0**	**19**
Grand Total		**8,149**	**2,983**	**3,538**	**14,670**	**13,026**	**13,518**	**92%**					**(3,156)**	**971**	**1,693**

APPENDIX F

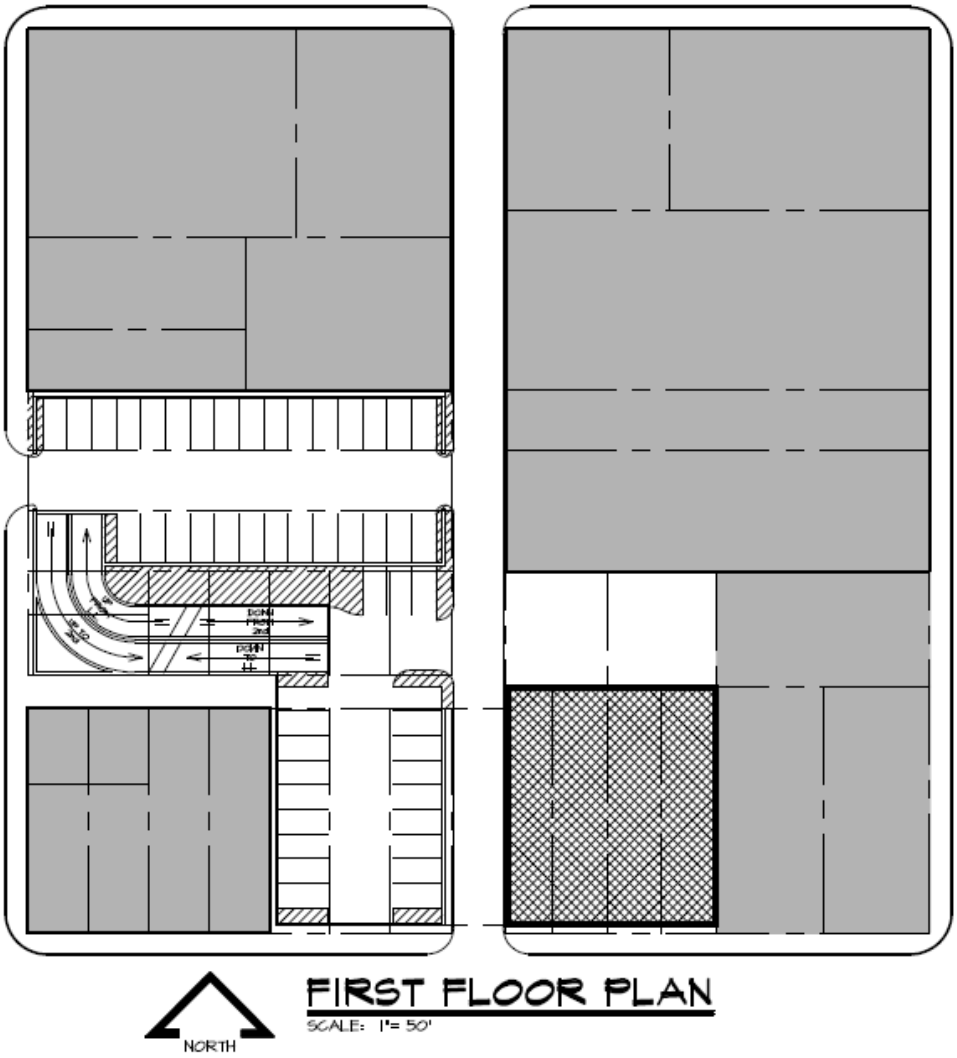
ALTERNATIVES

Lot Q - State Street, Street-Front Looking Northeast

Source: Gary W. Anderson W. Anderson & Associates, Inc.



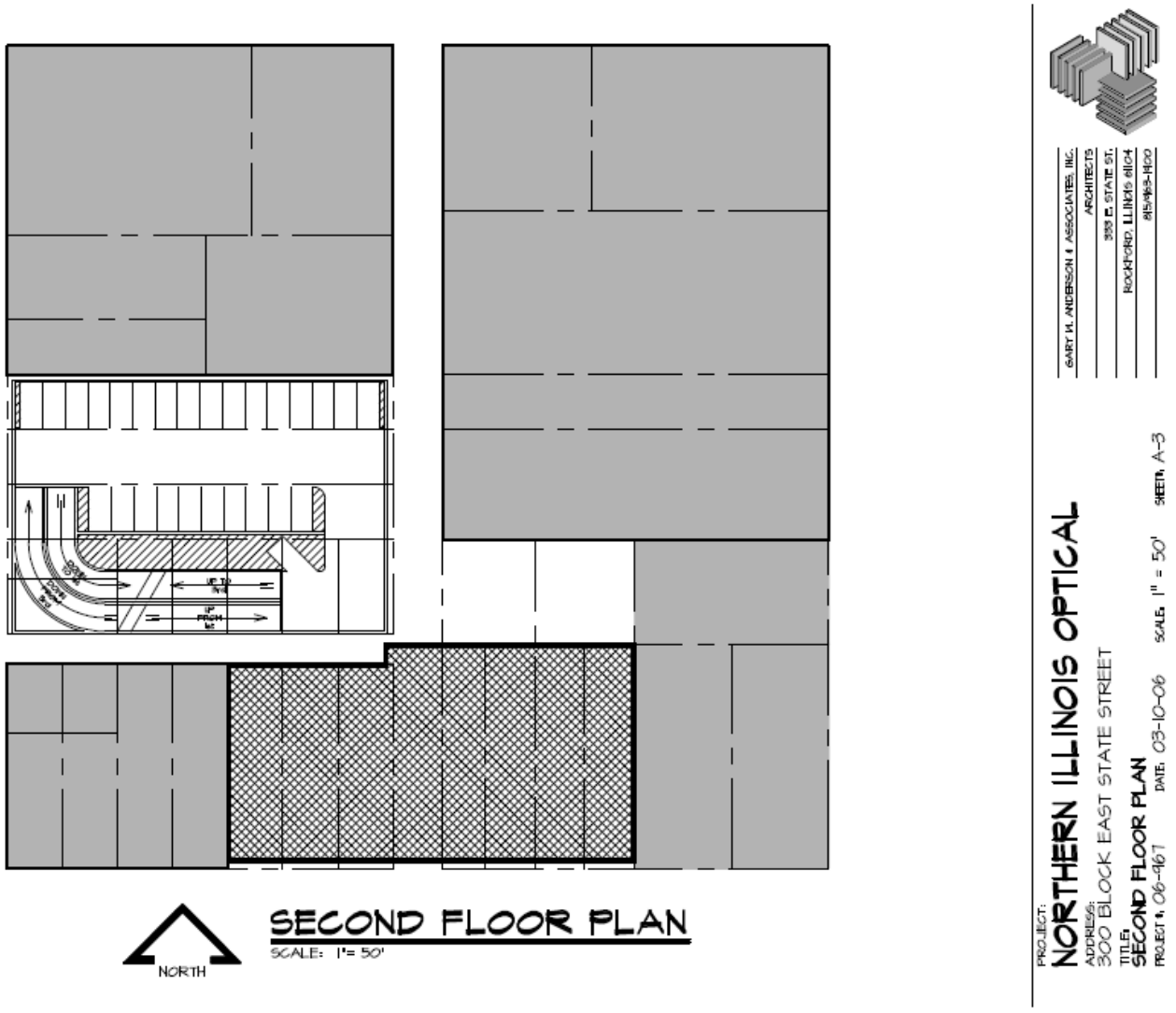
Source: Gary W. Anderson W. Anderson & Associates, Inc



