



# City of Billings

## Downtown Parking Plan

Final Report

January, 2010



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January 15, 2009

Chris Mallow, Parking Supervisor  
Parking Division  
City of Billings  
210 North 27<sup>th</sup> Street  
Billings, MT 59103

Dear Mr. Mallow,

Please accept this Downtown Billings Parking Study report. This document is the final product of the parking study work undertaken by the City. The report documents background research, analysis and recommendations for consideration. Overall the recommendations presented are intended to enhance the efficiency of the parking system, coordinate with other downtown goals and objectives and to help the City plan for its future parking needs.

The study was initiated late in 2008 with a draft report issued in the spring of 2009. Review of the initial draft report by the City and Parking Advisory Board led to the request for re-examination of several aspects of the background information used as part of the analysis. As a result, the consultant conducted a follow-up investigation of parking utilization in the fall of 2009 and subsequently updated the report to include new information and comparative analogy between the winter 2008 and fall 2009 investigations.

Following the update and preparation of a final version, a second review of the work and document by the Parking Advisory Board led to acceptance and recommendation for submittal to the Billings City Council for further consideration. Rich and Associates would like to extend sincere gratitude to the Billings Parking Advisory Board for their efforts in helping develop the parking study. Special thanks to Chris Mallow, Parking Supervisor and Bruce McCandless, Assistant City Administrator.

Parking Advisory Board Members

Nick Blake

Leticia Moore

Steve Bruggeman

Don Olsen

Scott Godfrey (new member)

Bruce Simon

Mitch Goplen (new member)

Scott Wetzel (past member)

Randy Hafer (Chair)

Sincerely,

John Revell, AICP  
Rich and Associates, Inc.

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## EXECUTIVE SUMMARY



## EXECUTIVE SUMMARY

This parking study prepared for the City of Billings serves to examine the existing and potential future parking needs within the downtown as well as address parking operations to aid in optimizing the City's parking system. The study was initiated with a comprehensive inventory of the on and off-street parking, land use inventory and turnover and occupancy study. The parking and building inventory data was used in conjunction with survey data and field observations of parking turnover and occupancy to determine current, 5 year and 10 year future parking demand models.

A follow up turnover and occupancy study was conducted in October of 2009 at the request of the City's Parking Advisory Board. The follow-up observations were used as a second data set to verify the accuracy of the original parking observations and to provide supplemental information used as part of the parking analysis. The two observations correlated well and confirmed that both observations of the parking were valid tools to be used as part of the analysis.

The key findings of the study confirmed that overall the City has adequate parking with shortages occurring in some pocket areas. The parking shortages can be mitigated by operational enhancement outlined in **Section 4** of the report. These operational enhancements include recommendations on parking allocation, durations, pricing, enforcement, signs and marketing.

Future developments largely drive the need to consider additional parking in the downtown area. The key developments that will tentatively create the need for additional parking included the moving of the Federal services to a new facility within the downtown and plans to rehabilitate the old facility as leasable commercial space, the planned Stockman Bank building and the proposed new Convention facility. Other impending changes that will influence parking include the relocation of the Public Library and other redevelopments of existing building space in the downtown.

Several potential new parking locations were identified in the downtown area. These sites were refined to five prime locations based on input from City staff and from the Parking Advisory Board. An effective parking radius or service area zone analysis was prepared for each site to determine which sites demonstrated adequate parking demand for further consideration. Montana Avenue at 28<sup>th</sup> Street emerged as a key location to pursue new parking opportunities in conjunction with the development of the proposed convention facility with a secondary site located at 1<sup>st</sup> Avenue and 29<sup>th</sup> Street.

The second new parking area identified as optimal from a demand perspective was the site located at 27<sup>th</sup> Street and 4<sup>th</sup> Avenue. This site presents an opportunity central to several key developments. Developments near the 27<sup>th</sup> and 4<sup>th</sup> site are also slated to occur sooner, making this a priority site.

The City requested that Rich and Associates examine the potential for revising the operating equipment use in the City's parking structures. Specifically, the City wanted to know if there could be cost saving achieved by upgrading the equipment and operations in the parking facilities. An examination of the equipment and operations revealed that some cost savings and possible revenue increases could be obtained by implementing a cashier-less operation at some of the parking facilities. **Section 5** deals more in depth with regard to new equipment and revised operations.

Finally, the consultant was tasked with considering the possibility of the disposition of Park 4. Specifically, proposals had been tabled to sell Park 4 to a private entity interesting in using the facility for employee and other long-term parking use. Rich and Associates examined this possibility in light of the entire parking system and determined that since the facility is primarily used for long-term parking, the City could obtain higher and better use of its capital resources by selling the facility and using the funds to undertake new parking in higher demand locations.

The selling of public parking by the City may seem contrary to a goal of providing more public parking. However, the opportunity to use the capital to help build new public parking in higher demand areas is the primary objective with the sale of Park 4. Further details on the potential disposition of Park 4, rational and key considerations are located in **Section 4**.

Overall the study concluded that the City is on the right track with regard to its parking operations and that demand management techniques will adequately address existing parking shortages. Parking supply management will need to take precedence as development occurs in the downtown and as a means of pursuing economic development, adaptive re-use of existing building space and to continue to evolve the regional facility aspects of Billings' downtown area.

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## **SECTION 1: PARKING STUDY OVERVIEW**



## SECTION 1 - PARKING STUDY OVERVIEW

### 1.1 Background

The Billings Downtown Parking Plan serves as both an examination of current and future parking needs and represents a consensus driven strategy or plan to address parking issues in the near term and in the long term. Several important aspects of Billings' downtown present a unique situation requiring a comprehensive approach to parking strategies.

The Downtown Framework Plan established for downtown Billings entails a more walkable, compact community that encompasses high quality uses and entertainment venues that will serve the City's residential, commercial and customer/visitor base. As downtown Billings re-develops, it faces the paradox that as the density of private development increases, private parking needs to decrease in favor of publicly-owned parking. This is a characteristic of all downtowns seeking to optimize parking efficiency and to develop in a way that will enhance sense of place with greater walk-ability and application of shared use.

Achieving a shift from private to public provided parking presents challenges and is the key reason downtown Billings needs to plan for additional public parking opportunities in the future. Recognition of the need for increasing utilization of public parking is one of the first steps in developing reasonable solutions. The City is already beginning to experience the pressures of change and the need for public involvement in downtown parking issues.

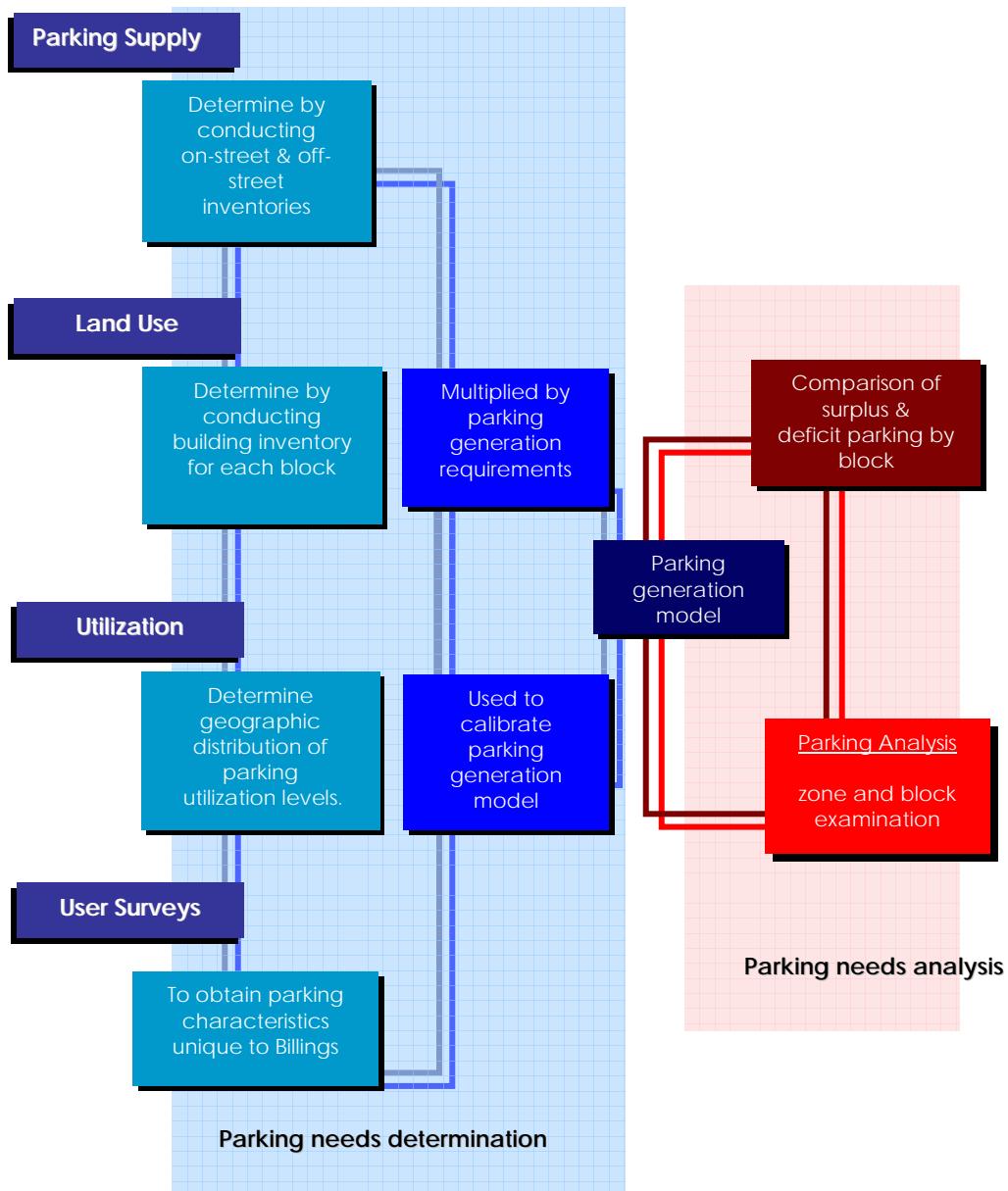
Many small and large businesses in the downtown community don't have their own parking and rely on public parking. An increasing concern for stakeholders is the need for available parking to be part of economic stimulus for downtown business. Future new projects and re-development opportunities in Billings require attention when considering parking allocation, operations and new parking projects. The recommendations presented in this report touch on a number of different areas pertaining to parking including; operations, safety, security, pricing, locations and the need for new parking.

The planning process examines the downtown area's existing parking from both a qualitative and quantitative standpoint. It also is designed to provide a comprehensive analysis of the existing and potential future parking demands in the downtown area. Rich and Associates adopts a philosophy that parking should support the community's greater vision for economic activity, social interaction, transit choices and environmental aspirations by being adequate, but not provide a surplus of parking beyond the existing and potential need. Specifically, our approach is to consider parking allocation, location, design, multi-modal opportunities and operating efficiency in conjunction with necessary expansion.

