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PARKING OPERATIONS PLANNING

CITY OF BLOOMINGTON

BLOOMINGTON, INDIANA

Prepared for:
THE CITY OF BLOOMINGTON

DECEMBER 2012

WALKER
PARKING CONSULTANTS

December 12, 2012

Ms. Susie Johnson, Director
Department of Public Works
City of Bloomington
401 N. Morton Street
Bloomington, Indiana 47404

Re: *Parking Operations Planning*
        Bloomington, Indiana
        Walker Project Number: 13-3056.00

Dear Susie:

Walker Parking Consultants is pleased to submit this final parking report for the City of Bloomington. We look forward to discussing and finalizing.

Once again, we appreciate the opportunity to be of service to you.

Sincerely,

WALKER PARKING CONSULTANTS

Jeffrey A. Colvin, AICP   Jon R. Martens, AICP
Parking Consultant   Parking Consultant

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EXECUTIVE SUMMARY

This executive summary is intended to highlight this report's key points. This summary should not be read in lieu of the entire report; rather, the report should be read in its entirety to understand the assumptions, analysis and conclusions featured within this document.

On-street parking has become the preferred choice in Downtown Bloomington, as it is the most conveniently located and free. The result is increased traffic as users circulate searching for an open spot, increased carbon emissions and frustration.

The primary purpose of charging a fee for parking convenience is not the collection of revenue, although this is important, but rather to allocate a scarce resource efficiently. Most highly valued commodities in limited supply are often most fairly rationed by price. Charging appropriate parking fees allows the market participants to value each parking asset properly.

Free parking increases the tax burden on all city property owners, not just parkers. Providing free parking puts the City of Bloomington and its taxpayers in the position of being the ultimate, sole provider of Downtown parking for the foreseeable future because parking revenue at today's parking rates is not sufficient to amortize the costs of constructing new parking. The City controls a finite number of parking spaces (1,200) and needs to manage the allocation of that scare resource carefully.

In 2007 Walker documented the study area experienced on-street parking inadequacies during peak parking periods, and as a result recommended the City explore the installation of on-street metering. Since the 2007 study, the Downtown area has experienced increased parking demand from numerous new developments (two hotels, several apartments, a new trail and several other projects in the works). These developments, while they do provide some on-site parking, add to the overall vibrancy and general traffic volumes, in turn add to the pressure of the existing finite parking resource of on-street spaces.

To facilitate changes to the parking system and address these issues, our primary recommendations are to improve the management of the existing and future parking supply as summarized in the following points. We recommend:

- The City of Bloomington eliminate its current, two-hour, on-street parking system and transition to a metered system.

- Initial on-street parking rates be $1.00/hour; no change is recommended in hourly rates for garages. Parking lots should be priced at garage rates.

Graduated parking rates are sometimes utilized by cities to control the length of parking; longer parking periods require a higher fee. Walker does not recommend graduated rates at this time. The City may want to consider graduated rates sometime in the future after measuring the success of the parking meter program.

- A total of 142 multispace meters and 57 single space meters throughout Downtown Bloomington.

- Continued provision of free or very low cost metered parking on-street along Rogers Street (56 total spaces).

- The City work with the County to continue to provide free parking in blocks 52 and 53.

- Multispace smart meters for those block faces that have an economically viable number of contiguous spaces, with the intent to maintain a system-wide density standard of approximately 6 to 10 on-street spaces per multispace meter.

- Single-space smart meters for those on-street metered spaces that do not meet the density standard, are geographically isolated, separated by physical streetscape elements (driveways, curb cuts, loading zones, etc.), or located on streets with grades that do not meet accessibility standards.

- All on-street meters accept coins and credit cards for payment.

- The addition of a pay-by-phone option, which adds convenience and benefits for both the motorist and the City at minimal cost.

- An effective communications plan, complete with press releases and public awareness components, which is instrumental to a successful implementation program. A website and printed materials focusing on how the meters work have proven to be effective, as have surveys to collect feedback from patrons. The focus should be on the added convenience of the credit card payment feature, and enforcement officers should be trained to assist patrons as the new meters are deployed to mitigate a negative public reaction to the new meters.

- Enhancements of the Residential Permit Program including: increasing the size or number of zones if spillover demand occurs after meters are installed; selling permits on the City's website; and analyzing the cost of administration of the program and adjusting rates to cover the costs, if needed.

- Change of enforcement hours to 8 a.m. – 10 p.m.

INTRODUCTION

Downtown parking systems serve numerous stakeholders, demand flexibility for growth, integrate with transportation and move significant traffic volumes. As such, development of an integrated, long-term, strategic parking management plan is critical. To assist with this approach, Walker Parking Consultants performed a parking study for the City of Bloomington ("City") in 2007. That study serves as the foundation of this new parking policy study and recommendations. To expound upon these recommendations, the City has embarked upon an effort to study parking policies at a deeper, more strategic level and to improve the management of its parking system by implementing selected parking policies and installing additional parking meters.

Bloomington's Downtown Central Business District is a unique space, but the CBD is not a typical municipal Downtown or CBD area. In addition to the usual retail shops, restaurants, office buildings and government complexes, this district is adjacent to the campus of Indiana University. There are also several IU student-housing facilities within the district, which add to the dynamic of this area.

THE CITY OF BLOOMINGTON PARKING SYSTEM

The goal of the City of Bloomington parking system is to provide convenient, user-friendly, safe, economical parking that will serve the parking needs of residents and visitors and promote a diversified and vibrant local economy.

The parking system serves parkers of all kinds. In addition to monthly contract parking and hourly services, several City-owned garages contain facilities for bicyclists, and motorcyclists. Located throughout Downtown, municipal parking garages and lots help residents, visitors and commuters access the businesses and entertainment centers of Downtown Bloomington. The City provides clean, safe and convenient solutions to Downtown travelers and promotes livability in the community.

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ON-STREET ADA GUIDELINES

The ADA provides rights-of-way accessibility guidelines regarding on-street parking. Although the guidelines have not been amended into law, the draft is expected to be enacted, and municipalities are strongly encouraged to follow them to the best of their ability. Accessible on-street parking spaces are required whenever parking is marked or metered; therefore, within a majority of Downtown Bloomington, the ADA guidelines should be followed as to the number of marked on-street ADA spaces provided for public use. The following table is adapted from the Draft Guidelines for Public Rights-of-Way publication.

Table 1: Required Accessible On-Street Parking

Total Number of Marked or Metered Parking Spaces on Block Perimeter	Minimum Required Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4% of total

Source: http://www.access-board.gov/prowac/index.htm (Table R216)

The guidelines further state that accessible spaces are best located where the street has the least crown and grade and close to key destinations and any adjacent sidewalk space should be free of obstructions to permit deployment of a van side-lift.

ACTUAL VS ADA GUIDELINES

A review of the study area found a few blocks with fewer ADA spaces than recommended (Representing approximately 12 spaces) in the guidelines and 12 blocks that exceed or meet the guidelines. Off-street ADA spaces may count toward the guidelines, as long as the spaces are offered at the same or lower price, they are just as convenient, and they are above any off-street ADA requirements. While it may be more convenient to add an ADA space off-street to meet the requirement, these spaces will basically convert two regular spaces to account the space and access aisle.

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ACCESSIBLE DESIGN RECOMMENDATIONS

The ADA guidelines provide specific design recommendations for parallel and perpendicular or angled parking spaces. These standards include providing access aisles to allow wheelchair access to and from the space safely.

PARALLEL PARKING SPACES

Parallel parking spaces located adjacent to a walkway that exceeds 14 feet in width are required to provide an access aisle at least 5 feet wide at street level the full length of the parking space. Access aisles are not required where the width of the adjacent walkway is less than or equal to 14 feet. When an access aisle is not provided, the parking space is to be located at either end of the block face to allow access to the sidewalk. The following picture illustrates two accessible spaces with the access aisle.

Figure 1: On-Street Accessible Parking Example

Source: http://www.access-board.gov/prowac/guide/figure54.htm

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PERPENDICULAR OR ANGLED PARKING SPACES

Perpendicular or angled on-street parking is required to provide an 8-foot-wide access aisle at minimum at street level the full length of the parking space. The access aisles are to connect to a pedestrian access route serving the space and are to be marked so as to discourage parking in them.

The following drawing shows an example of proper accessible angled parking with the access aisle. Shown are three accessible spaces; two vans are sharing an 8-foot access aisle; and one car is parked adjacent to a 5-foot access aisle. Pedestrian routes from the access aisles to the sidewalks are shown via ramps located in the angled area across the head of a vehicle space.

Figure 2: On-Street Accessible Parking Example

Source: http://www.access-board.gov/prowac/guide/figure55.htm
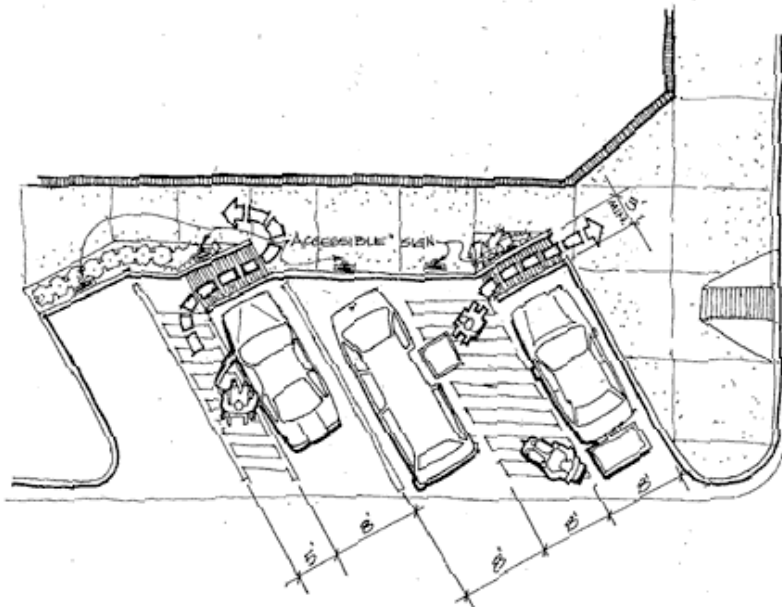
REQUIRED SIGNAGE

On-street parking spaces are required to have signs that include the International Symbol of Accessibility. Signs are to be located at the head or foot of the parking spaces so they do not interfere with the operation of a side lift or passenger side transfer.