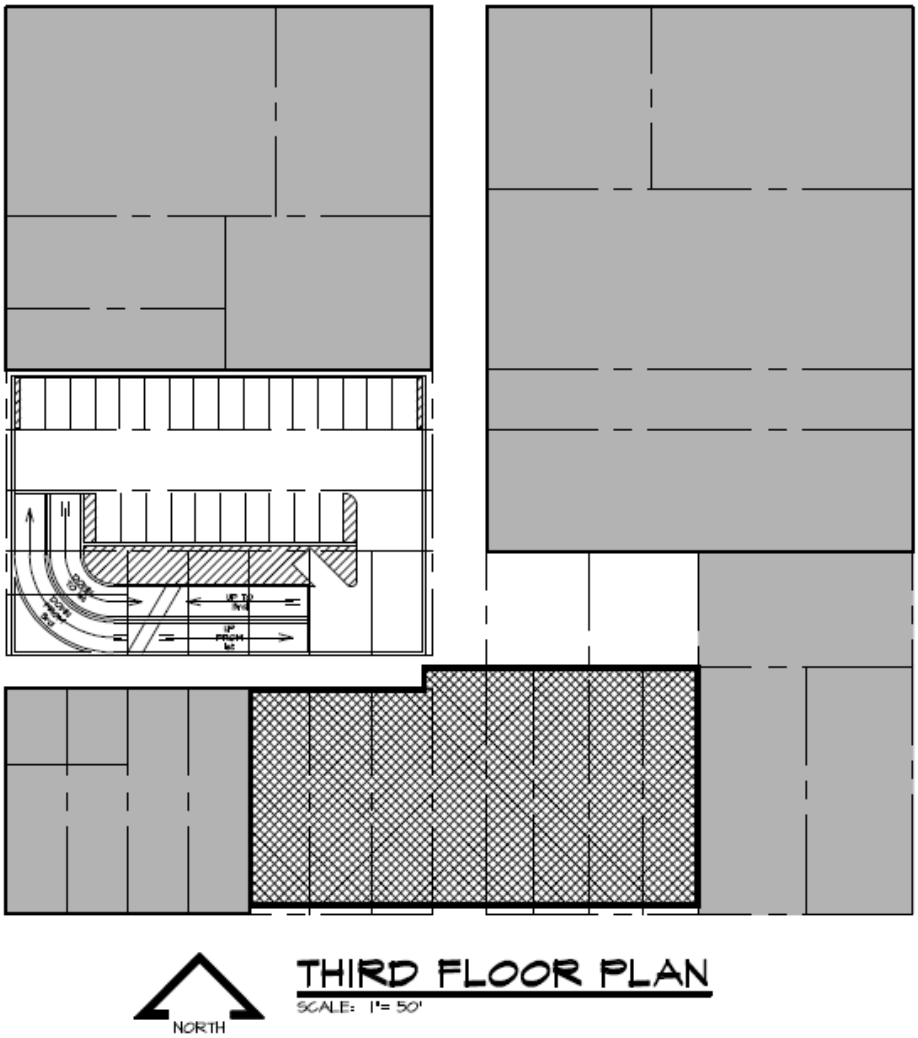
GARY H. ANDERSON & ASSOCIATES, INC.
ARCHITECTS
333 E. STATE ST.
ROCKFORD, ILLINOIS 61104
815/963-1500

PROJECT:
NORTHERN ILLINOIS OPTICAL
ADDRESS:
300 BLOCK EAST STATE STREET
TITLE:
FIRST FLOOR PLAN
PROJECT #: 06-467 DATE: 03-10-06 SCALE: 1" = 50' SHEET: A-2

Source: Gary W. Anderson W. Anderson & Associates, Inc



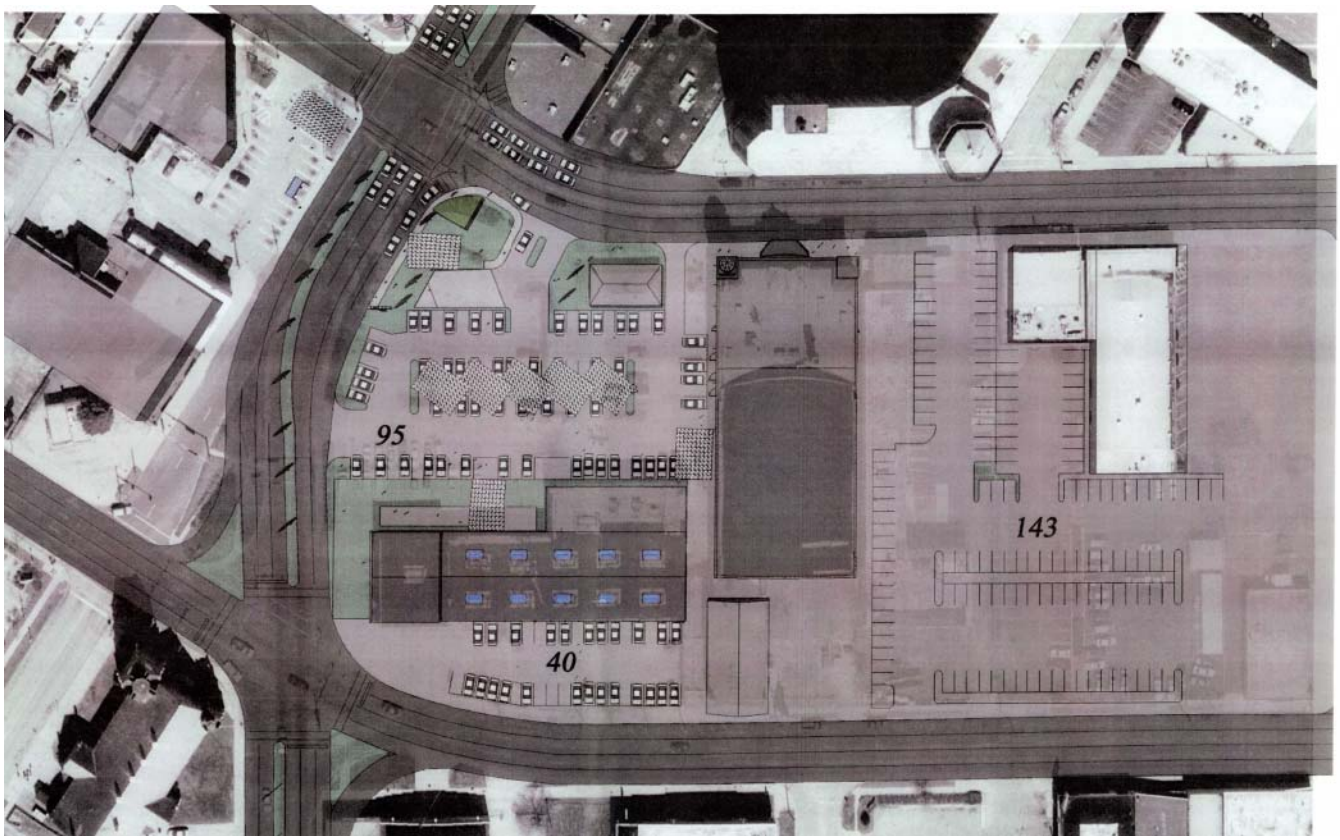
Source: Gary W. Anderson W. Anderson & Associates, Inc