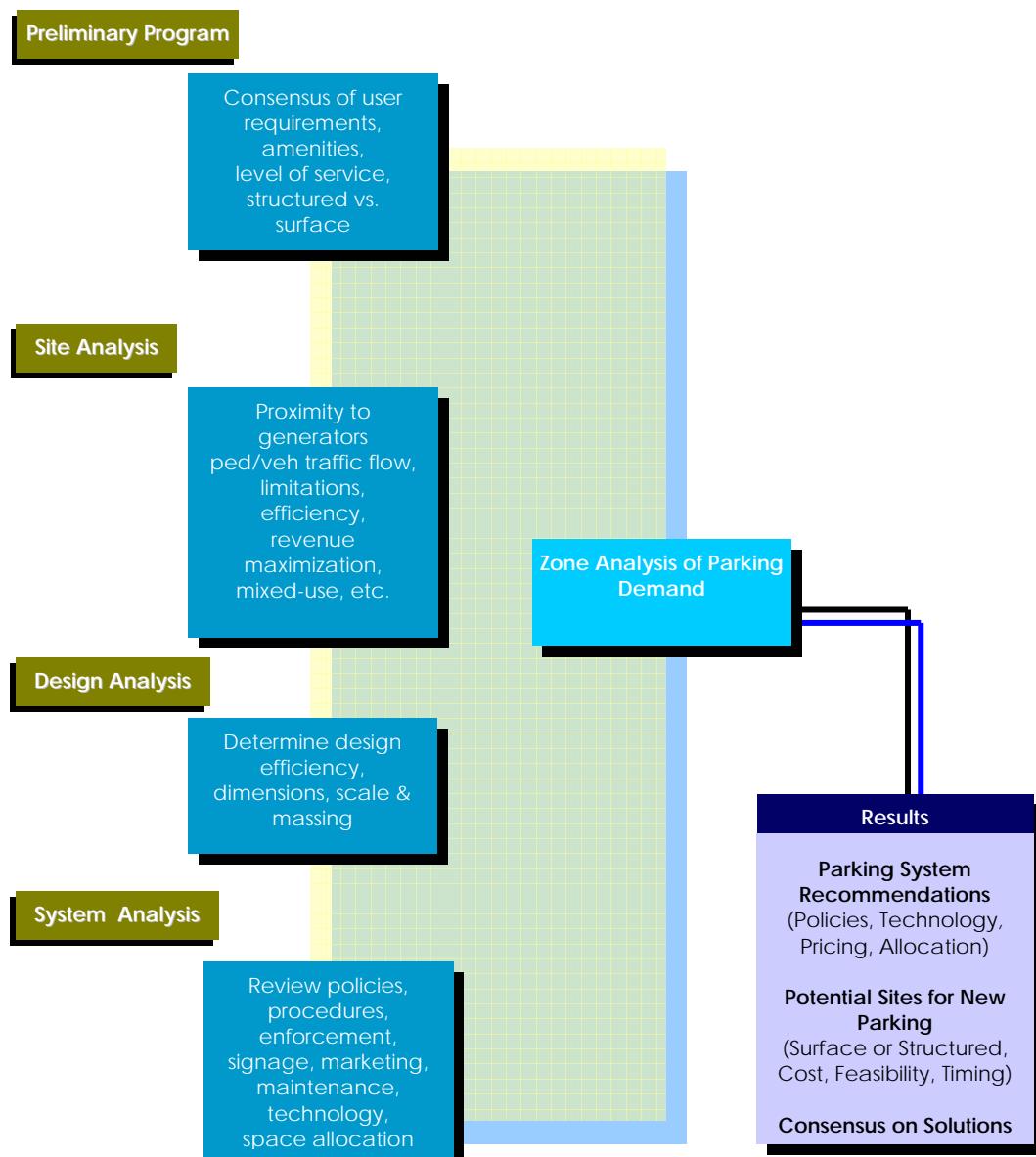
## 1.2 Process

**Phase One** of developing the Downtown Parking Plan is a process of quantifying and qualifying the parking needs in the study to determine the parking demand for the study area. This was done through field work, utilization studies, surveys and a series of public and stakeholder meetings. The flow chart below details the planning process.

### Phase One



**Phase Two** of the Downtown Parking Plan involves reviewing the current parking system, the existing parking facilities, parking policy, potential future development, parking signage and wayfinding, and enforcement. Recommendations are then developed for short and long term parking improvements that combine the parking system and management improvements with potential capital improvements.



### 1.3 Study Area

The study area, as determined by the City, is illustrated in **Map #1, “City of Billings – Study Area Map”** located on page 5. The approximate boundary streets for the study area are 6<sup>th</sup> Avenue on the North, 22<sup>nd</sup> Street on the East, Minnesota and 2<sup>nd</sup> Streets on the South and 33<sup>rd</sup> Street on the West. The area boundaries vary in some locations to include relevant parking and land uses or to exclude neighboring industrial and single family residential areas that do not impact downtown parking.

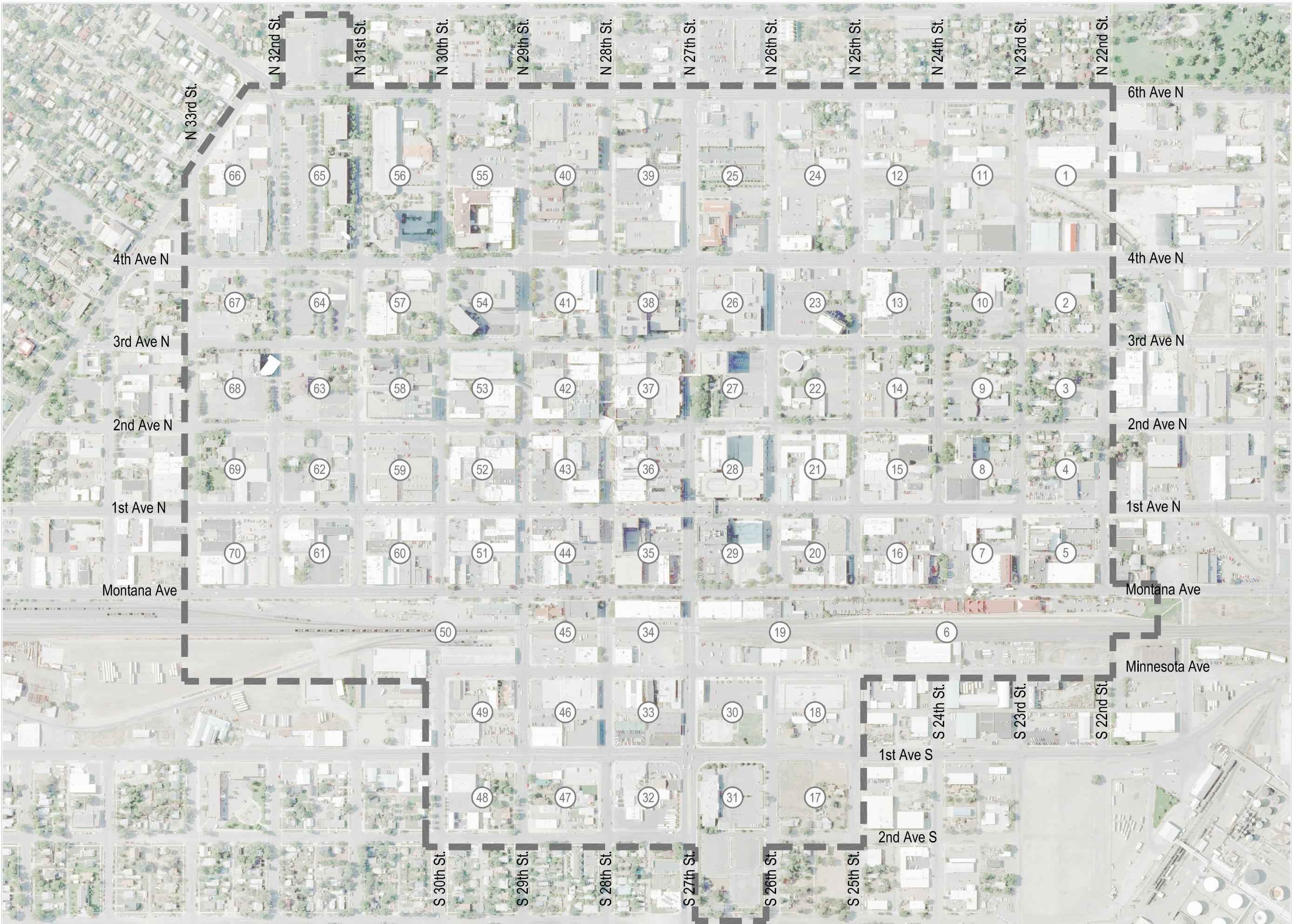
The overall study area can be roughly described as being two distinct regions consisting of a higher density core and a lower density periphery. The higher density core would be the area encompassed by 4<sup>th</sup> Avenue on the north, 26<sup>th</sup> Street on the east, Montana Avenue on the south and 30<sup>th</sup> Street on the west. The lower density periphery would consist of the remaining blocks in the study area that encompass the higher density core. The distinction of these two areas is an approximation based on overall building density.

The study area encompasses a number of land uses including retail, commercial, government, office, community and residential. Some of the land uses presently have adequate on-site parking to meet their needs. Other land uses rely either wholly or in part on public parking opportunities.

New developments slated for the downtown area that are examined for parking impacts as part of this study include new office space for Federal Government services, a potential new bank office building, expanded parking as part of the proposed Minnesota Avenue streetscape improvement and other facility changes or improvements in the downtown.

Of the potential developments in the downtown area considered in the study, one significant project is still in the conceptualization phase. This development is the Conference Center/Meeting Facility development opportunity being investigated at Montana Avenue and North Broadway. This facility is identified in the Downtown Billings Partnership Annual Report (July 1, 2001 – June 30, 2002) as prepared by Art Scibelli.

The parking conditions, supply and activity of the approximately 70-block focus area were evaluated in detail, including inventories of parking and buildings, user surveys, stakeholder involvement and field observations of the existing parking utilization. Some blocks outside of the main study area were also examined to determine potential parking impacts to the core downtown.



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BILLINGS, MONTANA

Downtown Parking Plan

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## **SECTION 2: ANALYSES**



## SECTION 2 – ANALYSES

### 2.1 Analysis Introduction

This section of the report is an assessment of parking supply and demand based on current and anticipated future developments and changes to parking. For the analysis, Rich and Associates used parking turnover and occupancy data from two separate time periods, parking and building inventories, business owner surveys and experience with parking operations in other communities.