ON-STREET PARKING RECOMMENDATIONS

The City faces two challenges with its on-street ADA parking. The first is the quantity, and the second is how the spaces are configured. Based on our review, no on-street spaces have an access aisle.

We recommend the City use this information as a guide for the blocks to add on-street ADA parking. Where at all possible, these spaces should be located at the end of a block-face closest to curb cuts with the required signage. Priority for converting the ADA spaces is recommended as follows:

1. Blocks that are short more than two ADA spaces.
2. Blocks requiring but having no ADA parking spaces.

RECOMMENDED ON-STREET METER LOCATIONS

On-street parking in Downtown Bloomington is convenient and the lowest cost parking option for patrons and employees. For the most part it is available at no charge. The time-limit restriction is established by code based on a two-hour parking limit per 100-block. Thus, if a vehicle parks in the morning, leaves the area and returns in the afternoon, the vehicle may receive a citation. A limited number of paid meter spaces are located along Morton Street, north of 7th Street.

Off-street paid parking is available within the three City parking garages in Downtown as well as the Indiana University parking garage located at 6th and Dunn Streets. Off-street parking garages and City lots are provided to support Downtown commerce and ensure an adequate parking supply. Ideally, the off-street parking would be used for longer-term parking and would provide an easy place to park in the area without having to search for an open on-street space. When on-street parking, which is the most convenient, is priced lower than the off-street parking, demand for on-street parking only increases. Thus, parking and conversely, traffic, increase as patrons and employees circulate looking for on open, "free," and convenient on-street parking space. Demand from employees further exacerbates the problem, as these parkers tend to utilize the on-street parking spaces for extended periods of time.

The recommended strategy for encouraging turnover and reducing the number of employees parking in the prime on-street areas is to implement metered parking. Walker reviewed Downtown Bloomington to identify areas for meter placement and to quantify the number of recommended meters. Considerations to the quantity and type of meter are based on utilizing Pay and Display multispace meters as well as single space meters that accept credit cards when four or fewer spaces are grouped

together. This combined approach is based on the costs to purchase, maintain and operate a multispace meter vs. a single space meter that accepts credit cards. Generally, for a multispace meter to be financially neutral, it should cover at least five to six single spaces. This takes into account the initial cost, monthly connectivity charges and ongoing maintenance costs.

Based on Walker's analysis and observations, a total of 142 multispace meters and 57 single space meters are recommended. The following map provides Walker's assessment of the recommended parking meter locations.

ommended Meter Placement Map
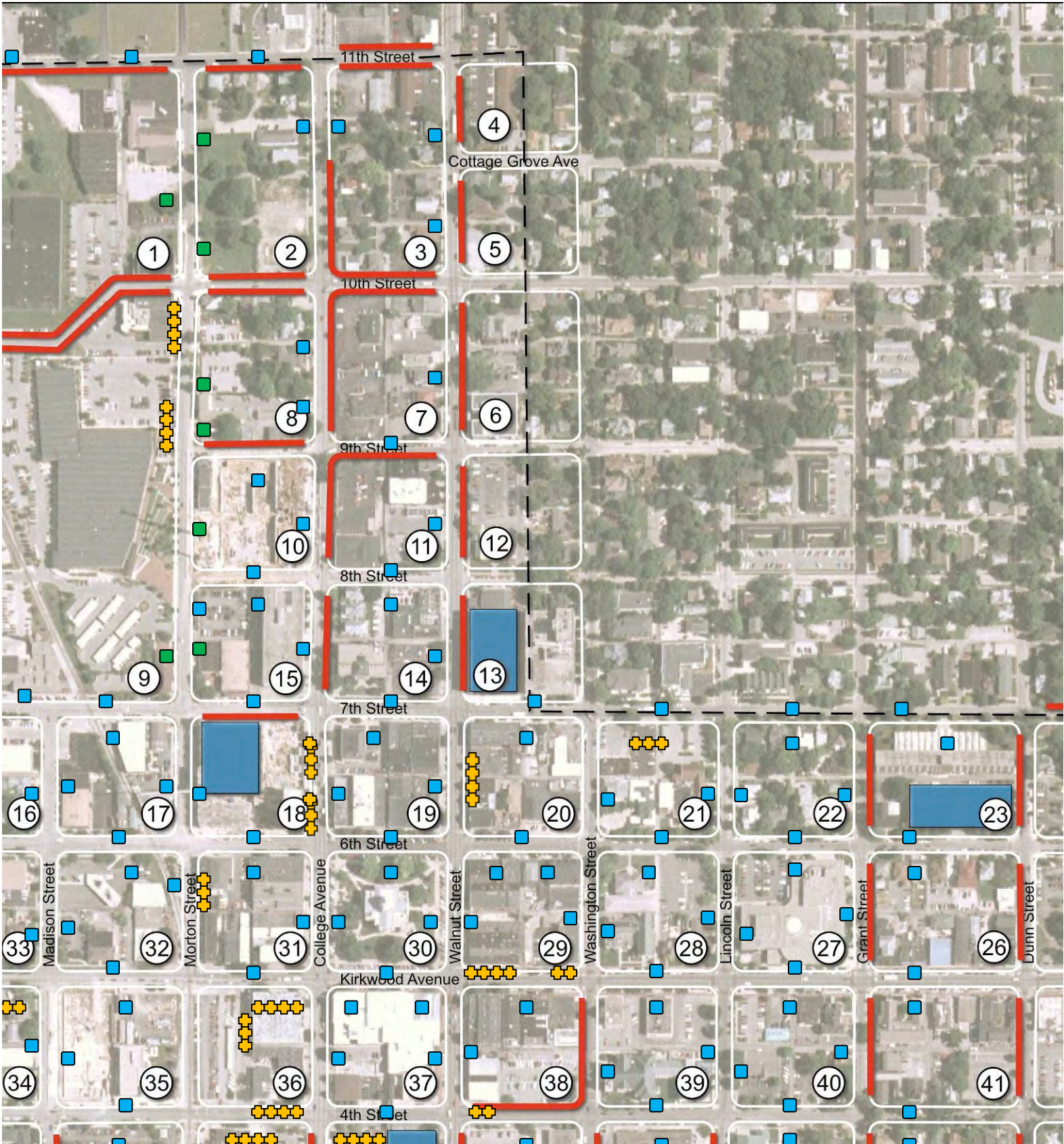
LONG-TERM PARKING OPTIONS

In addition to metering the Downtown area, we recommend providing low cost or free parking options as well. Many cities offer long-term, metered parking on the fringe of Downtown. These meters can be free or accept payment for eight- to 12-hour parking at a very low rate. We recommend the City continue to offer free or very low cost metered parking on-street along Rogers Street. The only reason to add a small fee to free spaces would be to keep the spaces from being used for long-term vehicle storage. Walker also recommends the City work with the County to continue the free parking areas in blocks 52 and 53.

CREDIT CARD ACCEPTANCE

The few multispace meters in use along Morton Street accept payment by coin or credit card. Accepting payment by credit card has proven to increase revenue as it provides an alternative payment method over coins.

Unfortunately, there is an added cost to accept payment by credit card. Typically, there is a small per transaction fee, plus a percentage of the sale. This means the lower the purchase price, the higher the percentage of the fee. For this reason, Walker generally does not recommend accepting credit cards for transactions less than $1.00 per hour.

CONTROLLING CREDIT CARD COSTS

We recommend the City examine its credit card processing costs on a regular basis. The current number of meters is very low and the credit card processing is combined with other credit card charges besides parking. Once new meters are installed, the number of lower transaction will increase, which will change how the fees are calculated.

To gain a perspective on the current use and fees, Walker requested a review of the current credit card fees by the firm Blue Square. Blue Square was provided a generic monthly statement with the fees in order to run a compairson of the fees. Based on this analysis, changing providers has the potential to save about $200 a month. The savings come mainly from reduced transacion fees. Again, this analysis includes the existing meters and other non-parking charges.

A copy of the Blue Square analysis and description of the company is provided in the Appendix.

ON-STREET METER SIGNAGE

Signage is a key component of multispace meter installations. Walker recommends following the Manual on Uniform Traffic Control Devices for Streets and Highways ("MUTCD") 2009 Edition for any added signage.

Section 2B.46 Parking, Standing and Stopping Signs of the MUTCD cover signs governing vehicle parking, stopping and standing. MUTCD specifically states:

"If a fee is charged for parking and a midblock pay station is used instead of individual parking meters for each parking space, "Pay Parking" signs should be used. Pay Parking signs should be used to define the area where the pay station parking applies. Pay station signs should be used at the pay station or to direct road users to the pay station."

Examples of recommended signage are provided to the left and below with their MUTCD figure number. The examples to the left feature the time limit and would be placed to direct patrons to the meter. The example below left would be placed to direct parkers to the actual meter. The example below right would be placed above the meter.

R7-21

R7-21a

R7-22

R7-20

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BLOOMINGTON SIGNAGE

The existing signage in Bloomington is close to the MUTCD standards as shown in the following pictures. Graphics in green may standout better than the current black and larger circle "P" may also be beneficial. Consistency of the signage is key, regardless of any minor changes.

Figure 4: City of Bloomington Parking Signage

Source: City of Bloomington

CITY OF CHICAGO METER SIGNAGE EXAMPLE

The City of Chicago initiated a slightly different signage standard in conjunction with its concession agreement with Chicago Parking Meters, LLC/LAZ Parking:

- Every block should have at least three signs.
    - Two end limits and a "Pay to Park" sign.
    - Only exception would be "Signs Only" blocks (Two end limits).