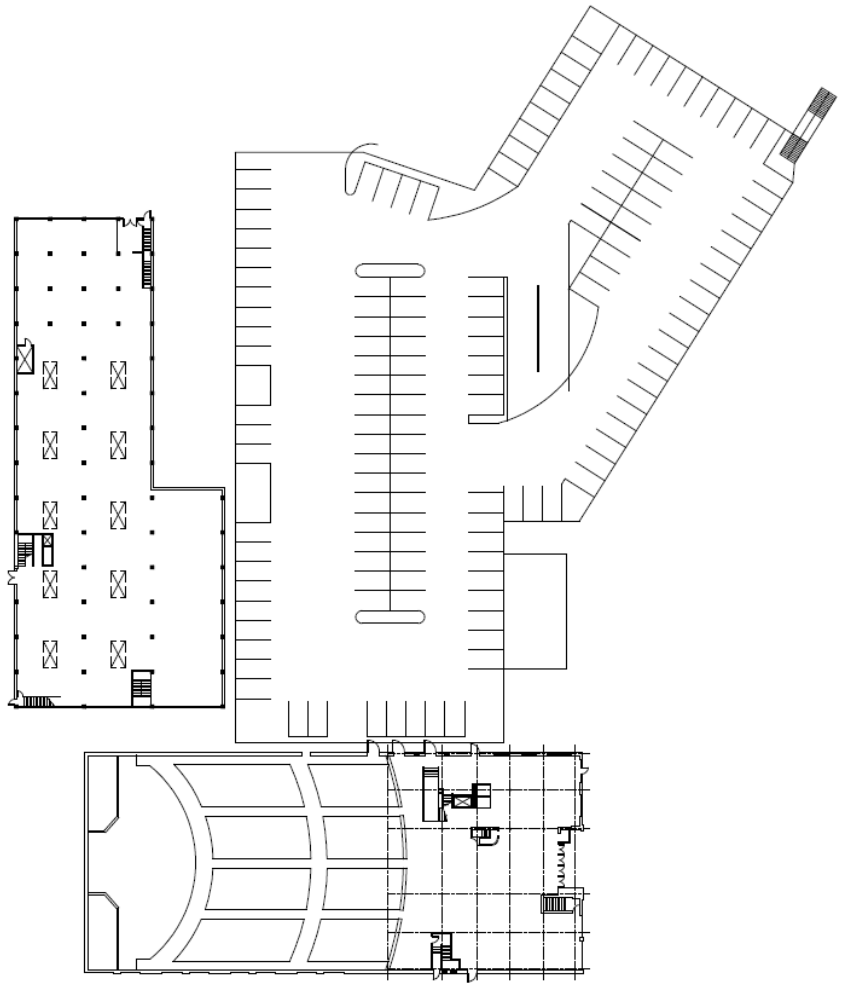
Source: Gary W. Anderson W. Anderson & Associates, Inc

Midway Theater Redevelopment Looking Southeast

Source: Gary W. Anderson W. Anderson & Associates, Inc



Source: Gary W. Anderson W. Anderson & Associates, Inc



Alternative 2A/2B: Block 9/Theater Site

Source: Gary W. Anderson W. Anderson & Associates, Inc

APPENDIX G

DATA MANAGEMENT, REPORTING AND AUDIT PROCEDURES

DATA MANAGEMENT, REPORTING AND AUDIT PROCEDURES

The issues discussed in this section of the report pertain more to the future operation of the Parking System and the general approach for data management, reporting and audit procedures.

Parking revenue passes through many hands: the customers, parking cashiers, supervisors, managers, and finally the owners. As the revenue passes through each step, there is a potential of revenue misreporting or even theft. This section of the report will discuss some of the audit procedures that can be performed in order to ensure that there is no revenue being lost along the way to the bank.

There are two types of parking facilities that will be discussed here: traditional parking equipment locations and cigar box operations (or operations without parking revenue control equipment). There are other types of parking operations, as well as modifications of the two types listed above.

TRADITIONAL EQUIPMENT LOCATIONS

A traditional equipment location refers to a parking facility that has gate arms at both the entry and exit lanes, a ticket dispenser and/or a card reader at the entry lane, and a cashier booth with a fee computer and/or a card reader at the exit.

HOW IT OPERATES

The daily parker is issued a time-stamped ticket from a dispenser. When the parker pulls the ticket, the entrance barrier gate is activated (or opened). The parker then proceeds to park. When the parker is ready to exit the parking facility, the parker drives up to the exit lane where the ticket is handed to the cashier. The cashier inserts the ticket into the ticket reader/validator, which automatically calculates the fee owed. In some systems, the cashier must manually enter the entry time into the fee computer. If the ticket contains a validation, the cashier enters the type of validation into the fee computer, which automatically subtracts the value of the validation from the fee owed. The cashier then collects the amount owed and gives the parker any change. Once the transaction is completed, the exit barrier gate is activated.

Monthly parking is monitored by an access control system. (This system may be part of the revenue control system, or may be a separate stand-alone system.) All monthly parkers are issued individual

access cards, which activate the entry and exit gates. The parker inserts the card into the reader (or swipes the card through the reader), which determines if the card is valid. Once the access system determines that the card is valid, the system opens the entry/exit gate. The system usually has the ability to print and/or store, in memory, all card usage activity.