The process of projecting parking demand consisted of a two-part analysis. The first part of the analysis included a calculation of parking demand by block based on a building inventory and parking generation factors for each type of land use. The calculated parking demand was subtracted from the available parking supply and the resulting surplus or deficit of parking was determined on a block-by-block basis.

The second part of the analysis involved comparing the projected parking surplus and deficit patterns to the turnover and occupancy data. This comparison offered a benchmark by which parking demand was calibrated and to aid in the evaluation of the parking recommendations.

Parking analysis also included a conditions review of the City's four parking structures. Details on the review of each facility can be found in **Appendix F**. The review included observations of the physical aspects of each facility and includes notations on where the facilities are meeting expectations and where they fall short (i.e. lighting levels, surface wear, stairs, etc.)

### 2.2 Parking Inventory

**Table 2A** summarizes the existing parking supply in downtown Billings. There are a total of approximately 11,082 parking spaces within the study area. (Note: some parking stalls were estimated where painted stalls were not present). Of the total 11,082 spaces, there are 4,961 public parking spaces (45% of the total supply) and 6,121 private parking stalls (55% of the total supply).

Of the 4,961 public parking spaces, 2,168 are on-street spaces and 2,793 are off-street public spaces.

**Table 2A – Public/Private Parking**

	<b>Public</b>	<b>Private</b>
On-Street (2,168 stalls)	44% (2,168 stalls)	0% (0 stalls)
Off-Street (8,914 stalls)	56% (2,793 stalls)	100% (6,121 stalls)
<b>Totals (11,082 stalls)</b>	<b>45% (4,961 stalls)</b>	<b>55% (6,121 stalls)</b>

The ratio of publicly to privately owned parking becomes a key factor as downtowns develop and wish to create walkable districts with efficient parking facilities. This is because the more public parking that is provided allows for expanded shared use opportunities, reducing the overall amount of parking spaces needed to service an equivalent amount of building space.

Also, when the amount of publicly controlled parking is 50 percent or greater it allows for the City to effectively implement policy-driven parking strategies. In effect the City becomes better equipped to respond to development scenarios and opportunities in a timely and effective manner.

**Table 2B** on page 9 is a detailed parking supply; listing types and durations of parking by each block. It is followed by **Map 2**, a spatial view of the parking supply. In cases where parking spaces were not marked, Rich and Associates estimated the numbers of parking spaces. For the purpose of this study, any parking marked reserved or privately owned was designated as private parking.

#### 2.2.1 Parking Inventory Observations

Of the 11,082 spaces in the study area, the City of Billings manages and controls the on-street parking (2,168 spaces) and 2,793 off-street parking spaces, amounting to 45 percent of the total parking supply. As previously mentioned, controlling at least 50 percent of the available parking allows the City to effectively manage the parking in terms of allocation, changing demand and market pricing. It also allows the parking to be enforced with greater efficiency. Billings only falls marginally short of this benchmark, but should endeavor to continue to pursue public parking options.

Communities with too little public parking suffer from economic development issues, lower density, lack of pedestrian connectivity, and in some cases poor perception by visitors. Private parking in the form of surface lots also has a tendency to interrupt street continuity by reducing pedestrian activity and lowering urban density, both crucial components of successful downtowns.

Although the City's parking has signage and there is parking information available on the internet, Rich and Associates noted that the signs fall far short of being ideal for users. Specifically, there is room for improvement with regard to vehicle and pedestrian way-finding and general information on parking area (who can use it, how much it would cost, hours of operation etc.) Further there are few public parking lot options for long-term parkers and enforcement of parking regulations are undertaken as staff availability and weather conditions permit.

**Table 2B** breaks down the parking supply into general categories. While there are no rules regarding the ratio of on-street to off-street parking, on-street parking is generally the first choice for customers and visitors in a downtown setting. On-street parking is generally in front of the parkers' destination and is easy to get into and out of. Surface parking lots are seen as second best parking options since they are easy to get into and out of, but generally customers and/or visitors cannot see their destination from the lot. Parking structures are generally the last choice for a customer or visitor as they are seen as inconvenient to get in and out of.

The definitions associated with **Table 2B** are as follows:

- Unmarked – no sign limiting the time a vehicle may park.
- LZ/10/15/30 minute – signed 10, 15 & 30 minute parking or Loading Zone.
- Two hour (etc.) – signed hourly duration parking.
- Public – City owned parking.
- Private – privately owned parking or City owned parking that is reserved.
- Permit (Per). – Parking that requires the use of a permit.
- Structure – Parking structure (multi-level facility).
- Res. – Reserved.
- Lot & Structure – surface lot parking or parking in a structure.
- Barrier Free (Hcp) - signed Handicap parking spaces.
- Public Use – Privately owned hourly or daily parking available to all users.

Reduced density and reduced pedestrian activity both contribute to a need for more parking. Conversely, higher density and greater amounts of pedestrian activity have a tendency to reduce needed parking.

Employee parking and long-term parking for customers and visitors should always be encouraged in off-street locations. Employees in particular are more willing to walk greater distances. Rich and Associates typically recommends 350 feet as a benchmark distance for customer and visitor walking distance and 650 feet for employee walking distance to and from parking areas.

**Map 2** on page 10 illustrates the available parking supply in the study area.

# BILLINGS, MONTANA

## Downtown Parking Plan

**Table 2B – Study Area Parking Supply Summary**

Block	Public On-Street										Off-Street					Private Off-Street				Total Sum	
	Unmarked	Per.	LZ/10/15/30m	2 Hour	3 Hour	4 Hour	10 Hour	Structure	Res.	Hcp.	2 Hour	10 Hour	Res.	Hcp.	Structure	Public Use					
	1	30		2									21				51				51
2	30												53				85				85
3	35												51				86				86
4	35												14	2			51				51
5	18			18									48	3			87				87
6		1		23					163	4							191				191
7	10			15									77				102				102
8	30			9									70				109				109
9	27	2	2	9									97				137				137
10	21		1	27									77	6			132				132
11	37			13									69				119				119
12	37		1	2									73				113				113
13	29	2		15									132	4			182				182
14	18		1	6		7							117				149				149
15	24			8									33				65				65
16				31									99				130				130
17	44																44				44
18	24																24				24
19	4		1	8		5							56				74				74
20		1	4	17		2							54				78				78
21			1	23		4							105	3			136				136
22		6		5									59	4			74				74
23		3		23					92	4			74				196				196
24	18		4	14		5							189	4			234				234
25	17	1		8		5							162	5			198				198
26		4											126				130				130
27		2	4	17					51	2			100				176				176
28		6		12				760								778				778	
29		19	5										86	5			115				115
30	10		1			4							69	6			90				90
31	10												314	5			329				329
32	20																20				20
33	1		1	8		6							21				37				37
34	8			1		2							44				55				55
35		1		22									52	1	183		259				259
36		2		20					46	2	9		6				85				85
37		9	1	32				273	6	1							322				322
38		2	1	12									61	1			77				77
39		1		10		9							193	5			218				218
40		2		31		5			53	3	49	28	172				343				343
41			5										51	4			86				86
42		1	2	27											229		259				259
43		2	7	36									91	2			138				138
44		1	3	25									52	2			83				83
45				1		8							65				74				74
46		1	5	19									21				46				46
47	33	1											39	2			75				75
48	44												43				87				87
49	18		1	11													30				30
50						9							54				63				63
51		2		26									72				100				100
52		1	4	36									33	1			75				75
53		1	2	32				455					53				543				543
54		3		37									84			42	166				166
55		2	1	12		42	5		32				172	7			273				273
56		6		37		1		760					115	7			926				926
57			1	19		22							29	2		48	121				121
58		4	1	13		23							33	1			75				75
59		1		35									73	1			110				110
60		1	5	24									50				80				80
61		3		12		5							96	1			117				117
62	8	1	2	18		9							80	2		42	162				162
63						18							109	2			129				129
64				4		14							104	4			126				126
65		1	2	52									502	17			574				574
66	19	2	7	24									78	7			137				137
67	18			11		14							110				153				153
68	27		1	15		3							167				213				213
69	20		8	2									61				91				91
70	19		3	17									50				89				89
	743	53	130	1015	0	42	185	2248	443	16	58	28	5461	116	412	132	11082				

PARKING  
STUDY  
FOR  
THE CITY OF  
BILLINGS

BILLINGS, MONTANA



**LEGEND:**

- # BLOCK NUMBER
- (A) LOT DESIGNATION
- STUDY AREA
- ON STREET PARKING**
- 2 HR. METERED
- 4 HR. METERED
- 10 HR. METERED
- 10 MIN. UN METERED
- 2 HR. UN METERED
- UNMARKED (+/-)
- PERMIT/SPECIAL USE
- Iz LOADING ZONE

**OFF STREET PARKING**

- PUBLIC
- RESERVED (PUBLICLY OWNED)
- PUBLIC (PRIVATELY OWNED)
- PRIVATE
- ACCESSIBLE
- UG UNDERGROUND

Date	ISSUED FOR:
03-13-2009	OWNER REVIEW
06-26-2009	DRAFT REPORT
07-02-2009	DRAFT REPORT
12-03-2009	DRAFT REPORT

Sheet Title:

PARKING  
SUPPLY

Minnesot Ave. Parking Master Plan

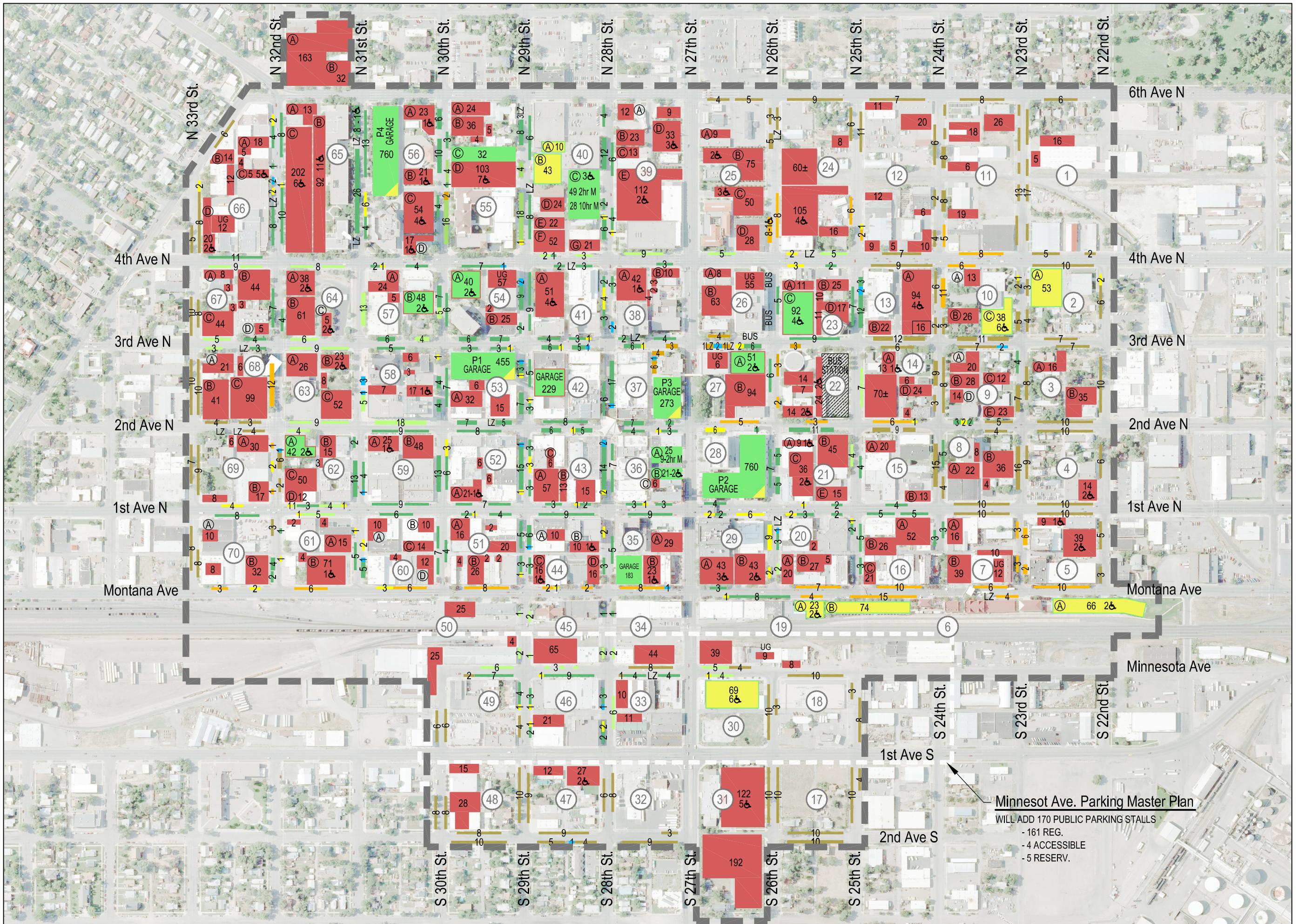
WILL ADD 170 PUBLIC PARKING STALLS  
- 161 REG.  
- 4 ACCESSIBLE  
- 5 RESERV.

File No	0918
Scale	NTS
Last Rev.	12-03-2009
Page	

MAP Number:



MAP 2



## 2.3 Turnover and Occupancy Study

Two turnover and occupancy studies were undertaken in downtown Billings. The studies were conducted during the winter (Thursday, December 18th, 2008) and again in the fall (Thursday, October 1, 2009) from 9:00 A.M. until 5:00 P.M. The second study in the fall was conducted at the request of the Billings' Parking Advisory Board to ensure accuracy in field observations.

The turnover and occupancy studies included field observations of public and private parking in the study area. Four research teams split the study area into sub-areas and selected a broad sampling of parking within each area. License plate data was recorded for the hourly and short-term parking, and overall occupancy was recorded for long-term or all day parking.

A Thursday survey day was selected by the City and PAB as a representative weekday in the downtown. The turnover portion of the analysis included on-street spaces (with the exception of the long-term 10-hour parking meter spaces). This was done to determine how long specific vehicles were parked in certain spaces and if parkers were moving (or shuffling) their vehicles to different spaces to avoid parking tickets.

In all other parking spaces (off-street lots and the City's parking structures) the numbers of parking spaces occupied were counted for overall occupancy. Occupancy is a measure used to examine the level of utilization of a parking area and is calculated for all of the parking examined in the study area.

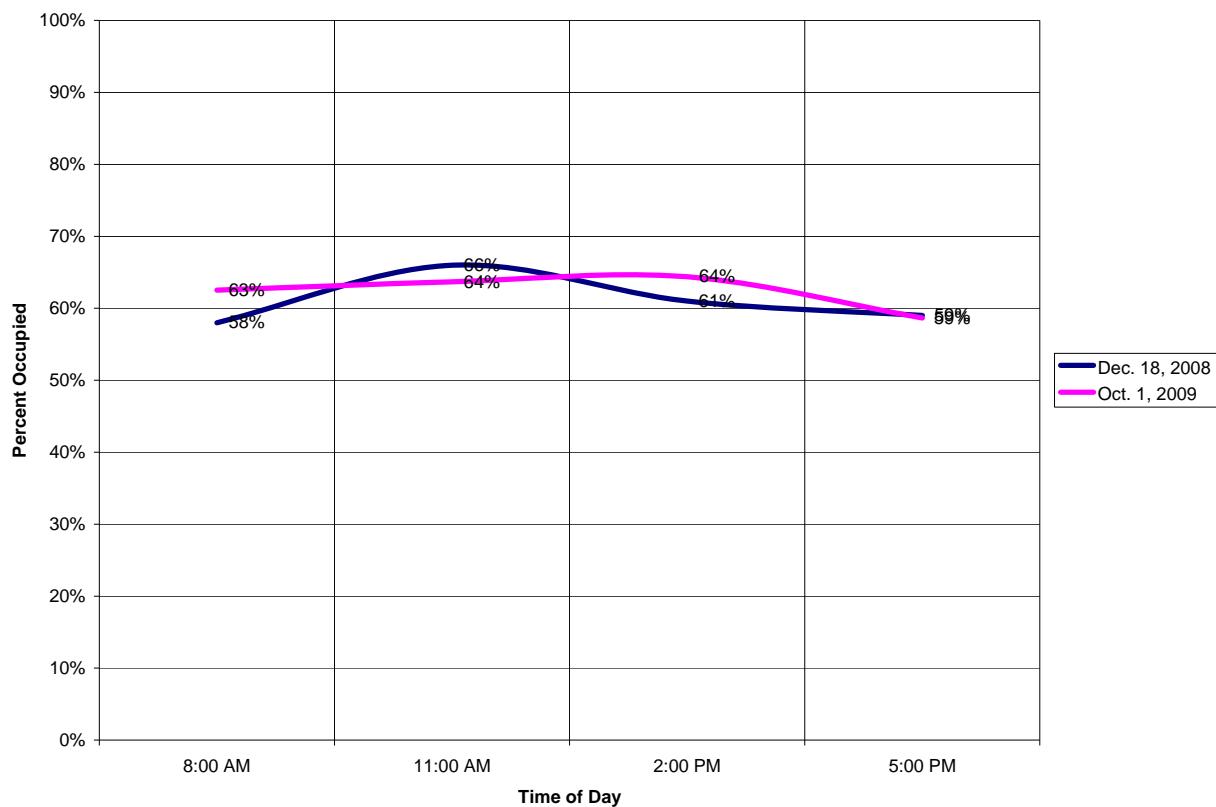
Occupancy is an important aspect of parking because it helps us understand how parking demand fluctuates throughout the day. Likewise, occupancy can be used to illustrate how parking demand is impacted by events in the downtown area. Overall, the occupancy data is used by Rich and Associates to calibrate the parking demand model. **Maps 3a & 3b** are the summary results of the turnover findings. Complete occupancy charts are located in the **Appendix**.

### 2.3.1 Observations

- Peak parking demand on Thursday, December 18th, 2008 occurred just before noon at 66% overall occupancy.
- The October 1<sup>st</sup>, 2009 count revealed a peak of 64% at about 1:00 pm, just after noon.
- The variation between the peak occupancy times in the December and October counts could be that more individuals ate out for lunch in December.
- In general the parking occupancies were slightly higher during the winter (December 2008) counts than during the fall (October 2009) counts. Activity may have been higher due to the holiday season in December and weather may have caused a few more individuals to park on-street nearer to the downtown area.
- Pricing of parking favors on-street long-term parking as opposed to parking structure parking (on-street parking is less expensive in Billings than the off-street parking).

- In general, parking occupancy peaked around 66%. Areas closer to the core of the downtown experienced much higher occupancy rates than areas further away.
- Several areas in the core had occupancy above 90%
- The public parking structures experienced relatively high occupancies (73% to 80%), with the exception of Park 4.
- Park 4 experienced a peak occupancy of 58% in both December 2008 and October 2009.
- 16 individual vehicles were noted as moving or shuffling every two hours during the December counts and 8 individuals were noted shuffling during the October counts.

**Exhibit 2C – Parking Occupancy Comparison (Thursday) December 18, 2008 vs. October 1, 2009**



**Maps 3a & 3b** illustrate the observed parking occupancies at a peak hour in the downtown focus area (3a – December 18, 2008, 3b – October 1, 2009). The maps are used to cross reference the calculated parking demand and to help calibrate the parking demand model.

PARKING  
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BILLINGS, MONTANA



LEGEND:

# BLOCK NUMBER

Ⓐ LOT DESIGNATION

— STUDY AREA

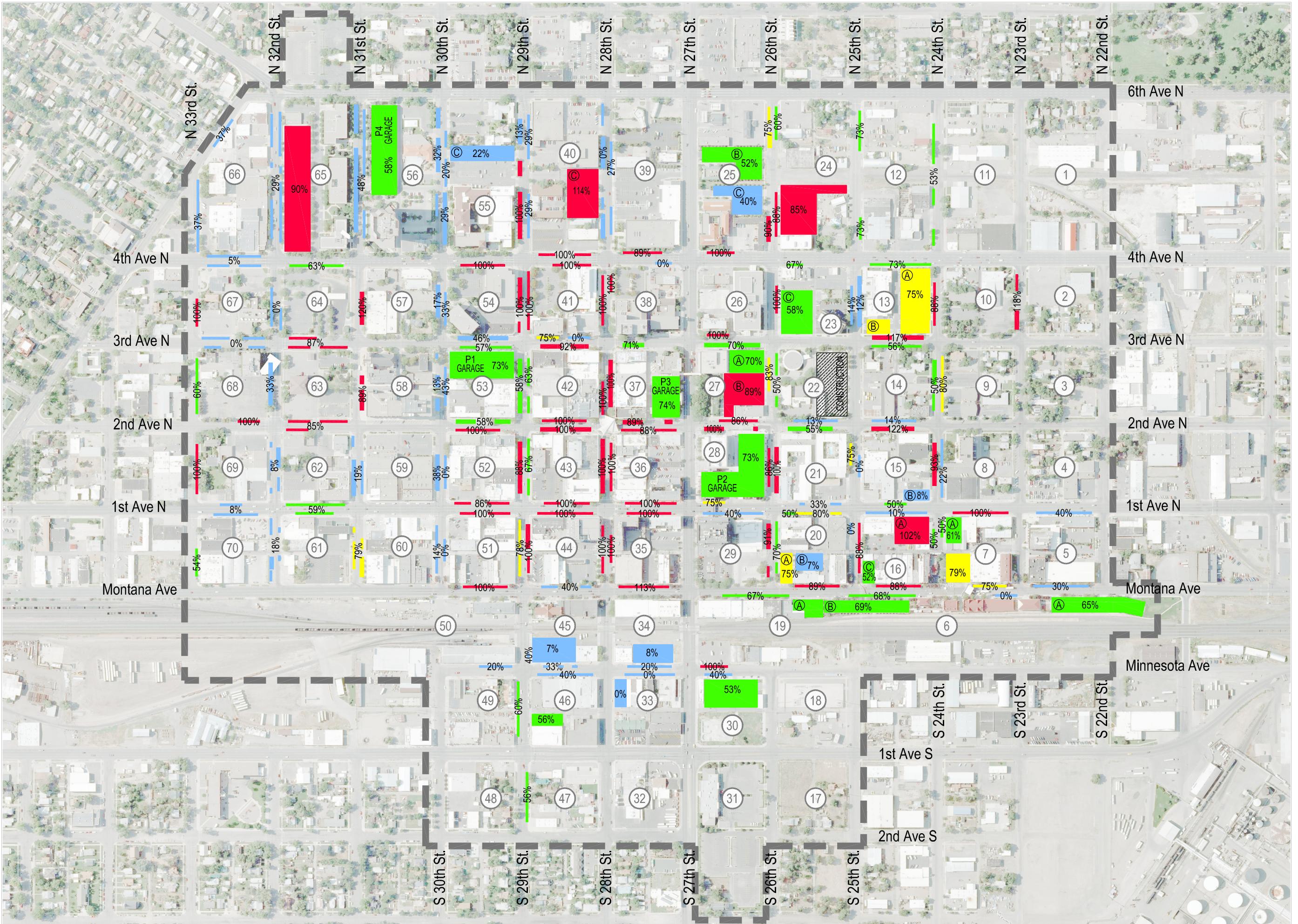
PERCENTAGE OF OCCUPANCY

85% through 100%

75% through 84%

50% through 74%

0 through 49%



Date	ISSUED FOR:
06-26-2009	DRAFT REPORT
07-02-2009	DRAFT REPORT
12-03-2009	DRAFT REPORT

Sheet Title:

TURNOVER/  
OCCUPANCY  
10:00am-12:00pm  
Thursday, December 18, 2008

File No	0918
Scale	NTS
Last Rev.	12-03-2009
Page	

MAP Number:



MAP 3(a)

PARKING  
STUDY  
FOR  
THE CITY OF  
BILLINGS

BILLINGS, MONTANA

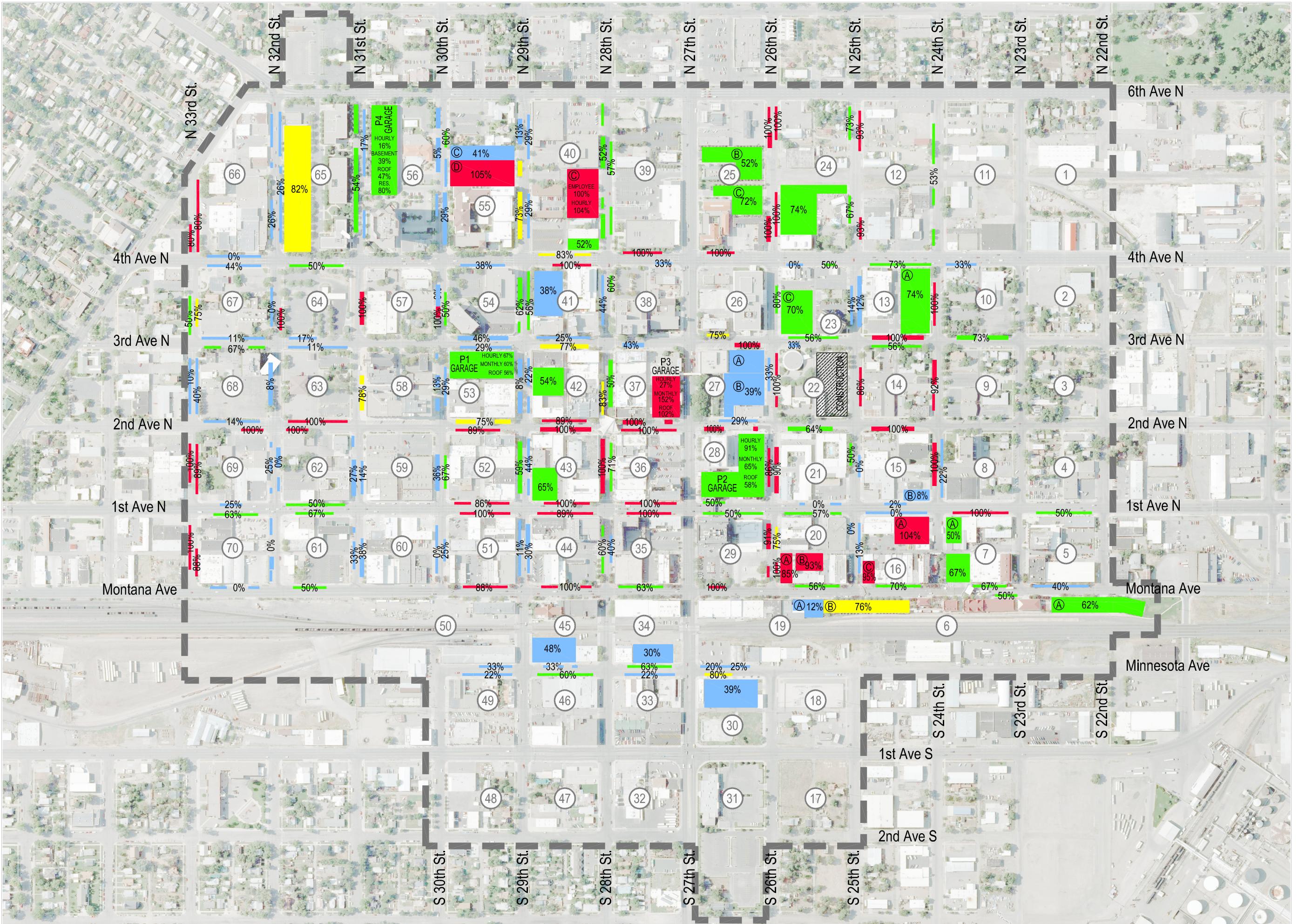


LEGEND:

- # BLOCK NUMBER
- Ⓐ LOT DESIGNATION
- STUDY AREA

PERCENTAGE OF OCCUPANCY

- 85% through 100%
- 75% through 84%
- 50% through 74%
- 0 through 49%



Date	ISSUED FOR:
12-03-2009	DRAFT REPORT

Sheet Title:

**TURNOVER/ OCCUPANCY**  
11:00am-1:00pm  
Thursday, October 01, 2009

File No	0918
Scale	NTS
Last Rev.	12-03-09
Page	1

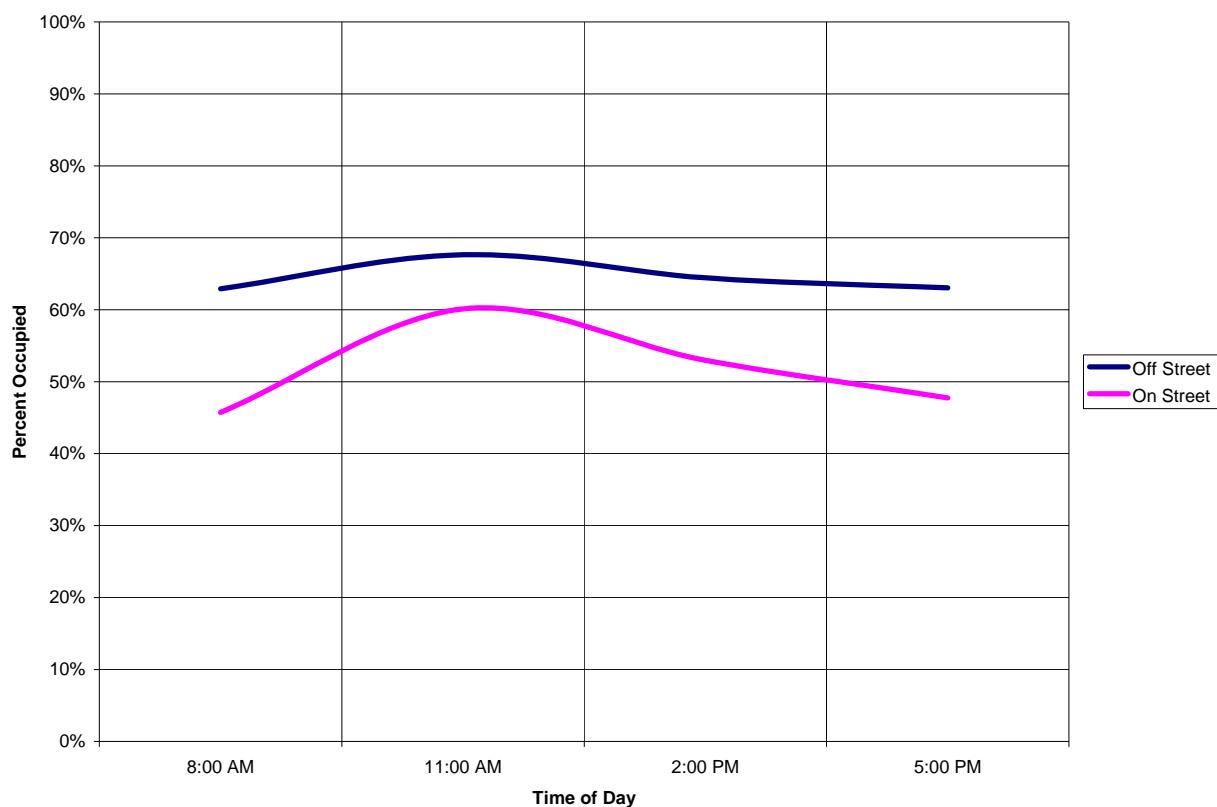
MAP Number:

**MAP 3(b)**

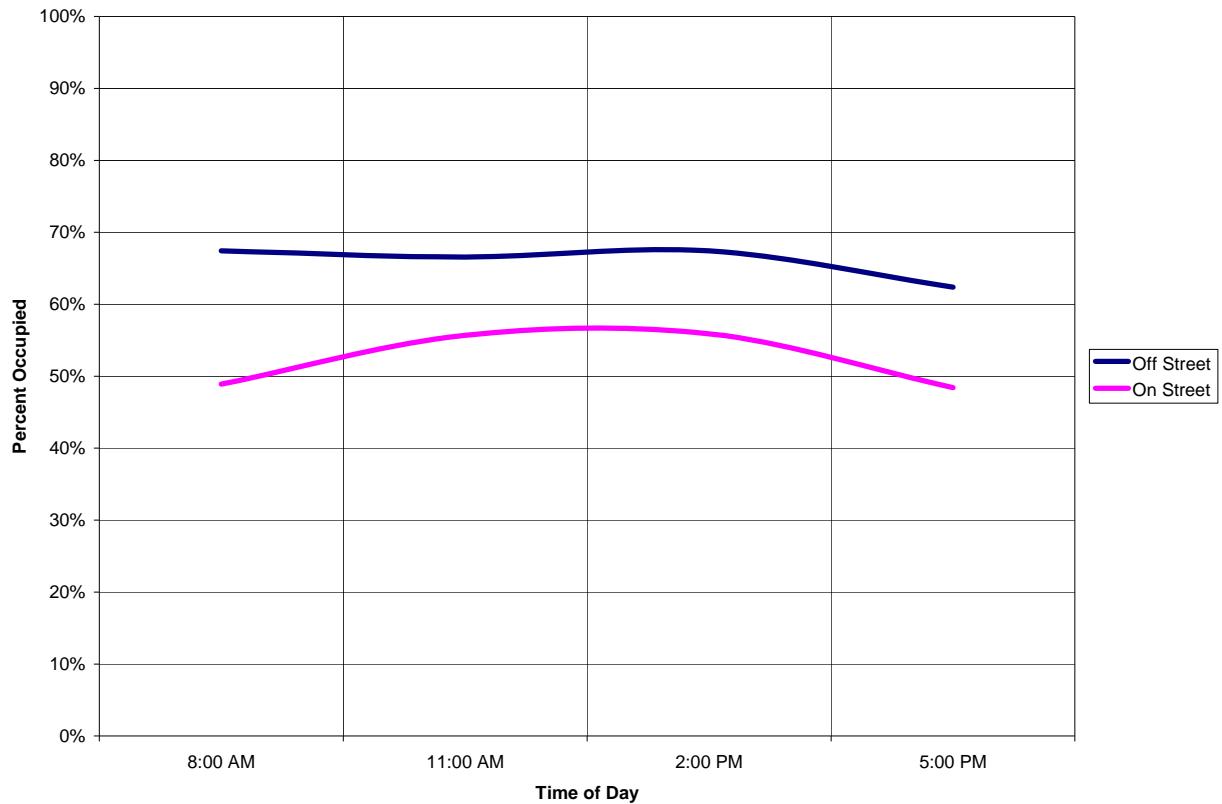
**Exhibit 2Da & b** demonstrate the relationship between on-street and off-street parking (2Da – December 18, 2008, 2Db – October 1, 2009). The shape of the curves, peaking around noon, is typical for a downtown with a diverse economic base including retail, offices and restaurants. On-street parking traditionally has a tendency to be better utilized since it is preferred by customers and visitors. However, the off-street parking in Billings' case proves to have higher overall occupancy. In situations like this, a review of the amount or ratio of short-term parking to long-term parking is called for.

Employees may have a tendency to use on-street parking if the threat of receiving a ticket or the fine rate is low. Many, if not all, of the parkers observed to be staying four hours or longer are likely to be employees. Rich and Associates advocates for consistent daily routine enforcement with a market-based fine rate that will help deter parking infractions by employees. This practice is favored by most downtown businesses, recognizing that proper parking enforcement frees up their most valuable customer parking and relieves them of the task of policing employee parking habits.

**Exhibit 2Da – On-Street versus Off-Street Parking (Thursday, December 18, 2008)**



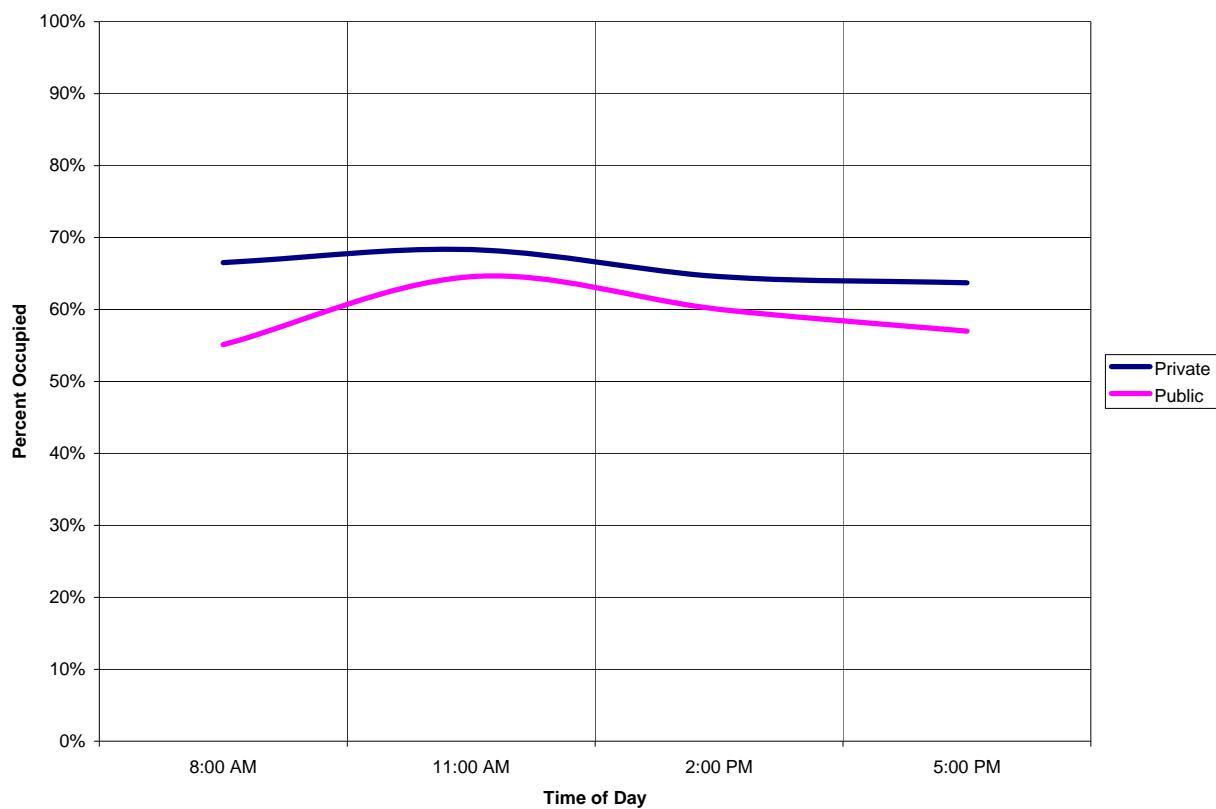
**Exhibit 2Db – On-Street versus Off-Street Parking (Thursday, October 1, 2009)**

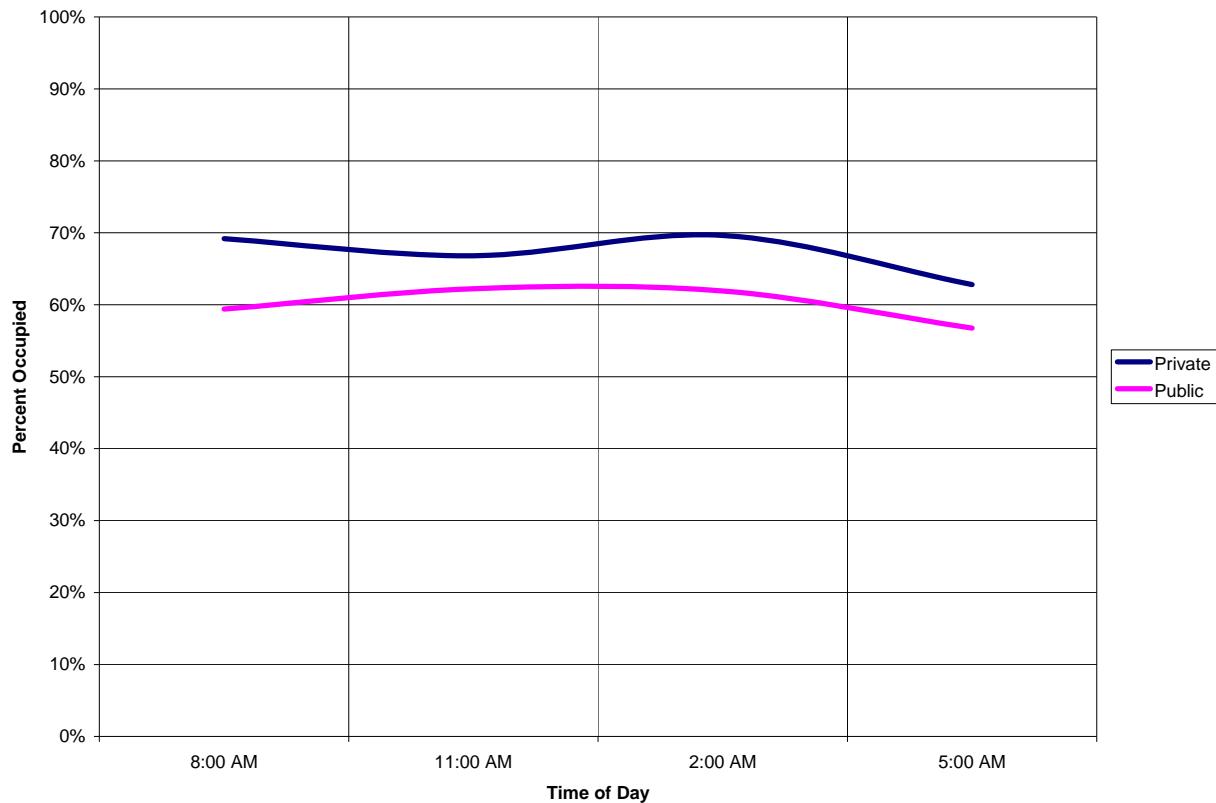


**Exhibit 2Ea & b** demonstrate the relationship between public and private parking in downtown Billings (2Ea – December 18, 2008, 2Eb – October 1, 2009). Important here is These exhibits demonstrate that public parking has less overall occupancy than private parking. Private parking is typically reserved for a specific group of users. Public parking may be experiencing lower occupancies due to allocation, specifically; there is an abundance of short-term parking on the west side of the downtown that is underutilized. This parking may better serve the community and adjacent businesses as long-term parking.

Established best practices indicates that communities should endeavor to have 50% or greater public parking to take advantage of the increased occupancy offered by shared use potential. Public parking serves a greater amount of building space due to shared use than private parking. The benefit of public parking over private is primarily due to the location and exclusionary nature of private parking. The reduced amount of land and other valuable resources dedicated to parking is fiscally responsible on the part of the community, helps communities achieve walkability and sense of place, and supports greater sustainability from an environmental perspective.