- Three types of signs.
    - End Limit – Defines the parking area (arrow).
    - Pay to Park – Identifies the location of the box.
    - Mid-Block – Reminder sign that the block is a paid parking area.

Examples of each type are shown below.

Figure 5: Typical Chicago Parking Meter Signs

End Limit   Pay to Park at location of box   Mid-Block Reminder

Source: CPM, Chicago

CLOSURES AND SPECIAL SIGNAGE

Temporary closures of street parking are required for construction, street cleaning, dumpsters and special events (parades, street fairs, etc.). Multispace meters can be programmed to not accept payments, but will require signage at the meter and also may require additional temporary signs, cones or light barricades along block faces. The following figure provides examples of signs at multispace meters.

Figure 6: Multispace Meter Closure Signs

Source: City of Chicago

Single space meters are much easier to bag and can be done on an individual space basis. The following illustrates single space meter bagging.

Figure 7: Single Space Meter Bagging

Source: Walker Parking Consultants

Loading zones, taxi stands and designated accessible parking zones affect meter operations and require additional special signage, as illustrated in the following figure.

Figure 8: Special Parking Zone Signs


Source: City of Chicago

MULTISPACE METER CONFIGURATIONS

Multispace meters can be configured for use in one of three modes of operation: Pay and Display, Pay-by-Space, or Pay-by-License Plate. As previously stated, Bloomington is currently utilizing the Pay and Display method of operation. Each configuration is described below.

PAY AND DISPLAY

In pay and display mode, patrons park the vehicle, walk to the parking meter, pay a variable fee for a certain amount of time and receive a receipt. Somewhat less convenient for the patron than individual meters, in pay and display mode, patrons have to return to their vehicle to place the receipt on the dashboard. The receipt indicates the duration, location, machine number and end time for which the vehicle has paid for parking. The receipts are visually inspected during enforcement procedures. This has been found to take more effort and time as compared to the enforcement of other meter types. Pay and display meters are typically used for on-street applications or areas that do not have defined parking spaces such as dirt, gravel or sand-covered parking areas.

Pay-and-Display Voucher
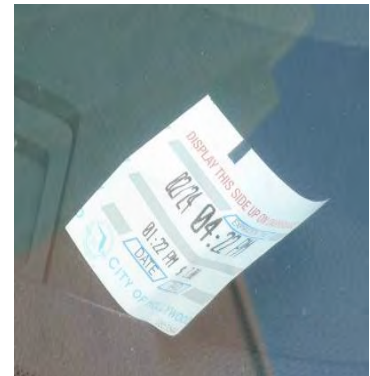
PAY-BY-SPACE

In pay-by-space mode, the patron is not required to return to the vehicle with a receipt. Instead, each parking space is numbered. Patrons approach the parking meter, enter the parking space number in which their vehicle is parked, and select the amount of time desired. No receipt is needed for enforcement, but there can be a receipt for proof of transaction. Enforcement is done by viewing a web-based report of paid and/or unpaid spaces on a hand-held enforcement device or from any web-enabled computer. Some manufacturers have incorporated enforcement via a smart phone.

Pay-by-Space Signage
in Tulsa, OK

Most pay-by-space applications offer the added convenience of allowing patrons to add parking time to the meter from another meter or through their phone for added convenience. Pay-by-space meters are typically used in off-street applications where spaces can be easily numbered using signs or surface paint. However, they also are

gaining in popularity for on-street applications due to the pay-by-phone option, which provides an additional convenience for customers, and their improved enforcement options.

PAY BY LICENSE PLATE

In pay-by-license plate mode, patrons are not required to remember their parking space or return to their vehicle with a receipt. Instead, they enter their vehicle's license plate information, and select the amount of parking time. No receipt is required for enforcement, but there can be a receipt for proof of transaction. This system allows patrons to move their vehicles to another spot within the same meter zone without having to pay for parking again, provided there was time still remaining on the original purchase and they were not in violation of the posted time restrictions. Enforcement is completed with a License Plate Recognition (LPR) system. The LPR system can be vehicle mounted or handheld units to scan and read the plate number automatically. The plate number is compared to the database of paid users.

Pay by License plate is relatively new, with the first U.S. installation just a few years ago in Flint, Michigan. The Pittsburg Parking Authority added this type of system in 2012 and is currently the largest installation in the U.S. Payment by license plate has its advantages; mainly, enforcement and no need to return to the meter. However, it is still a new concept to most users and requires users to remember their license plate number. Entering the wrong number can result in a citation.

SYSTEM ENHANCEMENT TECHNOLOGY

Additional services and technology can be added to the system to enhance both productivity and the overall customer experience. Some examples of add-on technology include the following.

PAY-BY-PHONE

The proliferation of cell phones has brought the ability to pay for parking by using a cell phone and credit card.

Pay-by-Phone methodology:

1. The pay-by-phone vendor sets up an account with the City, identifying all parking spaces and/or zones. Each parking space or zone is established with a unique number.

2. Motorists register their cell phone number, vehicle license plate and credit card payment information for the pay-by-phone vendor via their phone.

3. Upon parking, the motorist calls the pay-by-phone vendor's automated payment line.

4. The motorist enters the appropriate location codes for the city, zone, meter number, space number, etc. and the desired parking time.

5. The pay-by-phone vendor charges a convenience fee, typically $0.35 to $0.50 per transaction to either the user or City.

6. Enforcement is conducted by viewing a web-enabled device showing a listing of paid transactions provided by the pay-by-phone vendor.

7. The pay-by-phone vendor deposits the parking fees into the City's established bank account, keeping the convenience fees.

Most vendors allow adding time before the parking session expires and will send a text message to the user's phone with time expiration notification. The time limits are similar to the meter (parkers are unable to extend time beyond any established legal time limits).

BENEFITS OF THE PHONE OPTION TO CUSTOMERS:

- Eliminates concern about coin availability.
- Provides a text message alert when parking time is about to expire.
- Enables remote extension of parking (within the allowable maximum time limit).
- Is simple and user friendly.
- Allows for viewing/maintaining parking transactions online.

BENEFITS OF THE PHONE OPTION TO THE CITY:

- Allows for quick implementation for minimal cost and with minimal infrastructure.
- Increases revenue due to more people paying and buying larger blocks of time.
- Reduces operating costs due to reduced cash handling.
- Provides real time statistics.
- Provides greater convenience, which leads to greater customer satisfaction.
- Manages event parking, entertainment venues and sports facility parking.
- Supports green initiatives and flexible rate models.
- Promotes image of modern and innovative City organization.

Many cities are extensively and successfully using payment by phone. This system is judged to work best with pay-by-space or pay-by-license-plate systems, but also will work with pay and display.

Pay-by-phone adds another layer of enforcement when used in conjunction with parking meters, as the enforcement officer needs to view a web-based report of paid vehicles in addition to checking the meter reports. Some vendors are now integrating their software systems to enable the customer to view combined payment data on one report. The following list is a sample of the pay-by-phone vendors.

ParkMobile............................. http://us.parkmobile.com/
Verrus .... http://www.verrus.com/verrus/index.aspx
ParkNow! .... http://parknow.us/
PayByPhone .... http://paybyphone.com/
QP.. https://qpme.com/home

The market leader is ParkMobile, followed by Verrus and ParkNow!

REAL TIME ENFORCEMENT HANDHELDS

Enforcement handheld devices that have two-way communications allow the officer to receive data directly from the multispace meter ("MSM") space sensors and other software peripherals such as back-end citation management and motor vehicle checks. All citation information can be sent in real time from the handheld to the Parking Enforcement Office and is available immediately as opposed to a batch mode process[1]. This is both a customer service and an enforcement enhancement feature.

Sample Enforcement Device

PEOs are able to work more efficiently because all violation data on handhelds is in real time.

Table 2: Enforcement Handhelds – Cost of Ownership

Item	Initial Investment
Capital Cost per handheld with printer	$5,000 (per unit)
Management System Software	$4,000 - $8,000
On-going Fees	Varies based on system; from $0 to small fee per citation

Source: Walker Parking Consultants

SENSORS

The option to add parking space sensors to each parking space is on the cutting edge of parking management. The use of parking space sensor technology allows the monitoring of each space 24 hours a day, 365 days a year, and provides the live information necessary to help policy makers make the best decisions on time restrictions and pricing. This technology also offers the added benefit of increasing the overall efficiency of the parking enforcement staff by directing them to a potential violator. Recent study of the sensors in Los Angeles indicated that this technology
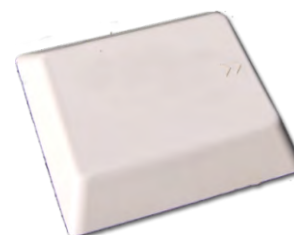
Streetline Parking Sensor

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[1] Enforcement handhelds that do not communicate in real time store all citation information in the device and download it to the server at the end of the officers' shift.

increased the average citation volume by nearly 2.6 times the previous average.[2]

Some vehicle sensor systems require the installation of routers and other wireless infrastructure on City street poles, traffic light poles and other utility poles. A single-space meter manufacturer offers an integrated sensor installed in the street below each space. The following is the price range provided by the manufacturer.

Table 3: Sensors – Cost of Ownership	
Costs	Integrated
Capital Cost per Sensor	$250
Operating Costs, Wireless Fees, and Data Management System	$3.75-$6.25 per space per month
Additional wireless hardware to be installed on City street poles?	NO

Source: IPS Group, Inc.

SUMMARY OF METER OPTIONS AND RECOMMENDATIONS

Walker recommends that the City deploy a mix of multispace and single-space smart meters.

Multispace smart meters are recommended for those block faces that have an economically viable number of contiguous spaces, with the intent to maintain a system-wide density standard of approximately 6 to 10 on-street spaces per multispace meter. The "pay and display" option is currently in use along N. Morton St and is recommended, as is consideration of a "pay by plate" option.