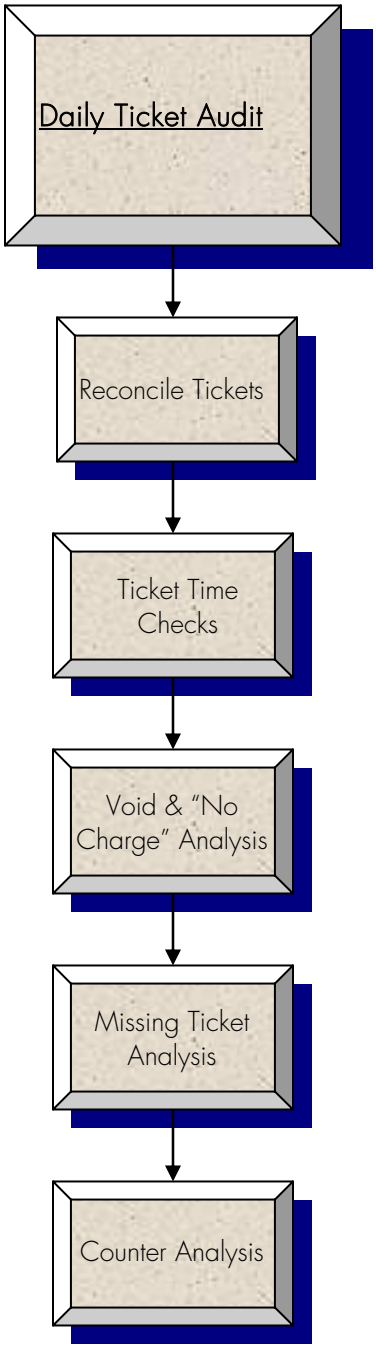
AUDIT OF DAILY TICKETS

The first step is to reconcile the parking tickets to the individual cashier reports. In this type of facility, a system generated cashier report is generally available, however a manual cashier report is also kept. A physical count of all tickets, by increment and type, should be done for each cashier. This procedure should be performed daily, but could also be performed on a randomly selected day. The test day should not be a slow day. If audits are randomly selected, and time allows, a two- or three-day sample is desirable. Any discrepancies should be noted.

Next, a ticket time check should be performed. A random sample of tickets, from each cashier, should be selected. This procedure requires the recalculation of the parking fee based on the entry and exit times. All discrepancies should be noted. Is the entry time printed by the fee computer the same as that of the entry time printed by the ticket dispenser? Do all validated tickets contain the appropriate validations?

Next, an analysis of all void and "no charge" tickets should be performed for each cashier. This procedure is useful for developing trend analysis. (A single day of data may not mean much, but comparing it to historical data will show trends developing.) A worksheet should be developed that lists all the various types of void and no-charge tickets (grace period, monthly parker, spitter void, deliveries security, management, etc) and the quantities of each type, for each cashier shift. This gives you an indication of the types of void/no-charge tickets that are being processed by each cashier. Are all tickets clearly documented with the reason, name of the parker and signature? Does one cashier seem to have more void/no charge tickets than the others? Does a cashier have a large number of a certain type of void/no charge tickets? Any odd trends in void or no charge tickets should be noted.

Lastly, an uncollected (missing) ticket analysis should be performed. These are tickets that are lost by visitors, or not collected when the visitor leaves (e.g. vehicles leaving after hours, etc.) This is a time-consuming process, but will prove valuable in determining the



approximate entry time of each uncollected ticket. All tickets for the day should be combined together. Then each ticket sequence should be arranged in numerical order (lowest number to highest). A worksheet should be developed which lists each uncollected ticket and the entry time of the ticket prior to the missing one.

The industry average for a typical facility that closes in the evenings (gates left open after closing) is 2% or fewer tickets uncollected. For a facility that is operated 24 hours per day, the percent drops to 1% or less. A facility that only offers valet parking should have no missing tickets, since a ticket is required by the valet in order to retrieve a car.

A large number of uncollected tickets early in the morning indicate a possible problem with monthly parkers pulling a ticket on their way in and using their access card on the way out. A large number of uncollected tickets just prior to closing indicate that customers realize that after closing time, they can exit for free. Extending hours on a trial basis and performing a cost/benefit analysis should be tried to determine if the additional revenue generated is more than the additional labor cost. Tickets missing throughout the day indicate other issues and will require further investigation.

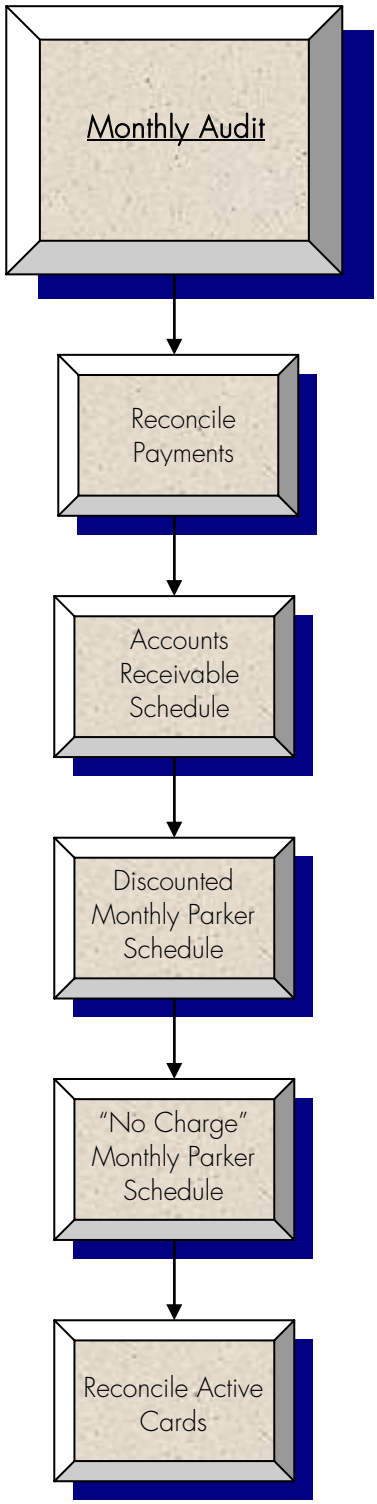
Other items that can be examined include non-resettable lane, gate, loop and transaction counters. Ideally, all these counters should be recorded on a daily basis and reconciled to each other as well as the number of tickets collected for the day. Any variances should be noted and investigated further.

AUDIT OF MONTHLY PARKING

The most important item in auditing monthly parking is to obtain an active key-card list (from the card access system) for the period being audited. Without this list, it is impossible to audit monthly parking for a past period; only the current period can be audited. Once the parking manager knows that an audit is going to be performed, the element of surprise is gone and this provides the parking manager with time to "clean up" the records.