#### Exhibit 2Ea – Public versus Private Parking (Thursday, December 18, 2008)



**Exhibit 2Eb – Public versus Private Parking (Thursday, October 1, 2009)**

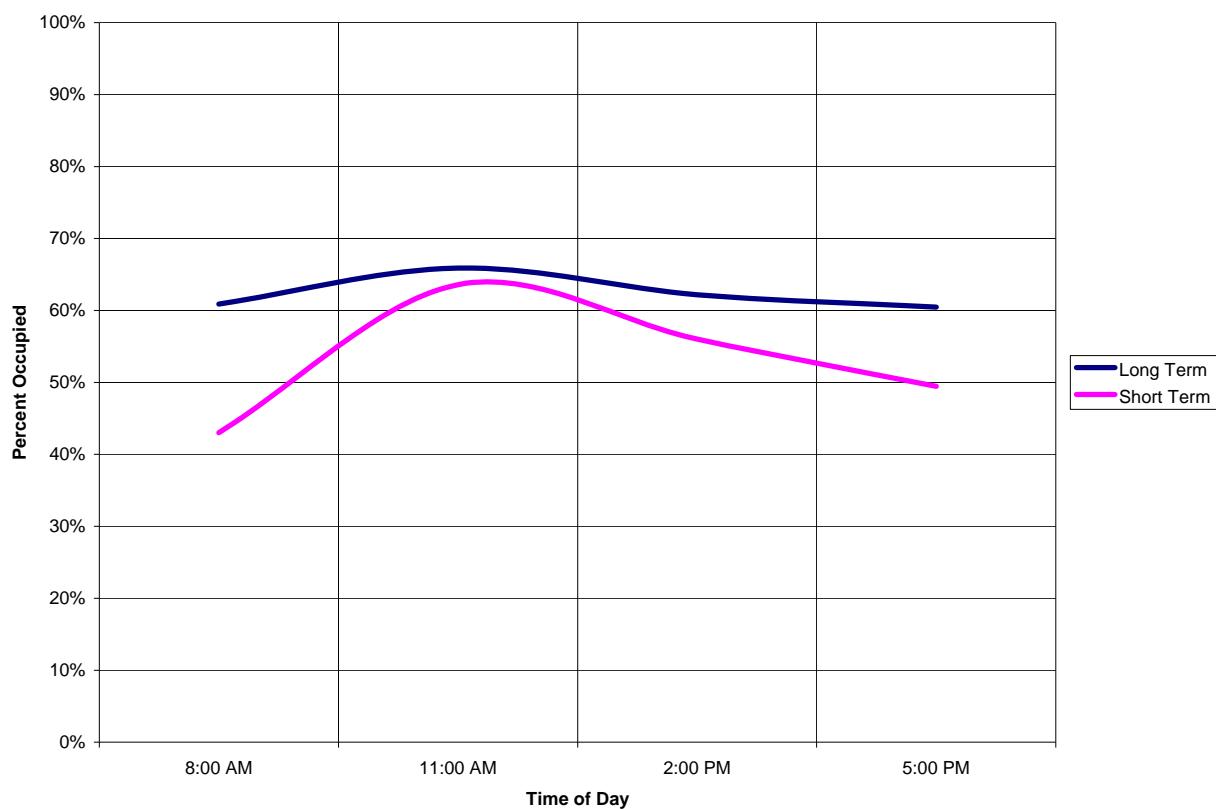
**Exhibit 2Fa & b** (next pages) demonstrate the relationship between long and short-term parking in the downtown area (2Fa – December 18, 2008, 2Fb – October 1, 2009). Notably the long-term parking experiences higher occupancies than the short-term parking, particularly in the October observation. This is due in part to the pricing structure that the City uses to encourage individuals to use the long-term on-street parking.

Parking in the downtown core experiences higher occupancy than peripheral parking. Much of the short-term parking in the core (4<sup>th</sup> Avenue on the north, 26<sup>th</sup> Street on the east, Montana Avenue on the south and 30<sup>th</sup> Street on the west) in fact was observed to be 100% occupied, while periphery (remainder of the study area) parking occupancies were very low. Again, the observation here is that changing parking allocation and revising some parking pricing will help address the pocket area that need more long-term parking opportunities.

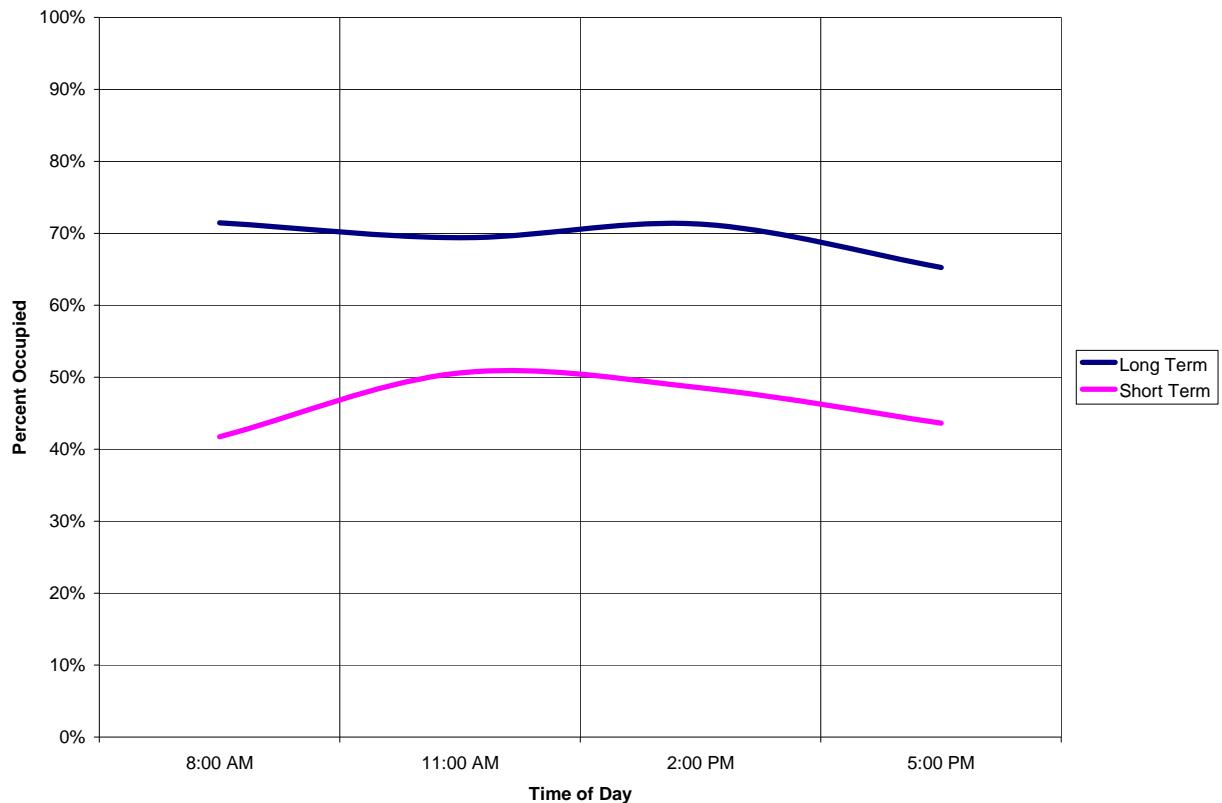
Overall the parking in Billings is within an acceptable occupancy range being below 85% in most cases. Occupancies that peaked above 85% occurred in area used as long-term parking by downtown employees or residents, which is acceptable for these user groups. In most instances, customer/visitor parking is effectively full at 85% occupancy (due to the perception issues associated with transient parking; most customers/visitors perceive parking areas to be full at 85% or higher occupancy).

Conversely, customer/visitor parking should be adequate enough to allow for reasonably close parking to their destination. Occupancies over 85% can begin to impact parking location choices. Employee parking occupancies can be higher as employees and others more familiar with a downtown area are generally more willing to seek available parking further from their destination and are more willing to seek parking in areas that have average occupancies in excess of 85%.

**Exhibit 2Fa – Long versus Short-Term Parking Occupancy (Thursday, December 18, 2008)**



**Exhibit 2Fb – Long versus Short-Term Parking Occupancy (Thursday, October 1, 2009)**



## 2.4 Parking Demand Calculation

Analyses were performed to determine the current and future parking demands and needs for the study area. The data collected and compiled by Rich and Associates to calculate the parking demand included:

- An inventory of the study area's on- and off-street parking supplies.
- Two turnover and occupancy studies of public and private on and off-street parking areas.
- Block-by-block analysis of the square footage and use of every building in the study area.

Specific parking demand generation ratios are used to calculate parking demand for each block. These ratios are assigned according to the type of use present in the buildings. The parking generation ratios were established from experience in other communities, examination of industry standard parking requirements, field observations in Billings (turnover and occupancy) and from surveys distributed to managers, business owners and employees throughout the study area.

The parking generation ratios for each land use type include an estimate of the parking needs for employees and patrons for a particular land use. The overall effect is that each classification of someone coming downtown, whether an employee, business owner, visitor/customer or resident is accounted for in the parking generation ratios for Billings. Once parking generation ratios have been calculated for both current and future conditions, a comparison with the existing supply of parking is made. The resulting figures are parking surplus or deficit numbers for each block.

The method for establishing parking generation ratios customizes the parking demand model specifically to the study area. The ratios are used in conjunction with information from the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI). These two sources are the industry accepted standards for parking generation.

Once a parking demand model is developed that illustrates the surpluses and deficits numerically and graphically, the model is compared with actual field observations, specifically the turnover and occupancy counts. The comparison serves as a test of the parking demand model and allows Rich and Associates' staff to make further revisions or adjustments where necessary to ensure accuracy and fully understand the overall parking dynamic in the study area.

The assumptions used for the parking demand calculations are as follows:

**Assumption 1:** It was assumed that parking demand per block was dependent on the gross floor area of each type of land use contained in the block. Demand computed for one block was not affected by the amount of gross floor area by land use available on surrounding blocks. Therefore, a block with surplus parking supply is not used to offset parking deficits on adjacent blocks.

**Assumption 2:** The parking demand calculations were derived under the assumption that currently occupied properties would remain occupied at existing, or higher than existing levels, into the future. It also assumed that the land use would not change unless identified specifically by the City or PAB.

**Assumption 3:** The calculated parking demand does not consider the price or availability of the parking on the block.

**Table 2G**, below, illustrates the specific parking generation ratios used for determining parking need during the daytime for the summer and winter season in Billings. The parking generation ratios are compared with ITE standards as well as Billings Zoning to demonstrate how parking ratios can vary.