Single-space smart meters are recommended for those on-street metered spaces that do not meet the density standard, are geographically isolated, separated by physical streetscape elements (driveways, curb cuts, loading zones, etc.) or are located on streets with grades that do not meet accessibility standards.

Walker recommends that all on-street meters accept coins and credit cards for payment. Accepting banknotes will add considerable expense and maintenance to the system, and with credit card acceptance, is not necessary.

Walker further recommends that a pay-by-phone option be considered. Pay-by-phone adds convenience and benefits for both the motorist and the City at minimal

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[2] A recent study in Los Angeles indicates the volume of citations in the study area increased 2.6 times the previous average with the use of sensors when compared to the same area without the use of sensors.

cost. Smart cards are not recommended as this technology has been superseded by the acceptance of credit cards.

CONCEPTUAL METER COST

The first step in the cost analysis is to estimate the quantities and types of meters required. Based on Walker's analysis and observations, a total of 142 multispace meters and 57 single space meters are recommended, as shown in Figure 3: Recommended Meter Placement Map.

Assumptions used in our analysis include the following meter types and features:

- Pay and Display multispace smart meters;
- IPS single space smart meters where applicable;
- Coin and credit card acceptance;
- Back of house management system for monitoring meters; and
- Signs, installation and warranty.

While multispace meters cost more to purchase and install than single space meters with credit card acceptance, multispace meters tend to be more economical throughout the life of the system. Single space meter manufacturers charge additional credit card transaction fees (in addition to the merchant fees charged by credit card providers). Over the useful life of the meters, these fees typically exceed the initial purchase and implementation costs of multispace meters. Multispace meters also are less expensive to maintain, based on the reduced number of meters (fewer meters to collect and maintain). Because there are relatively few recommended areas for single space meters, the difference between providing a mixed system of multispace and single space meters vs. an all-multispace system regardless of the number of spaces served is minimal.

Walker generally recommends multispace meters in layouts that will enable the multispace meter to service six or more spaces, when single space meters are already in place. This number is reduced to about four spaces when no meters exist.

BASE METER COST

Based on a review of similar projects in the Midwest, the cost for multispace meters ranges from $7,500 to $9,500 per solar powered, pay and display multispace meter accepting coins and credit cards for the quantities expected. For this analysis, we use $8,500 per meter, not including installation, signage or options. Actual prices will be higher or lower, depending on the manufacturer and features selected.

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Single-space meters that accept credit cards have been easier to price, as there are a limited number of manufacturers providing these meters and only one manufacturer with several years of experience. Regardless of manufacturer, all single-space meter manufacturers have similar pricing of about $550 per meter head for upgrading existing meters. This cost does not include the base meter head housing, pole and installation. These items, which would already be in place for an existing system, add considerably to the cost of going to single space meters.

TYPICAL STANDARD WARRANTY AND SERVICE

The typical standard warranty included with both the multispace and single-space meter is one year, parts and labor. A local vendor may provide support for the manufacturer or act as the manufacturer's area representative and offer additional periods of maintenance and service, but this is not always available. Some manufacturers offer call center support for trouble shooting problems and all provide initial training for basic maintenance and servicing. For the most part the meters are component based and repair is done by swapping defective parts. Service is typically provided by each city's own staff.

CONSUMABLES AND INSTALLATION COSTS

Ongoing operating costs and installation must be considered in the analysis. Depending on the system, there are monthly fees per meter for connectivity, credit card processing fees, paper receipts and replacement batteries. These fees do not include ongoing maintenance fees to replace parts after the warranty or to service the equipment. Servicing the equipment typically includes wiping down the unit, cleaning the solar panel, and checking the battery, locks and inside the unit for moisture. Multispace meter installation includes mounting each meter to a concrete base (or existing sidewalk), installing signage and testing connectivity. Single-space meter installation includes installing poles and the base unit of the meter to collect coins.

Assumptions:

- Two and one-half transactions per day per meter, six days per week; (2.5 x 6 x 52 x 199 = 155,220)
- One and one-half transactions paid by credit card per day; (1.5 x 6 x 52 = 468)
- Three-year battery life; (199 batteries)
- Three signs per multispace meter; (3 x 142 = 426)
- $900 per multispace meter for installation (site prep, bolt down and configuration);($900 x 142 = $127,800)

- $600 per single-space meter for installation of pole and base unit; ($600 x 57 = $34,200)
- $50 per month per multispace meter for connectivity; ($50 x 12 x 142 = $85,200)
- $8.00 per month per single-space meter for connectivity; ($8 x 12 x 57 = $5,472)
- $0.20 processing fee per credit card transaction for single-space and multispace meters;($0.20 x 2.5 x 6 x 52 x 199 = $31,044)
- $0.13 vendor fee per credit card transaction for single-space meters; ($0.13 x 2.5 x 6 x 52 x 57 = $5,780)
- $120 per multispace meter battery; ($120 x 142 = $17,040)
- $35 per single-space meter battery; ($35 x 57 = $1,995)
- $35 per 3,500 receipts; and
- 1,200 on-street spaces.

Using these assumptions, we modeled the cost of the meter system as recommended with a combination of multispace and single-space meters and a multispace only system. Our opinion of cost for the upfront purchase and installation for the mixed meter system as outlined is roughly $1.49 million; while an all-multispace meter system is $1.41 million. Consumable expenses are about $100,000 higher per year for the single space meter system. Not included in the cost analysis are the labor costs, which would be higher for the single space meter system due to the large number of units in the field. The following tables provide our option of cost breakdown of for each scenario.

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Table 4: Meter Scenario Cost Analysis

Scenario 1: Mixed Device System			Scenario 2: SSM Only System		
Number of MSM:		142	Number of MSM:		0
Number of SSM:		57	Number of SSM:		1,200
Total Devices:		199	Total Devices:		1,200
Total Signs[1]:		426	Total Signs[1]:		0
Base Cost per MSM	$	8,500	Base Cost per MSM	$	8,500
Base Cost per SSM	$	550	Base Cost per SSM	$	550
Base Cost for Meters	$	1,238,000	Base Cost for Meters	$	660,000
Spare Parts[2]	$	62,000	Spare Parts[2]	$	33,000
Site Prep and Installation[3]	$	162,000	Site Prep and Installation[3]	$	720,000
Cost for Signage[4]	$	30,000	Cost for Signage[4]	$	–
Total Installed Cost[5]:	$	1,492,000	Total Installed Cost[5]:	$	1,413,000
Consumables			*Consumables*		
Annual Connectivity Fee[6]	$	91,000	Annual Connectivity Fee[6]	$	115,000
Receipt Paper[7]	$	9,000	Receipt Paper[7]	$	–
Battery Replacement[8]	$	6,000	Battery Replacement[8]	$	16,000
CC Processing Fee[9]	$	109,000	CC Processing Fee[9]	$	109,000
SSM Vendor Addl. CC Fee[10]	$	3,000	SSM Vendor Addl. CC Fee[10]	$	71,000
Total Consumables	$	218,000	Total Consumables	$	311,000

Assumptions
[1] Three signs per MSM.
[2] Spare parts projected at 5% of base cost.
[3] Site prep per MSM projected at $900; per SSM projected at $550.
[4] $70 per sign.
[5] Figures rounded.
[6] Monthly connection fee per MSM projected at $50; per SSM projected at $8.
[7] Receipt paper based on 2.5 transactions/space per day ÷ 3,500 receipts per roll x $35/roll; SSM do not issue receipts.
[8] Battery based on 3-year life at $120 per MSM; $35 per SSM.
[9] Credit card processing fee based on $0.20 per cc transaction; assume 1.5 cc trans/day/meter.
[10] Credit card vendor fee charged only for SSM transactions at $0.13 per transaction, assuming 1.5 cc transaction/day/meter.
 (Credit card convenience fees may be passed on to consumers)
Source: Walker Parking Consultants

LONG-TERM COSTS

The higher costs associated with operating the single-space meter system is most notable when the two systems are compared over several years. Single-space meter systems are typically an upgrade to existing meters; thus the upfront cost is considerably lower. In the case of Bloomington, there are no existing meters, thus the costs include a pole and lower unit housing for each single-space meter. This adds considerable cost to each metered space.

To show the projected consumable costs over a longer period, the basic assumptions are considered over a six-year period. The installed cost is assumed to be financed over the six years at 6 percent interest. The results are shown in the following table and graph, which support a mixed installation.

Figure 9: Six Year Cost - Hardware and Consumables

Option	Equipment	Cunsumables	Total
Scenario 1: Mixed Device System	$ 1,818,000	$ 1,308,000	$ 3,126,000
Scenario 2: SSM Only System	$ 1,722,000	$ 1,866,000	$ 3,588,000
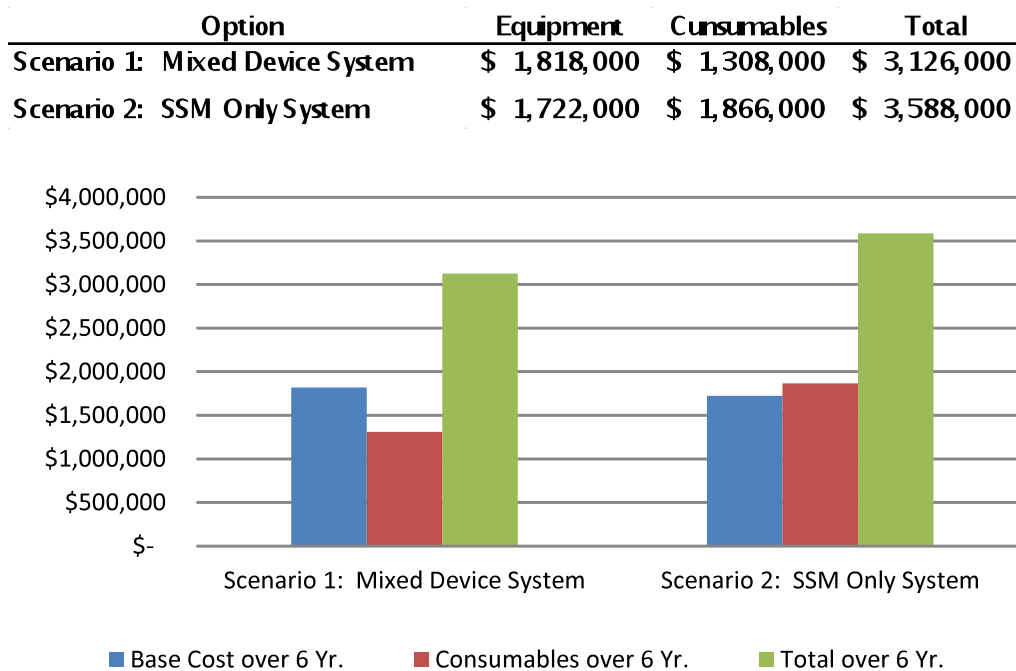
Source: Walker Parking Consultants

COMMUNICATIONS PLAN

Upgrading or replacing the parking meters is a major investment. A clear and effective communications plan is imperative to the successful implementation of new meters. It would be beneficial to the City to discuss strategies of successful implementation with vendors during the interview process.