The other items needed to conduct the monthly parking audit are an accounts receivable schedule from the start of the test month and the end of the month, a list of all cards billed for the test month, a list of any no-charge cards, and payment records listing all individuals and companies paying for monthly parking during the month.

The first audit procedure should be to reconcile the payments received to the billings. The beginning accounts receivable schedule should



also be used to ensure that all payments are credited to old balances first, rather than the current billing. Any differences should be noted.

Once all payments have been reconciled, an accounts receivable schedule should be created based on the accounts that remain unpaid from the above audit procedure. This schedule should be compared to the ending accounts receivable schedule provided by the parking manager. Any differences should be noted and investigated further. Were there "write-offs" that occurred? Were the reasons for the write-offs documented? Were the write-offs clearly noted on the monthly management report? Who approves the write-offs?

A schedule of all discounted monthly parkers should be created based on the billing information provided. This schedule should then be reviewed to ensure that all the discounts are in agreement with lease agreements or other written agreements. Also, a second schedule should be produced listing all no-charge monthly parkers. The list should be reviewed to ensure that all individuals are authorized to receive free monthly parking.

The next audit procedure is to reconcile the active card list to the paid, no-charge, and outstanding key cards. (Figure 1) Any differences should be noted and the appropriate action taken: an invoice could be issued for the unbilled card(s), or the unknown card(s) could be de-activated from the card access system.

MAIN STREET GARAGE

Shift Report

Lane #1		Cashier #3
Shift Start		03/01/03 06:03
Shift End		03/01/03 15:01
Type	Count	Total
Rate A	231	$765.50
Rate B	10	75.00
Rate C	0	0.00
Gross Revenue		$840.50
Cash Sales		$680.50
Validations		160.00
Gross Revenue		$840.50
Transactions		
Start #		128161
End #		128401
Total This Shift		241

Validation Summary
Merchant 1
Merchant 2
Merchant 3

AUDIT OF VALIDATION SALES

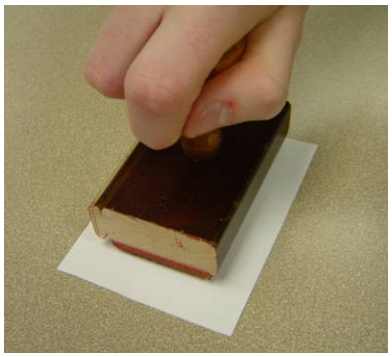
Validation stamps are also known as validation coupons or stickers. These are pre-paid stamps that are sold from the parking office. The stamps usually come in a book with ten sheets, each sheet containing ten stamps. Each book is pre-numbered and typically has the name of the garage pre-printed on the stamp. The stamps can be either a dollar value or time value (i.e., $1 stamp or 1-hour stamp). The time value is the most often used.

The book purchaser uses the stamp to validate his/her visitor's parking ticket. The appropriate number of stamps is affixed to the ticket. Upon exiting, the cashier enters the number of validation stamps into the fee computer, which automatically deducts the amount of the validation stamps from the amount owed. The audit of validation sales consists of auditing the sales of the books and verifying the inventory on hand. The audit of the sales consists of reconciling the validation sales log to the payments received. Any differences should be noted.

A copy of the invoice showing the validation books sold over the past

year should be obtained. The invoice will list the number of books printed and the serial numbers. Next a physical inventory of the books should be performed. The inventory should then be compared to the invoice to ensure that all books are either reported as sold or are still in inventory. Any discrepancies should be noted.

A second type of validations frequently used in the parking industry is rubber stamps. These are ink stamps that may be an address stamp, name stamp or one that says parking validation. The office tenant stamps the back of the ticket with this stamp which provides free or discounted parking. Other times the stamp indicates to the parking operator that the parking charges are to be billed back to the tenant. This type of validation is known as a "charge validation." At the end of the month, the parking manager must manually separate all charge validated tickets by tenant and manually calculate the amount to be invoiced back to the tenant. There are several draw backs to this type of validation. They include: the ease the stamps can be duplicated at a local stationary store, the increased labor required to prepare invoices, invoice disputes and outstanding receivables. Facilities that use this type of validations should consider discontinuing accepting rubber stamp validations and switch users to validation stickers.



PART 1, ON-SITE AUDIT

The paper trail is divided into two sections: the paperwork that is typically performed on-site in the booth and in the parking facility office and the paperwork that is performed off-site.

A cashier report is prepared by each cashier at the end of his or her shift. The report lists the tickets collected, by type, and the amount of cash collected. Also, at the end of the shift, a closeout tape from the fee computer is generated. This tape lists all the transactions processed through the fee computer and contains a total of transactions and dollars collected.

1. Reconcile cashier report to fee computer closeout tape
2. Reconcile cashier report to daily report
3. Complete ticket audit

The first procedure in this phase of the audit is to reconcile the cashier report to the fee computer closeout tape. Not only should the total dollars agree, but also the number of transactions should equal the number of tickets turned in by the cashier. Also, the closeout tape should have a non-resettable counter for the number of transactions processed. This number represents a total of all of the transactions performed by the cashier. The ending non-resettable counter from the prior shift should equal the current starting non-resettable counter. If they do not, then a second shift and closeout was processed which was not reported. Some revenue control systems also provide a non-

resettable cash total, which can be used in the same fashion.

The next procedure is to reconcile the cashier report to the daily report. The daily report is a summary of all the cashier activity for a particular day plus any other revenue received. The monthly parking payment log and the validation payment log should also be reconciled to the daily report. Any differences should be noted.

Some (if not many) operators perform a complete ticket audit for each cashier, comparing the number of tickets (by transaction type and amount) to the totals recorded on the cashier report and system generated report when the cashier closes.

1. Reconcile daily reports to revenue summary
2. Reconcile deposit slips to daily repot
3. Cash composite analysis

PART 2, OFF-SITE AUDIT

Once the parking manager completes the daily report, it is then forwarded to the parking operator's main office or to the accounting department. From here, it is entered into the accounting system, which at the end of the month generates a monthly management report (MMR). Most accounting systems are capable of generating an interim report, sometimes referred to as a revenue summary. This report details the various revenues by type and by day received.

The first audit procedure in this phase of the audit process is to reconcile the daily reports for a test month to the revenue summary. Note any differences. The next procedure is to reconcile the summary to the MMR. Any difference should be noted.

The next audit procedure is to reconcile the deposit slips to the daily report. Depending on how the deposits are made (either each cashier makes a deposit or there is one deposit for all revenues), this can be performed by cashier shift report or by daily report. After all deposits have been verified, then the deposit slips need to be reconciled to the bank statement. Any differences should be noted.

The last step is to perform a cash composite analysis. A common source of fraud occurs when cash is taken from transient revenues and replaced with a check for monthly parking or validations. It is not only necessary to verify that the total revenue deposited is equal to the amount reported, but also the composite of each deposit must be verified to ensure that the amount of cash deposited is equal to than the total daily revenue. A deposit that is greater than or less than the daily revenue should be thoroughly investigated.

Suppose that according to the daily report your revenue from a

particular day, say $410, is solely from daily parking. If you only verified the total deposit amount, there appears to be no problem. But if you look at the composition of the deposit, you will notice that there is a $150 check included, when there is only daily revenue reported. This is a sign that there are bigger issues that have not yet been discovered.

CIGAR BOX OPERATIONS

A Cigar Box facility refers to the early days of the parking industry where the attendant used a cigar box as a cash register, since the technology of fee computers was not available. This type of location consists of a time clock and either a basic cash register or a "cigar box". This type of operation offers a lower level of revenue accountability.

HOW IT OPERATES

When a vehicle enters the facility, the attendant manually stamps (clocks in) a two-part parking ticket with the entry time. One portion of the ticket is given to the customer and the second is placed under the windshield wiper. The window stub is used to identify the vehicle when parked as a transient parker. When the customer is ready to exit, the ticket is surrendered to the attendant, who stamps the ticket with the exit time (clocks out) and manually calculates the parking fee owed. The customer pays the attendant and then exits the facility. Monthly parkers are issued a hang tag, which is placed on the rear view mirror of the vehicle. The hang tag identifies the vehicle as a current monthly parker.

An audit is conducted by obtaining parking tickets, cashier reports, and hang tag log. The first procedure is to reconcile the tickets to the cashier report. Next is to time check all the tickets. Once all tickets have been time checked, arrange them in numerical order. Starting with the lowest ticket number, ensure that the entry time on each subsequent ticket is a later time than on the previous ticket. Any discrepancies should be noted. With the tickets still in sequential order, check the entry and exit times on the tickets against the times of the unannounced inventory worksheet. Are there any tickets that were clocked out prior to the start of the inventory, yet the vehicle was still parked during the inventory? Are there any tickets that were found during the inventory, but not clocked in until later in the day? Either of these two situations may be signs of attendant/cashier ticket manipulation.

The hang tags found during the inventory should be checked against the hang tag log to ensure that all hang tags issued have been properly recorded as sold on the hang tag log. Any differences can indicate that the attendant is issuing hangs without recording the sale or that counterfeit hang tags are being used.

UNANNOUNCED INVENTORY

The key to building a house is a sound foundation. The same is true with an audit. The paperwork that is received from the garage manager may look great, but is it an accurate account of what is taking place at the parking facility? Since a cigar box operation has no revenue control, an auditor must first ensure that the paperwork is sound.

The first step is to perform an unannounced (surprise) inventory. This is performed to ensure that all vehicles are identified properly. Any unidentified vehicle could mean lost revenue. At the start of the inventory, the time and the next ticket number should be recorded. Then the license plate number and the daily ticket number or monthly hangtag number of every vehicle in the facility should be recorded. At the end of the inventory, the ending time and the next ticket number should be recorded.

Any vehicle with no ticket or hang tag should be noted. Once all vehicles have been recorded, the attendant or manager should be asked to explain any vehicles that are not identified. All explanations should be noted.

Unannounced inventories could also be used in auditing a valet parking operation. Most valet operations still operate using the cigar box method.

THINGS TO WATCH OUT FOR

During the inventory, special care should be taken to ensure the parking attendant does not issue parking tickets to vehicles already parked in the facility. Since the vehicles were already parked prior to the start of the inventory, they should have been issued tickets.

License plate numbers (the last three digits, at a minimum) should be written on the window stub. The auditor should randomly check to ensure the number on the stub matches the vehicle license plate. Writing the license number on the window stub prevents the ticket from being re-issued to a second customer.

Ensure that all monthly parkers have a current month hang tag properly displayed on their vehicle. When purchasing hangtags, it is a good idea to change the colors each month. This ensures that the hangtags cannot be easily duplicated using a scanner and a printer.

APPENDIX H

CASE STUDY – METRO TRANSIT RIDESHARING PROGRAM

CARPOOLS AND VANPOOLS

Metro Transit (Twin Cities transit agency) supports carpooling and vanpooling by maintaining a database of individuals who work in the region and want to commute to work in a carpool or vanpool. Individuals who wish to participate must register. The database uses a commuter's home address, work address and work hours to find others who live and work near them and who have similar schedules.

Van-GO is a regional Vanpool Program sponsored and promoted by: Metropolitan Council, Metro Transit Rideshare, Minneapolis TMO (Transportation Management Organization), Downtown St Paul TMO. 494 Commuter Services and Anoka County TMO.

Van-GO! Vanpools are made up of 5-15 people commuting to and from work together on a regular basis. Each van has a volunteer driver and back-up driver(s).

- Everyone in the Vanpool must be registered with Metropolitan Transportation Services or Metro Transit Rideshare.
- Van-GO passengers must live or work in the Twin Cities area.
- All Van-GO vans must carry a minimum of five passengers including the driver and commute to work an average of three or more days a week.
- Van-GO routes must not duplicate the Twin Cities Public Transit System *(Regular Route or Light Rail Transit service).*

Vans are leased to drivers on a monthly basis. The Metropolitan Council and VSPI, Inc. establish the lease rates and select the types of vans that are available for lease. Lease options include 7, 9, 12 or 15-passenger vans, insurance, maintenance, repairs and 24-hour roadside assistance. *(Lease agreement is between VSPI and the primary driver.)*

Passengers are responsible for setting their individual monthly van passenger fares based upon monthly vanpool expenses. Typically, drivers ride for free, in return for their volunteer driving efforts. Individual groups can decide whether they want to set daily rates for occasional riders in their Vanpool.

The Metropolitan Council receives federal funds for this program.

- Metropolitan Council provides 55% of the monthly van lease, regardless of van size.
- Van-GO passengers pay 45% of the monthly van lease, regardless of van size, as well as fuel and parking expenses.
- Employers may choose to subsidize Vanpools serving their locations.

Vanpool costs are determined by four primary factors:

1. Commute distance traveled
2. Size of the van being leased
3. The number of passengers sharing the cost (Vanpool expenses include the monthly van lease, gas, parking expenses, and car wash)
4. Any subsidy offered by your employer

Each individual vanpool tailors his/her service to its members home and work locations. Typical monthly Vanpool costs average about $100/month per person. Participants that live or work outside of the following counties: Anoka, Ramsey, Washington, Scott, Carver, Hennepin, and Dakota, may be subject to an additional quarterly fee.