COMMUNICATIONS ACTIVITIES

Based on other cities' experiences and successful installations of new meter systems, the following list provides examples of communications activities prior to, during and after installation:

- Six to three months prior to installing the new equipment, issue a press release announcing plans for new system, with a focus on the added customer convenience.

- Conduct community outreach meetings with stakeholders in advance of the meter change.

- Deploy a website with project updates and meter directions.

- Display sample meters in a public area for people to see, touch and feel prior to beginning the installation.

- Develop and provide informational and instructional handouts (card and/or fliers) throughout the Downtown and on the website, illustrating how to use the new meters.

- Develop a directional video for municipal television and/or YouTube.

- Issue a progress press release a few weeks prior to the initial installation.

- Install meters and signage with covers featuring the words "Coming Soon" so that patrons can see where the new equipment is installed.

- Post trained parking ambassadors around the new meters to assist patrons with their use.

- Issue a press release regarding the deployment of the new meters and areas scheduled for deployment.

- Provide citation warnings, rather than fines, for a short period of time following meter deployment.

SUMMARY OF COMMUNICATIONS RECOMMENDATIONS

An effective and comprehensive public awareness campaign will play a key role in a successful implementation program. The focus should be on the added convenience of the credit card payment feature, and enforcement officers should go through training to assist patrons as the new meters are deployed. The communications plan would provide information on key events impacting Bloomington parking access issues and should be responsible for increasing public awareness of Downtown parking through events, activities, publications, press releases, maps and other literature.

The Communications program should:

- Include a comprehensive "Downtown Parking" City web site.

- Respond to questions and requests from the general public for locations of parking facilities, pricing and availability.

- Maintain the integrity of Downtown parking promotional materials, and provide parking maps, business development packets and fact sheets.

- Provide day-to-day media relations, and generate press releases as needed, including use of social media.

- Provide public relations assistance to other Downtown events as needed.

This information should be disseminated by means of:

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

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

(3) Newspaper items or articles and media releases.

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

(5) Social media (Facebook, Twitter, etc.).

(6) Downtown meetings and presentations by the City parking manager about Downtown parking to businesses and civic groups upon request.

NEIGHBORHOOD PERMIT PROGRAM

For many residential neighborhoods, a Residential Parking Permit (RPP) program is among the more common strategies for controlling spillover parking from adjacent commercial uses. Where the spillover is almost entirely employee or visitor parking, the on-street spaces may be restricted to one- or two-hour parking or for parking by a

residential permit holder. Area residents pay a modest fee for a residential permit (and visitor permit if needed) that allows a vehicle to be parked on the street.

The environment of the residential neighborhood is not only enhanced by the reduction of nonresident parking, but also by the reduction of vehicular traffic caused by hunting for a parking space. The increasing spillover of public parking into residential areas has generated some resistance already and ultimately will drive residents to demand solutions.

The City of Bloomington currently administers an RPP program:

1. The program includes 10 zones.

2. Residents can obtain permits only for the zone in which they live.

3. Permits cost $25/year/vehicle.

4. Each resident can obtain one visitor permit for $25/year.

5. Permits do not guarantee the availability of parking.

6. Permits may be obtained at City Hall or by mail.

As meters are added to the Downtown core area, it will be necessary to manage on-street parking more intensively. Expansion of zones may be necessary, based on the spillover demand experienced.

Suggested changes to the Residential Permit Program include:

1. Increase the size or number of zones if spillover demand occurs after meters are installed and residents request permits.

2. Sell permits on the City website.

3. Analyze the cost of administration of the program, and adjust rates to cover the costs, if needed.

ON-STREET AND OFF-STREET STRATEGIES

On-street parking is often a critical parking resource despite the limited capacity it can provide. Some streets intentionally have been designed to provide on-street parking as well as moving traffic lanes. However, on-street parking is not solely adequate for even the smallest commercial areas. Generally, the goals of management of on-street parking relate to controlling who parks where, for how long and preventing spillover parking into adjacent neighborhoods.

On-street parking management strategies include adding or removing spaces, changing the permitted time limit, restricting parking to certain times or users and

designating some on-street spaces for preferential handicapped parking and carpool parking. On-street parking affects traffic movement on arterial streets critical for through-traffic, and conflicts over use of curb space for bus stops and deliveries can be a significant issue. Prohibiting parking in peak hours may provide a compromise between peak hour traffic needs and convenient parking for storefront businesses. It is important to review on-street parking restrictions for real need rather than habit. Parking rates for on-street spaces should be higher than off-street options. Higher rates will create more turnover of spaces and discourage individuals from utilizing these spaces as long-term storage.

Off-street parking is generally a more efficient mechanism for providing vast quantities of parking supply. Off-street spaces often cater to longer term parkers (including employees), thus freeing up on-street spaces for patrons of the Downtown. Parking rates in off-street facilities should, in general, be more economical than on-street spaces. This will provide an economic incentive to longer-term parkers to utilize these facilities. A discount program for employee parking in underutilized parking areas of some parking structures is recommended.

BIG TEN SURVEY

A comparison of Downtown on-street parking rates of municipalities that serve as home to Big Ten conference schools was conducted. In addition to Bloomington, all but one local municipality charges for on-street parking in the Downtown. Not surprisingly, the Downtown that did not charge for on-street parking had the lowest reported population. While a fee for parking was not charged for parking Downtown, time limits are posted and enforced.

The lowest rate charged by a Big Ten community is $0.50 per hour. The highest hourly rate is $2.00 an hour in Minneapolis, which actually has a few metered areas as high as $2.50 per hour. Based on the survey, overall median hourly rate is $1.25 per hour for parking at a meter.

A summary of the Big Ten city parking rate data is shown in the following graph.

Figure 10: Downtown Hourly Meter Rate
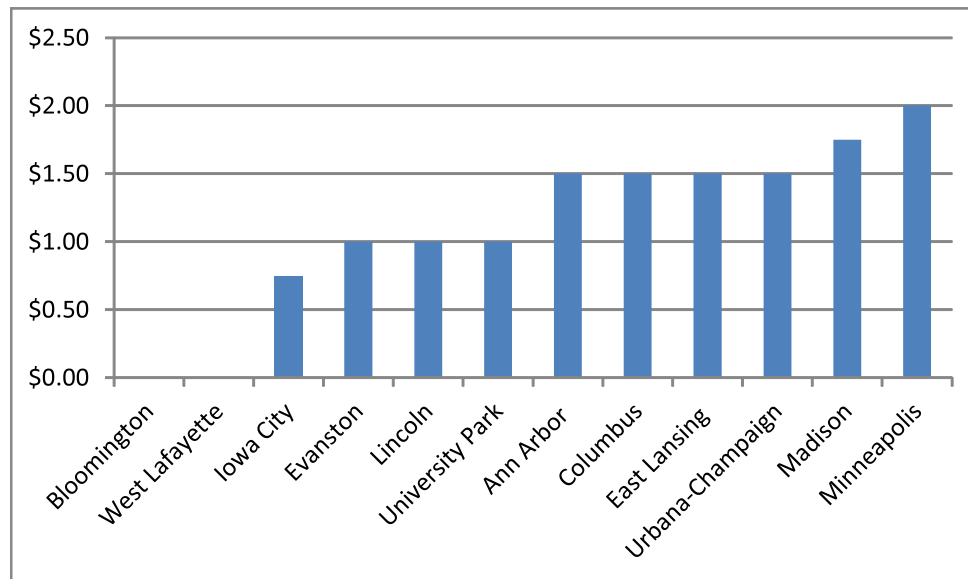
Source: Walker Parking Consultants, September 2012

Most municipalities enforce the meters Monday through Saturday, as early as 5:00 a.m. and as late as 10:00 p.m. The typical starting time is 8:00 a.m. and the typical ending time is 6:00 p.m. Enforcement should be based on demand and local conditions.

On average, time limits for the metered parking were 2 to 3 hours per parking session. Several municipalities offered short-term spaces at 15 to 30 minutes and long-term meters up to 10 hours. The long-term meters were located on the peripheral areas of the Downtown and provided at a lower rate for employee parking. Municipalities with higher rates were found to be much more likely to offer payment by credit card through either a multispace or single-space meter.

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The following table provides additional data from the survey.