Metropolitan Transportation Services provides information about forming or providing vanpools at 651-602-1710. Funding is limited and provided on a first come first serve basis. A Commuter Benefits Coordinator is available to meet with MCAD and potential Vanpool partners.

What are the benefits of being a Vanpool driver?

- The ride is free! In exchange for driving and coordination responsibilities, primary drivers travel free.
- Primary driver can use the van for some personal trips.
- Driver Rewards: Typically, the primary driver receives $100 after first six months of continuous driving and $100 annually thereafter. One back-up driver receives $50 after the first six months of continuous driving and $50 annually thereafter.

All registered drivers and Vanpoolers are eligible for "Guaranteed Ride Home" coupons that provide for a free taxi ride home. (To be used in event of transportation emergency)

What are the benefits of being a Vanpool rider?

- Sit back and enjoy the ride! Leave the driving stress to someone else and have time to read, sleep, or work.
- Save money. By not driving alone for your commute, you lower your fuel, ownership, and insurance costs, and reduce wear and tear on you own vehicle. UNM estimates the value of vanpooling at $800± per year.

Free or reduced fee parking fees, or special offers are available to registered car pools and vanpools at some public parking facilities.

GUARANTEED RIDE HOME

The Guaranteed Ride Home program addresses the worry about being stuck at work without a ride home when an emergency happens or you unexpectedly have to work later hours. Metro issues enrollees in the program two coupons that can be used for a bus or train ride, or for cab fare up to $25.00. Each six months, replacement coupons are provided with your program renewal.

The Guaranteed Ride Home Program is free. Commuters who ride the bus or train, carpool, vanpool, bike or walk at least three days a week to work or school are eligible. To receive the coupons, commuters must fill out a Guaranteed Ride Home Registration form. Commuters who register a carpool or vanpool are automatically enrolled in the Guaranteed Ride Home Program. Registered commuters receive two coupons every six months. The coupons are valid on any regular workday for a bus, train or cab ride in the event of an emergency or schedule conflict.

APPENDIX I

SUMMARY OF CITIES DOWNTOWN PARKING POLICIES AND REGULATIONS

Five similar sized cities in the Midwest were reviewed to determine their parking policies and those cities were:

- Peoria, IL
- Madison, WI
- Grand Rapids, MI
- Naperville, IL
- Aurora, IL

This discussion that follows will provide an oversight to the basic policies each City surveyed utilizes. The above cities were contacted to obtain their parking policies but they were not available. This was due in part because parking policies were not formally written or the Cities contacted were unresponsive. Therefore, each City's web site was visited to obtain their downtown parking policies. The City's websites provided specific parking related pages and detailed ordinances. The discussion that follows was obtain from the respective was taken from their parking related pages.

PEORIA, IL

The City of Peoria, IL web site was been reviewed for provisions that would be applicable in the Downtown area and a summary of the information is listed below:

- Meters located on City streets are enforced from 8:00 a.m. to 6:00 p.m. Monday through Saturday. Many parking meters note that they are not enforced on "City Holidays".
- The City of Peoria operates approximately 1,000 parking meters located throughout the City. These meters all have different time restrictions and rates.
- The purpose of time limits on parking meters is to ensure that parking spaces regularly become available for customers of area businesses and visitors to the area.
- It is illegal to deposit additional coins in the meter after the time limit has been reached.
- You must leave a parking space when the time limit posted on the meter has been reached.
- Vehicles properly displaying disability parking permits or plates may park for FREE at one, two, four and ten hour parking meters.
- Parking meters are color coded to coordinate maximum durations that were established depending on the desired

parking turnover in the area. The time restrictions and rates are posted on the parking meter.

Blue top = 10 hours

Green top = 4 hours

Yellow top = 2 hours

White top = 2 hour/30 minute free time with first coin

Bronze top = 30 minute

- Contractors can rent meter hoods under the following provisions:

  - To facilitate construction or emergency vehicles occurring within a meter zone, contractors may be eligible for renting a meter hood from the City. Meter hoods provide the ability for contractors to park at a meter in excess of the posted time limit and without having to deposit coins in the meter on a continuous basis.
  - Meter hoods can be rented on a daily, weekly or monthly basis. The daily fee is $8.00 per hood and $160 per hood, per month. If the hood is lost, stolen or damaged the contractor will be assessed a fee of $25 - $50.
  - Meter hoods should be used during the hours that meters are enforced. These hours are 8:00 a.m. to 6:00 p.m., Monday through Saturday.
  - Meter hoods are to be used ONLY during daytime construction. Hoods should be removed after 6:00 p.m. and replaced the next morning, especially over the weekends, to avoid theft of the hoods.
  - The City reserves the right to remove any Meter Hood not being used in compliance with the above regulation.
  - Meter hoods may be obtained for the City of Peoria, Traffic Engineering Division, 419 Fulton Street – Room 300 between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.
  - The contractor will be responsible for paying the daily rate for each parking meter removed from

service. The daily rate is established by the Traffic Engineering Division based on the parking rate charged for the individual meter.

- Loading Zones: For information on loading zones, contact Traffic Engineering at (309)494-8802

Additional information about the City of Peoria, IL parking was found at their web site:
http://www.ci.peoria.il.us/parking

MADISON, WI

The City of Madison, WI web site was been reviewed for provisions that would be applicable in the Downtown area and a summary of the information is listed below:

- Parking regulations for persons with disabilities:
  - Parking spaces for Persons with Disabilities (PWDs) are available in all City lots and on the ground floor of all City parking ramps.
  - In the Overture Center and State Street Capitol ramps, parking for PWDs is also available next to the elevator on every level except the roof level.
  - At cashier-operated facilities, parking fees are collected upon exit by cashiers, Pay-on-Foot Stations, Exit Stations or via a Parking Fee Notice (for overnight parking).
  - A valid, state-issued "Parking for PWDs" hangtag or license plate must be properly displayed when parking in a designated "Parking for PWDs" space.
  - The hangtag or license plate exempts the PWD from parking fees or time limit restrictions ONLY when parking at a meter with a time limit of 30 minutes or longer.
  - The individual to whom the hangtag or plates were issued must be in the vehicle when it is parked and when the vehicle leaves the parking space.
  - Do not operate your vehicle with the tag hanging

from the rearview mirror; the hangtag could obstruct your vision and subject you to a moving traffic violation.

- Contractor Hangtag - Hangtag parking permits are available to meet the needs of contractors and repair persons working in areas where parking is controlled by parking meters:
  - Offer more flexibility than meter hoods.
  - Can be purchased in advance.
  - Can be used at multiple locations.
  - Full-day permit @ $13.00
  - Half-day permit @ $7.00
  - Purchase in-person at the Parking Division Office or by mail.
  - Call (608) 266-4761 for further details.
  - All rates subject to change.

- Handicap parking On-Street:
  - When parking in a parking space designated for Persons with Disabilities (PWDs) a valid, state-issued "Parking for PWDs" hangtag or license plate must be properly displayed.
  - The hangtag or license plate exempts the PWD from parking fees or time limit restrictions ONLY when parking at a meter with a time limit of 30 minutes or longer.
  - The individual to whom the hangtag or plates were issued must be in the vehicle when it is parked and when the vehicle leaves the parking space.

- Meter Enforcement:
  - Meters located on City streets are enforced from 8 a.m. to 6 p.m., Monday through Saturday. Many parking meters note that they are not enforced on "City Holidays".

- Meter Time Limits – Parking meters are intended for short-term parking:
  - The purpose of time limits on parking meters is to ensure that parking spaces regularly become

available for customers of area businesses and visitors to the area.

- It is illegal to deposit additional coins in the meter after the time limit has been reached.
- You must leave a parking space when the time limit posted on the meter has been reached.

- Truck Loading Zones:
  - Spaces designated as Truck Loading Zones may only be used by vehicles with truck plates while actively engaged in loading and unloading.
  - Total time parked shall not exceed 30 minutes.

- City of Madison Parking Rates: http://www.cityofmadison.com/parking/allRates.html

- City of Madison Parking Ramp Rates: http://www.cityofmadison.com/parking/rampRates.html

- Parking in City Owned Parking Ramps during a Snow Emergency:
  - During a declared snow emergency you can park in the cashiered sections of city-owned ramps for NO CHARGE from 9 p.m. until 7 a.m.
  - If you arrive before 9 p.m. or leave after 7 a.m. you are liable for any parking charges from prior to 9 p.m. and/or from 7 a.m. until the time you leave.
  - When parking in the ramps over night, DO NOT park on the top level so this area can be plowed.
  - Be aware that vehicles stored in city ramps longer than 48 hours can be ticketed and towed.
  - Meters in lots and ramps are enforced 24 hours per day, seven days a week.

Additional information about the City of Madison, WI parking can be found at:
http://www.cityofmadison.com/parking/parking.html

GRAND RAPIDS, MI

The City of Grand Rapids, MI web site was been reviewed for provisions that would be applicable in the Downtown area and a summary of the information is listed below:

Mission Statement: *Provide and target parking resources and customer services to support existing development and foster new growth within the City Center and neighborhood business districts.*

- Parking Rates: http://www.grand-rapids.mi.us/download_upload/binary_object_cache/parking_Map%20Backs%202007%20with%20CC.pdf

- Services Provided to Customers:
    - Jitney Service to Areas 4, 6, 6A, 7, 8, and 9 are available to *customers* who work past 6 p.m. or when the DASH bus service ends. To use this service, call 456-3751 approximately fifteen minutes in advance to advise of the desired time and place for pickup. A Protective Services Officer (PSO) will pick you up at the time and location you specify, transport you to your vehicle, and wait until you are on your way. Look for a red Dodge Stratus or Chevrolet Uplander with security markings.
    - Our security personnel will also help you jump start a battery, get keys out of a locked car, change a flat tire, or assist with most any problem you, or your car, could run into downtown.
    - Security is provided Monday through Thursday from 7:30 a.m. until 11 p.m., Friday from 7:30 a.m. until 1 a.m., Saturday from 10 a.m. until 1 a.m.
    - Security is provided for areas shaded red or pink are city parking facilities. They're the only ones patrolled by Grand Rapids Parking Services security personnel.

- Loading Zones: The city provides a map of all the loading zone locations within the downtown area along with the lineal length of the loading zone.

- Hooding Parking Meters Policy link: http://www.grand-rapids.mi.us/download_upload/binary_object_cache/parking_Hood%20PolicyProc2007.pdf

- The fee for hooding a parking meter is $10.00/day.

Additional information about the City of Grand Rapids, MI parking can be found at:
http://www.grand-rapids.mi.us/index.pl?page_id=406

NAPERVILLE, IL

The City of Grand Rapids, MI web site was been reviewed for provisions that would be applicable in the Downtown area and a summary of the information is listed below:

- Downtown Parking Top Eight Tips:

    1. Parking is FREE in all downtown Naperville municipal lots and decks.
    2. The Municipal Center Parking Deck is available to all visitors after 5 p.m. Monday through Friday and all day during the weekend.
    3. Check out the second and third floors of the Central Parking Facility for available parking spaces.
    4. Washington Street on-street parking is available from 8:30 a.m. to 4 p.m. Monday through Friday. After 4 p.m. on weekdays, cars parked on this street will be towed.
    5. The time restrictions for on-street parking are two hours, surface parking lots are 3 hours and decks range from 3 hours to long-term parking.
    6. Bike to the downtown! Bike parking is located at the Van Buren Parking Deck, the Municipal Center and Nichols Library.
    7. Pace Bus routes 714 and 530 service downtown Naperville. For a route schedule, visit www.pacebus.com

8. Take the train to downtown Naperville! For a Metra schedule, visit www.metrarail.com www.metrarail.com

- Downtown Employee and Resident Parking (CBD Parking)
  - People who work or live in the downtown are required to purchase and display a Central Business District (CBD) hangtag. The hangtags are $5 and can be purchased from the City of Naperville Finance Department at the Naperville Municipal Center, 400 S. Eagle Street or from the Downtown Naperville Alliance, 55 S. Main Street, Suite 451, Naperville, IL.
  - Those with CBD permits shall park in designated areas and all other parking restrictions also apply to vehicles with CBD hangtags

Additional information about the City of Naperville, IL parking can be found at:
http://www.naperville.il.us/index_template.aspx?id=220

AURORA, IL

The City of Aurora, IL web site was been reviewed for provisions that would be applicable in the downtown area and a summary of the information is listed below:

Mission Statement: *To provide safe, clean and attractive public parking facilities and to assist in downtown development through effective management of parking policy and assets.*

- Parking Fines: http://www.aurora-il.org/mvps/fines.php

- Parking tokens:
  - Parking tokens are available for purchase by downtown business and property owners. The one-hour tokens, which are valued at $.25 each, can be purchased at a discounted rate for distribution to customers and clients. The minimum quantity that can be purchased is 40 tokens at a cost of $9.00; this reflects a 10% savings over the full price. It is expected that business and building owners will advertise the token program

as a gift to their customers, encouraging people to patronize downtown establishments. Tokens will not be sold to the general public.

- Tokens can be used in electronic meters only; these meters can be identified by the fact that they do not have handles. About 90% of the on-street meters in downtown Aurora are electronic. Most ten-hour meters are mechanical.

Additional information about the City of Aurora, IL parking can be found at:
http://www.aurora-il.org/mvps/index.php