Table 5: Big Ten Meter Survey

City	University	State	Enrollment	City Population	Hourly Meter Rate	Meter Hours of Enforcement
Bloomington	Indiana	IN	39,000	80,407	$0.00	5a–5p Mon–Sat
West Lafayette	Purdue	IN	40,000	29,596	$0.00	7a–7p Mon–Fri
Iowa City	Iowa	IA	29,000	67,873	$0.75	8a–5p Mon–Sat
Evanston	Northwestern	IL	8,000	74,486	$1.00	8a–9p Mon–Sat
Lincoln	Nebraska	NE	25,000	258,381	$1.00	7a–7:30p Mon–Fri and 7a–12p Sat
University Park	Penn State	PA	41,000	42,034	$1.00	8a–6p Mon–Sat
Ann Arbor	Michigan	MI	37,000	113,934	$1.50	8a–6p Mon–Sat
Columbus	Ohio State	OH	55,000	787,073	$1.50	9a–10p Mon–Sat
East Lansing	Michigan State	MI	43,000	48,579	$1.50	8a–6p Mon–Sat
Urbana–Champaign	Illinois	IL	37,000	122,461	$1.50	8a–9p Mon–Fri
Madison	Wisconsin	WI	41,000	233,209	$1.75	8a–6p Mon–Sat
Minneapolis	Minnesota	MN	45,000	382,578	$2.00	8a–10p Mon–Sat

Average	$1.13
Median	$1.25

Source: Walker Parking Consultants, September 2012

PARKING RATES

The primary purpose of charging a fee for parking convenience is not the collection of revenue, although this is important, but rather to allocate a scarce resource efficiently. Most highly valued commodities in limited supply are often most fairly rationed by price. Charging appropriate parking fees allows the market participants to value each parking asset properly. The City controls a finite number of parking spaces (1,200) and needs to manage the allocation of that scare resource carefully.

The relative value of parking to the typical user declines from high to low as follows:

- Proximity to destination to distance
- Visibility from the destination to obscurity
- Simplicity to complexity (surface parking to structured parking)
- Perceived safety to danger (light to darkness, above to below ground)

With these criteria in mind, most parkers perceive the relative desirability of parking from high to low as follows:

1. On-street parking
2. Surface lot parking

3. Structured parking (above grade)
4. Structured parking (below grade)
5. Remote parking

In the Downtown, on-street parking is perceived by the public as the most valuable asset in the parking system. In Bloomington, the most valuable parking asset is free!

Even though this most convenient of parking is being provided for free, it is not without significant cost. Because of higher land cost, greater density of development, higher development costs of structured parking and the higher property tax burden, the real cost of providing adequate parking is higher than in comparable suburban markets.

As building sites become fully utilized with highest and best use, a significant portion of the parking requirement must be satisfied off-street. The existing supply (1,200 spaces) of on-street parking is finite. This supply appears to be nearly able to accommodate the current activity level. As growth occurs, the current supply of on-street parking will not be sufficient to provide the convenience of short-term and errand parking.

For example, the replacement cost to reproduce 1,000 garage spaces at a conservative conceptual cost of $15,000/space (without land) is $15,000,000. This is a very significant investment by the City. And for the foreseeable future, the City may be the sole developer of public parking, because parking revenue is not sufficient to amortize the cost of development and operation.

The following table cross-tabulates project cost per space versus annual operating cost per space to show the monthly revenue required per space to break even. When the cost of land is not considered in the cost of the parking facility, an unattended parking structure with a $15,000 per space project cost (at 6%, 25 yr. amortization schedule) and $400/space per year in operating expenses will require more than $131/space per month to break even.

Table 6: Monthly Cost per Space

Project Cost Per Space	Annual Operating Cost Per Space						
	$300	$400	$500	$600	$700	$800	
$ 12,000	$103	$112	$120	$128	$137	$145	
$ 13,000	$110	$118	$126	$135	$143	$151	
$ 14,000	$116	$125	$133	$141	$150	$158	
$ 15,000	$123	$131	$139	$148	$156	$164	Monthly Revenue Per Space Needed
$ 16,000	$129	$138	$146	$154	$163	$171	
$ 17,000	$136	$144	$152	$161	$169	$177	
$ 18,000	$142	$151	$159	$167	$176	$184	
$ 19,000	$149	$157	$166	$174	$182	$191	
$ 20,000	$155	$164	$172	$180	$189	$197	

Rate: 6.00%   Amortized Period: 25   Years

Source: Walker Parking Consultants

Paid parking typically provides the revenue to finance parking improvements, and current economic conditions are increasingly demanding that parking be more self-sufficient. Charging parkers $40/month or less for lease parking and providing free transient parking will not return enough to recover costs of ownership and operation. The City of Bloomington is currently charging parkers $0.50 per hour at each of the City's three garages. Assuming the typical long-term parker's length of stay is approximately 9 hours, the daily parking rate is $4.50 per day, or $90 per month.

Providing free on-street parking has damaged the ability of the parking garages to collect short-term transient parking fees. This, in turn, damages the system's ability to collect monthly lease fees from parkers who soon realize that they can park for free by the day. Thus, while the Parking Enforcement division sees the necessity to collect transient revenue, it is limited in its ability to do so by having to provide free parking. In this manner, the current policy to provide free on-street parking damages the ability of the Downtown parking system to generate revenue, which damages the feasibility of private and public parking investments by depriving off-street parking projects of meaningful revenue streams.

Free parking increases the tax burden on all city property owners, not just parkers. Providing free parking puts the City of Bloomington and its taxpayers in the position of being the ultimate, sole provider of Downtown parking for the foreseeable future because parking revenue at today's parking rates is not sufficient to amortize the costs of constructing new parking.

RECOMMENDATIONS

Parking pricing (also called user pay and metered parking) refers to direct charges for using a parking space. Efficient parking pricing can provide numerous benefits including increased turnover and therefore improved user convenience, parking facility cost savings, reduced traffic problems and increased revenues. Free parking, argues author Donald Shoup[3], has contributed to auto dependence, rapid urban sprawl, extravagant energy use and a host of other problems. Planners mandate free parking to alleviate congestion, but end up distorting transportation choices, debasing urban design, damaging the economy and degrading the environment.

Walker recommends pricing strategies that place a higher value on the on-street spaces vs the off-street spaces. This approach will encourage turnover of the on-street spaces, while keeping rates for off-street attractive to longer-termed parking patrons (employees).

Parking Rate Recommendations:

- Initial on-street rates equal to $1.00/hour.
- No change in hourly rates for garages.
- Parking lots should be priced at garage rates.

TIME RESTRICTIONS VERSUS METERS

In the recent past, paid parking was perceived as a negative competitive element impacting business activity in comparison to suburban developments, where parking is generally provided for free. In response to this inequity, many cities revised their municipal ordinances and removed on-street parking meters within the Downtown. In its place, metered parking spaces are usually converted to time-limited spaces designated by signage and enforcement.

The intention of the conversion from on-street metered spaces to time-limited spaces was to remove the financial disincentive to the public to visit the business district, and to remove a disincentive to businesses to locate in the area. There are various pros and cons to this strategy. Specifically, this policy had the following positive aspects:

- This policy does reduce the cost of parking for most short-term and errand parkers.

- It creates the impression of increased activity due to high occupancy of on-street parking spaces.

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[3] Donald Shoup, *The High Cost of Free Parking*, Chicago: Planners Press, 2005 and 2011.

- Free short-term parking may improve the viability of some ground floor retail and commercial operations.

- This policy partially balances the competitive position of Downtown retail and some office uses in the area that need, but cannot provide, sufficient short-term parking.

- In the area, many properties are not large enough to provide sufficient on-site parking. Free short-term parking reduces the cost of ownership for some property owners and some tenants by relieving them of the responsibility to provide sufficient short-term parking, effectively reducing the cost of ownership or effectively subsidizing tenant rent. The parking district tax does shift some of this cost back to local property owners.

- It provides evidence that political bodies are responding to the perceived interests of stakeholders to reduce parking costs.

However, this policy decision has a number of unintended, negative consequences.

- Under the current policy, many on-street parking spaces in the study area continue to be occupied by long-term parkers.

- Some users re-park at two-hour intervals. Some long-term parkers actually may arrive late and leave early or periodically throughout the day. Some may arrive by 9:00 am and leave by 11:30 am for lunch or an appointment, and repeat this behavior in the afternoon.

- Some business owners or managers are frequent violators, who rationalize their occupancy of the closest spaces to their businesses by their frequent errands, banking needs, etc.

- These behaviors exist because parkers do not have an appropriate method of making a relative decision of the value of on-street parking. The penalty is a fine that is not significantly greater than the cost of parking. In fact, if a citation is avoided with any regularity, the penalty could be less than the cost of parking.

Bloomington would not be alone in the decision to re-institute paid on-street parking. A number of cities have removed parking meters in the past and have since decided to reinstall them. The trend of the 1980s when developers constructed shopping centers outside of traditional Downtown areas providing free surface lot parking in competition with Downtowns has come full circle. Suburban or highway interchange shopping areas with acres of parking are being replaced with new urban town-center, mixed-use developments and revitalized urban cores. Zoning ordinances are increasingly reversing strategies now providing maximum allowable parking capacities for urban development.

The focus of many communities is to revitalize Downtowns through promotion of a unique built environment, pedestrian or bike access, and nearness to town center workplaces and entertainment opportunities. Cities are reconsidering the value of the inherent density and are capitalizing upon resources through real valuations. Part of this movement includes reinstalling parking meters to collect parking fees establishing a premium market value for the most desirable parking spaces.

RECOMMENDATIONS

The on-street, time-limit restriction is established by code based on a two-hour parking limit per 100-block. Thus, if a vehicle parks in the morning, leaves the area and returns in the afternoon, it may receive a citation. Additionally, there are a limited number of paid meter spaces located along Morton Street, north of 7th Street. Walker recommends Bloomington transition its on-street parking system from the current two-hour time-limit system to a metered system, eliminating the two-hour time-limit. The 2007 study revealed an increase in parking demand after 5 pm (partially due to the large concentration of entertainment venues and restaurants). The heightened demand during this period increases the pressure on the finite on-street parking resources. For this reason, we recommend enforcement hours extend from 8 am to 10 pm. Most restaurant demand drops off after 10 pm, reducing the pressure on parking.

PARKING ENFORCEMENT POLICIES AND PROCEDURES

Although perceived as a negative by customers, parking enforcement does serve an important function in keeping prime parking spaces available to customers. Where enforcement is weak and rates are low, employees will have a tendency to park in a location that is most convenient for them. Customers, arriving later than first-shift employees, can't park in these convenient spaces and must look a block or two away. Where enforcement is good and rates make it unappealing to repark on the same street hour after hour, employees will seek out parking a little farther away. Since they know the area well and stay many hours, it is not unreasonable to expect them to walk a little farther from their destination. Visitors who does not know the area and may only stay and hour or two should be able to park closer to their destination.

CONCEPTUAL FINANCIAL IMPACT

The following description sets forth the basis for the conceptual projection of revenue associated with the new meters. Revenue has been projected based on the integration of information derived from comparable operating statements and a project specific revenue model developed by Walker. The following revenue projection is conceptual in nature and as such results may vary.

PROJECTED METER REVENUE

Transient parking revenue is determined by two variables: projected transient demand and the average transient parking rate (fee). The parking demand model applies the distribution of short-term and long-term transient patrons to determine the number of patrons in each category. Once the demand for each type of transient patron was determined, Walker multiplied the projected parking demand by an average hourly parking fee. By analyzing the historical length of stay at similar facilities, then applying the projected rate schedule to the length of stay distribution, the weighted average hourly parking fee is computed. With the two key variables identified, the transient parking revenue is calculated accordingly.

ASSUMPTIONS

The following assumptions are used to generate the preliminary financial pro forma for the prospective project.

1. Estimated number of spaces subject to meters: 1,200.
2. Estimated number of days/year meters are enforced: 302.
3. Estimated hours per day meters are enforced: 14 (8am-10pm).
4. Assumed hourly rate: $1.

The following table illustrates three revenue options for meters, varying the occupancy and pay rate slightly. Occupancy and pay rate (which includes discount for non-paying parkers) may vary greatly depending on factors such as time of day, month and year.

Table 7: Gross Meter Revenue Projection

	Spaces		Annual Days		Hours Per Day		Annual Potential Hours	Annual Potential Hours		Hourly Rate		Occupancy & Pay Rate		Potential Meter Revenue
Option 1	1200	x	302	x	14	=	5,073,600	5,073,600	x	$ 1.00	x	50%	=	$ 2,536,800
Option 2	1200	x	302	x	14	=	5,073,600	5,073,600	x	$ 1.00	x	45%	=	$ 2,283,120
Option 3	1200	x	302	x	14	=	5,073,600	5,073,600	x	$ 1.00	x	40%	=	$ 2,029,440

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TICKET REVENUE

Enforcement ticket revenue may have no significant change from current levels. Violations of the meter time limits may take the place of violations of the two-hour parking limits.

GARAGE REVENUE

Garage occupancy rates may increase with the introduction of meters on-street. Thus, revenue rates are expected to increase as well. The garage parking rates are recommended to be less than the $1.00/hr. on-street rates, thus making the off-street parking option more appealing to the long-term parking patron.

STAKEHOLDER GROUP MEETINGS

The purpose of Task #1 was to engage stakeholders in discussing parking management opportunities and to elicit opinions and thoughts regarding parking policy issues. This section summarizes the discussions of the stakeholder group meetings.

Five separate stakeholder group meetings were conducted on September 6 and September 27, 2012. The meetings involved the following groups:

- Chamber of Commerce
- City Council
- Downtown Bloomington Inc.
- Indiana University/Monroe County
- Neighborhood

Attendees included a cross-section of people representing different businesses, institutions, governmental agencies, and non-profit organizations. These meetings were facilitated by the City of Bloomington and Walker Parking Consultants.

The focus group meetings were conducted in a relaxed and professional environment. The meeting attendees openly expressed their opinions/perceptions about parking in Downtown Bloomington.

FOCUS GROUP ISSUES

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

- Lack of convenient parking – Some stakeholders expressed an opinion that convenient parking is not available in the City of Bloomington. They also shared their dissatisfaction about the lack of short-term parking. There is not enough turnover of on-street spaces.

- Perceived safety concerns – This was a common theme for all focus groups. They all indicated that there is a perceived safety issue especially as it relates to the parking garages. Lighting and landscape sometimes play a role in perceived safety, leading to many opting not to walk Downtown if areas are dark and/or hidden by overgrown landscaping.

- On-street parking system – Stakeholder opinion varied from some understating the purpose of meters and wanting them installed, to others that felt installing meters will hurt businesses. Many stakeholders would like enforcement to be more consistent.

- Availability of Free Shuttle – Stakeholders in the Downtown area felt that free shuttles working in tangent with lower garage rates would encourage parking further away from destinations.

- Lower Cost Parking – Some stakeholders would like the city to provide options for employee parking that would include either free or reduced fees for parking either in underutilized garages or perimeter parking areas.

Notes from each stakeholder group are listed on the following pages.

STAKEHOLDER NOTES

CHAMBER OF COMMERCE

Comments:

- High value spaces (around the square) should be metered to allow more turn over of those spaces
- Metering will make people, employees, use the garages because there will be a financial incentive

- Make garages more user friendly -multi payment meters, people don't carry change anymore.
- Meters will drive patrons to destinations with free parking
- Downtown has unique destinations, people will still come, and meters will have no adverse effect.
- What is to keep the "two hour shuffle" people from paying the meters all day?
- Downtown currently is seeing its lowest occupancy rate since the 80's. To keep businesses Downtown remember that meters can have a negative tone & cautioned the City to reexamine before installing meters
- What is the capacity of the garages?
- What will the hours, days be for parking meters
- Would like Valet Parking
- Buskirk Chumley looking into the valet parking scenario for Thursday-Saturday nights
- Phase in meters
- When the meters were removed the last time, some businesses saw an increase in customers
- There is not enough parking during certain times, other times there is plenty of parking
- Maybe a new garage needs to be built with the funds coming from Downtown businesses.
- Problem was created by City by allowing so many apartments and now hotels. These places should provide their own parking
- Look at validating parking for customers
- Kirkwood should be metered
- Credit card usage is key for meters
- Would like to be able to move cars from area to area after paying meters
- Downtown is lacking enough parking
- Low parking rates will not help with turnover
- 4th street garage is full and experiences a lot of vandalism and loitering
- If parking rates are too high, you will drive away business
- City should consider the impact of the B-Line Trail

CITY COUNCIL

Comments:

- Training will be needed with the new meters
- Will meters accept paper currency?
- Varying rate bands is important
- Change machines may be needed
- Will meters accept pay by phone or text?

- Will technology on enforcement need upgrade?
- Signage needs to be clear
- Where will employees park?
- Enforcement is needed in the evenings
- Meters may encourage businesses to move
- Need increased rates, the longer you park, the more you pay
- Parking ticket prices may need to be increased
- Merchant validation programs may be needed
- Merchants are concerned paid parking will hurt businesses
- Maybe fund employee shuttle with parking revenues
- Going from free parking system to paid parking system might be a public relations issue
- Keep it simple

DOWNTOWN BLOOMINGTON INC.

Comments:

- Multispace meters are easy to use
- Meters need to accept multiple forms of payment
- Rates for on-street should be higher than off-street
- There appears to be lots of vandalism in garages
- It is easier to use single-space meters
- Need some free parking for shorter-term parking
- Some spaces around the courthouse should be designated as 30 minute parking
- People are moving their cars every two hours now
- County employees are using all the spaces
- Most people expect to pay something for parking
- The current 2-hour limit is too short, 3-hour might work better
- Enforcement is strict
- Non-profits rely on volunteers and need free or cheap parking
- Churches Downtown rely on the on-street parking spaces
- Saturday enforcement especially in summertime may not be needed
- Enforcement after 5 pm may not be needed
- Install all metes are once, do not phase them in
- Will new hotels have their own parking?
- When can the issue with putting in meters be debated?
- After on-street meters are put in, more pressure will be put on private lots
- B-Line parking will increase pressure on private parking
- Churches would prefer no enforcement after 5 or on Sundays

- The Downtown parking study was done in 2007, times have changed, will meters kill business?
- Why were meters taken out in 1982?
- Retail merchants rely on free parking
- Retail customers are suffering due to lack of parking
- Meters on the square will help merchants
- The current policy placing meters in the parking garages is a problem
- Garages need attendants
- Garages need cleaned
- Garages need monitored
- Would meters have a positive impact on the city? Are their studies that prove that?
- Offer a discount for pre-paid parking
- Allow purchase of parking passes online
- The 4th street garage is scary, stinks and is not safe
- Do not like meters in garages
- Allow Downtown employees reduced rates in garages
- Parking regulations have to be clear
- Employees need some place for free parking, might need park and ride lots

INDIANA UNIVERSITY/MONROE COUNTY

Comments:

- The 2 hour limit may be shorter than needed
- A public outreach program is needed
- Meters should accept coins as well as credit cards
- The current multispace meters seem to take a long time to print receipts
- Meters should be labeled clearly
- ADA compliance is essential with meters
- 4 hour ADA spaces are needed
- Extending the time limit for parking may be counterproductive to turning over spaces
- Enforcement should start at 5 am
- City needs to promote Downtown parking
- The county courthouse has a lot of customers
- County employees should be told not to move cars every 2 hours
- The county currently runs a shuttle for employees to remote lots
- The library depends on the on-street parking spaces
- The library does not want to see paid parking on-street
- The library does not have an adequacy supply of parking
- The library has 145 employees at the main branch

- The price of parking should be high enough to encourage turnover, but not too high

NEIGHBORHOOD GROUPS

Comments:

- The current neighborhood parking permit program works well
- Prefer parking in front of our own homes
- Encourage more sustainable parking to help reduce demand
- People may be encouraged to car pool
- Like the multispace meter option
- Try charging a nominal fee for the first hour
- Revenue from neighborhoods should stay in the neighborhoods
- Designated employee parking is needed in the garages at lower rates
- Small businesses may be hurt by meters
- Encourage employees to park in remote areas
- There is a lack of enforcement during the Farmer's Market on Saturdays
- The Farmer's Market puts a huge strain on parking

APPENDIX A: SCOPE OF SERVICES

SCOPE OF SERVICES

TASK 1 – STRATEGIC IMPLEMENTATION

Inform stakeholders on the improved parking management opportunities available to the City of Bloomington and elicit their opinions and thoughts through the following outreach program:

1. Spend up to two days in Bloomington meeting with individual stakeholders to elicit their opinions and thoughts regarding parking policy issues.

2. Prepare and deliver one formal presentation at a public meeting of the City's choice.

TASK 2 – PARKING POLICY AND MANAGEMENT CONSULTING

1. Prepare a policy statement describing the relationship between on- and off-street parking and how rate strategies should be coordinated.

2. Identify and recommend future locations for parking meters within the 60-block area defined in Walker's previous study.

3. Develop a cost estimate of parking meters, related signage, curb painting and striping to be installed.

4. Advise City on the impact that installing parking meters may have in residential areas. Discuss options for reinvesting ticket surcharge in residential neighborhoods.

5. Review and comment on parking time restrictions on a conceptual basis.

6. Review percent of parking tickets that are overturned and recommend changes to the City's appeal process, including consideration of how other cities handle appeals and the City's statutory obligations.

7. Consider and advise the City regarding enforcing time limits versus allowing additional time to be added to meters.

8. Review and comment on changes to parking enforcement policies and procedures.

9. Review and comment on residential parking permit program rates. Comment on charging different rates for residents and non-residents.

10. Conduct a benchmarking study of parking rates charged at other Big Ten schools and cities in which these schools reside.

11. Identify goals and needs of parking system.

12. Review and recommend City parking rates and policy for increasing rates, especially the relationship of on-street and off-street rates.

13. Review and comment on City's RFP to be issued to parking meter manufacturers.

14. Review and comment on parking operator agreement.

15. At a conceptual level, comment on the supply and location of accessible spaces as they relate to the ADA requirements. (City will provide inventory of on-street and City-owned accessible parking spaces on a block face basis. Walker will not be recommending specific locations of accessible parking spaces)

16. Evaluate staffing levels and make recommendations for overall management of both on-street and off-street spaces, as well as enforcement and customer service activities.

17. Address the following items, as they relate to new metered parking, on a conceptual level:
return on investment on new metered parking; impact on ticket revenue; impact on garage revenue.

TASK 3 – REPORT AND RECOMMENDATIONS

1. Prepare and submit a draft report in PDF format for City review and comment.

2. Meet with the City to review and discuss the draft report.

3. Following City's review of draft report, we will produce a final report, incorporating the City's comments, and provide a PDF format copy.

APPENDIX B: BLUE SQUARE ANALYSIS

WALKER
PARKING CONSULTANTS

One Place. One Partner. One Solution.

BlueSquare Resolutions (BSR) offers the most flexible and technology advanced payment acceptance options in the payment industry, providing merchants access to a variety of Point-of-Sale (POS) payment solutions to match individualized business needs.

Reducing the Cost of Payment Acceptance

We provide merchants with a simple, single interchange fee structure, eliminating the layers of fees, ambiguity of statements and internal cost and time merchants dedicate to managing their interchange fees. We work with our clients to:

- Eliminate third party technology costs
- Monitor and manage interchange expenses
- Understand the complexity of the payment industry and data security requirements

Advance Merchant Solutions

Transactional cost is only half the expense of payment acceptance. BSR provides operational savings by providing a multitude operational solutions.

- Next day funding available[1]
- Portfolio and dashboard reporting services
- 24/7/365 access to customer support
- Customizable fraud and risk management systems
- Superior fraud protection and chargeback reduction techniques.
- Complete payment gateway solutions (Virtual terminal, shopping chart, API)

Put Our Experience to Work for You

With over 50 years experience in payment solutions, BSR team members are experts in reducing payment acceptance costs and consulting directly with you to ensure that your savings are amplified. We believe that diligence is required to maximize savings, and we are prepared to offer that guidance. BSR resolves to reduce your costs, and we are very good at what we do.

[1]Clearance time for funds may vary depending on your Demand Deposit Account.

INFO@BLUESQUARERESOLUTIONS.COM | WWW.BLUESQUARERESOLUTIONS.COM | TEL 1-888-356-7782

Five Points To Savings

Opportunities exist to achieve savings in your electronic payment acceptance.

1. Transaction Fee

This is a fee charged to process each transaction regardless of the transaction size. Often times, this fee can be reduced.

2. Reducing Interchange Premiums

The interchange premium, also called a discount rate, is the fee charged above the base interchange rate. In many cases, there is some flexibility in the premium charged.

3. A Well Trained Staff

Making sure your staff is properly trained to follow credit card procedures can help control cost and may also reduce fraudulent transactions.

4. Using Key Information Like AVS (Address Verification Service)

Simple prompts on your credit card machines like address, zip code, purchase order # and invoice # are basic key-strokes that can and will reduce your credit card fees.

5. Hidden costs

Many statements have hidden costs associated with them that may not have been disclosed in the beginning. Let BlueSquare find them with a free pricing analysis.

SAMPLE SAVINGS ANALYSIS	Current Processor	BlueSquare Resolutions	Savings with BlueSquare Resolutions
Merchant Monthly Sales Volume	$15,291	$15,291	
Number of Monthly Merchant Transactions	477	477	
Merchant Average Ticket	$32.06	$32.06	
Blended Interchange Rate	2.26%	1.95%	
Transaction Fee	$0.12	$0.08	
Monthly Interchange Cost	$345.57	$298.17	$52.60
Monthly Transaction Cost	$57.24	$35.78	$21.46
		Total Monthly Savings:	$74.06
		Total Annual Savings:	$888.72

BLUE SQUARE RESOLUTIONS

Business Solutions

BSR offers the most flexible payment acceptance options in the industry. Allowing merchants access to a variety of Point-of-Sale (POS) payment solutions to meet any potential business need.

Terminals – We support a full range of POS terminals, peripherals, and supplies designed to save both time and money. Lease or purchase… we can help.

PCI Compliance- We provide cost-effective solutions that help you keep your customer information safe and secure.

Virtual Terminal – With internet access, you're already 99% on your way to processing credit cards. Virtual terminals take the place of terminals or a POS. Eliminate your need to spend money and time on costly hardware and software.

Mobile Solutions - Enjoy the freedom and versatility of mobile payment acceptance. BSR offers a complete array of solutions for all smart phones and wireless terminals.

Shopping Carts - Already have a web-based shopping cart? BSR supports all major shopping carts. Need a shopping cart? We have the solution ready to go.

Check / ACH Solutions - Allow your customers to pay for goods and services electronically using the ACH network. We offer a virtual terminal to handle credit, debit transactions. We arrange recurring check transactions to improve your cash flow every month.

Cash Advance Solutions - We offer short-term working capital to many businesses through our referral program.

Loyalty and Rewards Programs - Complete custom gift, loyalty, and rewards card solutions designed specifically for your business.

**Contact us today and let the power
of BlueSquare work for you!**

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BLUESQUARE RESOLUTIONS

Merchant Name:	Pay Station
Current Processor:	TSYS
Business Type:	Auto Service
Date Prepared:	9/12/2012

Discount Savings

58.20%

Current Provider		
Total Monthly Sales:	$	38,011.50
minus: AMEX sales	$	-
Total Bankcard Sales:	$	38,011.50
Total PIN Debit Sales:	$	-
Total Monthly Transactions:		2534
minus: AMEX Transactions		0
Total Bankcard Transactions:		2534
Total PIN Debit Transactions:		0
Total Average Ticket:	$	15.00
Total Bankcard Average Ticket:	$	15.00
Total Interchange Fees:	$	716.15
Interchange Rate:		1.88%
Total PIN Debit Network	$	-
Acquirer Discount Avg:	$	272.78
Basis Points		0.0072
Assessment Fees:	$	41.81
Assessment standard rate		0.0011
Transaction Fees:	$	253.40
Transaction Per Item	$	0.10
Monthly Fees:	$	5.00
PCI Compliance Fees:	$	-
Visa Integrity Fees:	$	8.73
Visa APF / MasterCard NABU:	$	44.57
Visa Misuse of Auth and Zero Floor:	$	-
Chargeback Fee:	$	-
Cross Boarder Fee:	$	-
International Fees:	$	-
Batch Fees:	$	-
Total Fees:	$	1,342.44
Effective Rate:		3.53%

BlueSquare Resolutions		
Total Monthly Sales:	$	38,011.50
minus: AMEX sales	$	-
Total Bankcard Sales:	$	38,011.50
Total PIN Debit Sales:	$	-
Total Monthly Transactions:		2534
minus: AMEX Transactions		0
Total Bankcard Transactions:		2534
Total PIN Debit Transactions:		0
Total Average Ticket:	$	15.00
Total Bankcard Average Ticket:	$	15.00
BSR Interchange Projection:	$	716.15
Interchange Rate:		1.88%
Total PIN Debit Network	$	-
Acquirer Discount Avg:	$	114.03
Basis Points		0.0030
Assessment Fees:	$	41.81
Assessment standard rate		0.0011
Transaction Fees:	$	177.38
Transaction Per Item	$	0.07
Monthly Fees:	$	5.00
PCI Compliance Fees:	$	3.95
Visa Integrity Fees:	$	8.73
Visa APF / MasterCard NABU:	$	44.57
Visa Misuse of Auth and Zero Floor:	$	-
Chargeback Fee:	$	-
Cross Boarder Fee:	$	-
International Fees:	$	-
Batch Fees:	$	-
Total Fees:	$	1,111.62
Effective Rate:		2.92%

Monthly Savings:	$	230.82
12 Month Savings:	$	2,769.79
36 Month Savings:	$	8,309.36