**Table 2G: Parking Generation Ratio Comparison**

<u>Land Use</u>	<u>From Study</u>	<u>From Study</u>	<u>City of Billings</u>	<u>ITE</u>
	<u>Day</u>	<u>Evening</u>	<u>Zoning</u>	
Office	2.28	0.20	3.33	2.79
Retail	1.88	0.94	5.00	2.27
Service	1.40	0.10	12.50	4.17
Government	2.75	1.38	3.33	4.15
Restaurant	4.75	6.87	10.00	15.40
Residential (per unit)	0.65	1.75	2.00	1.75
Mixed	1.98	1.48	n/a	3.25
Community	0.55	1.20	15.38	3.83
Bar	2.00	6.75	10.00	12.49
Light Industry/Warehouse	0.36	0.03	1.25/0.05	0.41
Hotel (per room)	0.64	0.64	1.00+	1.10

(Note: per 1000 s.f. of gross floor area, unless otherwise noted)

(1) Source: Rich and Associates Fieldwork & Surveys, Fall 2008 & Fall 2009

(2) Source: City Of Billings Unified Zoning Regulations. Article 27-1200 (Note: CBD requirements vary).

(3) Source: Institute of Transportation Engineers Parking Generation Manual, 3<sup>rd</sup> ed., 2004

#### 2.4.1 Parking Demand

The following are issues that are considered when determining the number of parking spaces needed:

- Building size, purpose and special use conditions.
- Employment characteristics of the downtown.
- Alternative modes of transportation, which include: availability, use, convenience and policy impacts.
- Proportion of the downtown trips that are multiple-use or linked. This refers to someone coming downtown and parking once but visiting multiple businesses.
- Vehicle traffic.

The parking generation ratios developed for each land use reflect the peak daytime and evening conditions. This correlates with the observed needs within the downtown. Overall, parking is elastic in economic terms. The same factors that impact automobile use, such as fuel price, will also impact parking demand. Individuals will typically seek out more efficient means of transportation when faced with rising fuel prices and make greater use of linked trips, car pooling or transportation alternatives available. This factor adds to the importance of public ownership of parking as an aid in planning and urban design initiatives that facilitate activities such as walking or bicycle use.

The gross square footage of individual buildings was collected and then sorted by land use categories (**Table 2H**, on the following page). The different land uses for each block are in general multiplied by a parking generation ratio of parking spaces required per 1,000 square feet. The resulting number of parking spaces demanded is deducted from the available parking supply on each block and a surplus or deficit of parking for each block is then calculated. Summary tables for the different scenarios are located in **Table 2I** and illustrated in **Maps 4, 5, 6 & 7**. Future parking demand was derived from known and potential new developments, vacant space infill and an examination of potential build-out based on information provided by the City.

The results revealed that there is a surplus of parking overall in the study area of approximately 3,785 parking stalls. However, if we look solely at the core area (4<sup>th</sup> Avenue on the north, 26<sup>th</sup> Street on the east, Montana Avenue on the south and 30<sup>th</sup> Street on the west) there is a shortage of 185 parking stalls. The core area shortfall is verified by the high observed occupancies within the area that illustrate high utilization of the on and off street parking.

#### Inventory Notes:

1. Current parking demand was derived from an inventory of existing buildings provided. Information used to determine building inventories, uses and occupancy were obtained from the City of Billings, from aerial photos and from field observation by consultant staff.
2. Current parking supply was derived from an inventory of existing parking, public and private, gathered in the fall of 2008 by Rich and Associates staff.
3. Future increases in parking demand based on proposed developments for Billings deemed to have significant parking impact and from infilling vacant building space at a rate of 15% over five years.

# BILLINGS, MONTANA

## Downtown Parking Plan

**Table 2H – Existing Building Inventory**

	Office	Mixed Use	Retail	Residential	Service	Motel/ Hotel	Community	Restaurant	Bar	Vacant	Light Industry	Government
1					13,400						58,200	
2				2,300							18,400	
3	3,500			4,000	1,500			2,250				
4				13,250		2,500						
5	28,700		6,500					7,600			20,300	
6											31,080	
7					17,000						17,150	
8			15,100	65,500								
9	22,100			7,600								
10	14,000					7,400			4,700			7,400
11	7,500		6,600	18,750	9,750						31,250	
12	0				12,200						43,800	
13	36,000											
14	2,600				8,000			4,400			13,000	2,600
15	0		9,000	4,200	3,200						18,000	
16	50,550	26,000						12,000				
17	0											
18	0				1,800						4,000	
19	0	29,450								51,450		
20	0	23,250				19,800	39,950					
21	6,500					3,200	46,400			5,000		
22	4,700					4,400						
23	0			50,000	13,000							
24	8,000										22,600	34,800
25	0	2,650				3,600	7,600	23,350	7,000			
26	0					4,200						197,600
27	12,000											108,000
28	156,800											
29	18,750						240,000					18,750
30	5,000									3,000		
31	0				32,100					0		
32	0									0	32,000	
33	13,000		11,000							1,200	13,600	14,000
34	10,000						14,600				56,600	
35	18,900	32,000				160			5,000		0	
36	90,550	43,200	14,750						8,000	2,000	3,000	
37	6,250	83,200	14,000									27,000
38	82,500	10,800						39,100	1,500			
39					7,000	1,500				3,500		40,000
40					10,000		12,300	25,000	40,000			12,300
41	61,500							26,900				
42	111,900	20,600	13,700								18,000	
43		81,000	5,600								13,000	
44	63,000	23,750			15,000						4,500	
45							10,000			33,000	13,600	
46							44,000				90,400	
47	2,000					2,000					7,500	
48					12,000	10,000					0	
49		14,000									31,000	
50											60,600	
51	3,700	15,200	15,300			13,000			8,100	12,000	6,800	
52	17,125	31,300	25,000			6,000			6,625			
53	4,000	41,800	6,700									
54	186,800		6,900									
55	13,000						140,100					
56	250,800								4,000			
57	27,850	15,800										
58	52,050						23,000			6,300	52,050	
59	13,000	10,000	26,000					6,400				
60	38,400	12,500	28,500								10,000	
61	11,400		14,700								6,300	
62	32,000	3,000	6,300			2,000						
63								20,100				
64						5,000						
65	200,700											
66	3,750		27,300	56,100				112,000				
67	30,550											
68	90,350											
69	2,800		12,300			4,300		12,200				
70				19,925		33,200						
	1,814,575	516,850	311,075	242,450	219,150	338,960	552,700	81,375	7,900	224,450	663,080	377,400

# BILLINGS, MONTANA

## Downtown Parking Plan

**Table 2I – Parking Surplus/Deficit Calculation Worksheet**

	Demand (current)	Demand (current)	5 yr. Peak	10 yr. Peak	Parking Supply	Surplus/ Deficit	Surplus/ Deficit	Surplus/ Deficit	Surplus/ (current)
Day	Day		Demand	Demand		Day			
Evening		Evening				(current)	(5 years)	(10 years)	Evening
1	40	3	40	40	51	11	11	11	48
2	8	5	8	8	85	77	77	77	80
3	23	23	23	23	86	63	63	63	63
4	28	13	28	28	51	23	23	23	38
5	121	65	121	121	87	-34	-34	-34	22
6	11	1	-60	-60	191	180	251	251	190
7	30	2	30	30	102	72	72	72	100
8	71	129	71	71	109	38	38	38	-20
9	55	18	55	55	137	82	82	82	119
10	59	43	59	59	132	73	73	73	89
11	61	42	61	61	119	58	58	58	77
12	33	3	33	33	113	80	80	80	110
13	66	7	66	66	182	116	116	116	175
14	49	32	49	49	149	100	100	100	117
15	27	17	27	27	65	38	38	38	48
16	190	131	190	190	130	-60	-60	-60	-1
17	0	0	0	0	44	44	44	44	44
18	4	0	-16	-16	24	20	40	40	24
19	47	120	52	63	74	27	22	11	-46
20	71	95	71	71	78	7	7	7	-17
21	70	66	70	70	136	66	66	66	70
22	15	1	153	153	74	59	-79	-79	73
23	51	89	51	51	196	145	145	145	107
24	118	2	118	118	234	116	116	116	232
25	60	84	60	60	198	138	138	138	114
26	549	0	549	549	130	-419	-419	-419	130
27	319	2	457	457	176	-143	-281	-281	174
28	286	31	286	286	778	492	492	492	747
29	195	158	401	401	115	-80	-286	-286	-43
30	9	5	-1	-1	90	81	91	91	85
31	45	3	45	45	329	284	284	284	326
32	12	1	12	12	20	8	8	8	19
33	48	42	40	43	37	-11	-3	-6	-5
34	26	103	13	25	55	29	42	30	-48
35	109	86	315	315	259	150	-56	-56	173
36	298	169	298	299	85	-213	-213	-214	-84
37	238	138	238	238	322	84	84	84	184
38	196	90	196	196	77	-119	-119	-119	-13
39	38	38	38	38	218	180	180	180	180
40	75	75	275	275	343	268	68	68	268
41	127	45	127	127	86	-41	-41	-41	41
42	257	92	261	265	259	2	-2	-6	167
43	136	145	1244	247	138	2	-106	-109	-7
44	162	81	369	370	83	-79	-286	-287	2
45	10	61	15	22	74	64	59	52	13
46	57	56	43	43	46	-11	3	3	-10
47	9	1	9	9	75	66	66	66	74
48	22	22	22	22	87	65	65	65	65
49	33	22	26	26	30	-3	4	4	8
50	22	2	21	21	63	41	42	42	61
51	113	113	116	118	100	-13	-16	-18	-13
52	158	119	158	158	75	-83	-83	-83	-44
53	83	69	83	83	543	460	460	460	474
54	351	44	351	351	166	-185	-185	-185	122
55	101	171	101	101	273	172	172	172	102
56	476	78	476	476	926	450	450	450	848
57	76	29	76	76	121	45	45	45	92
58	126	49	128	129	75	-51	-53	-54	26
59	109	86	109	109	110	1	1	1	24
60	133	68	135	137	80	-53	-55	-57	12
61	45	16	45	45	117	72	72	72	101
62	75	17	75	75	162	87	87	87	145
63	11	24	11	11	129	118	118	118	105
64	7	1	7	7	126	119	119	119	126
65	366	40	366	366	574	208	208	208	534
66	146	259	146	146	137	-9	-9	-9	-122
67	56	6	56	56	153	97	97	97	147
68	165	18	165	165	213	48	48	48	195
69	36	27	36	36	91	55	55	55	64
70	76	22	76	76	89	13	13	13	67
	7,297	3,713	8,376	8,426	11,082	3,785	2,706	2,656	7,369
	(stalls)	(stalls)	(stalls)	(stalls)	(stalls)	(stalls)	(stalls)	(stalls)	(stalls)

PARKING  
STUDY  
FOR  
THE CITY OF  
BILLINGS

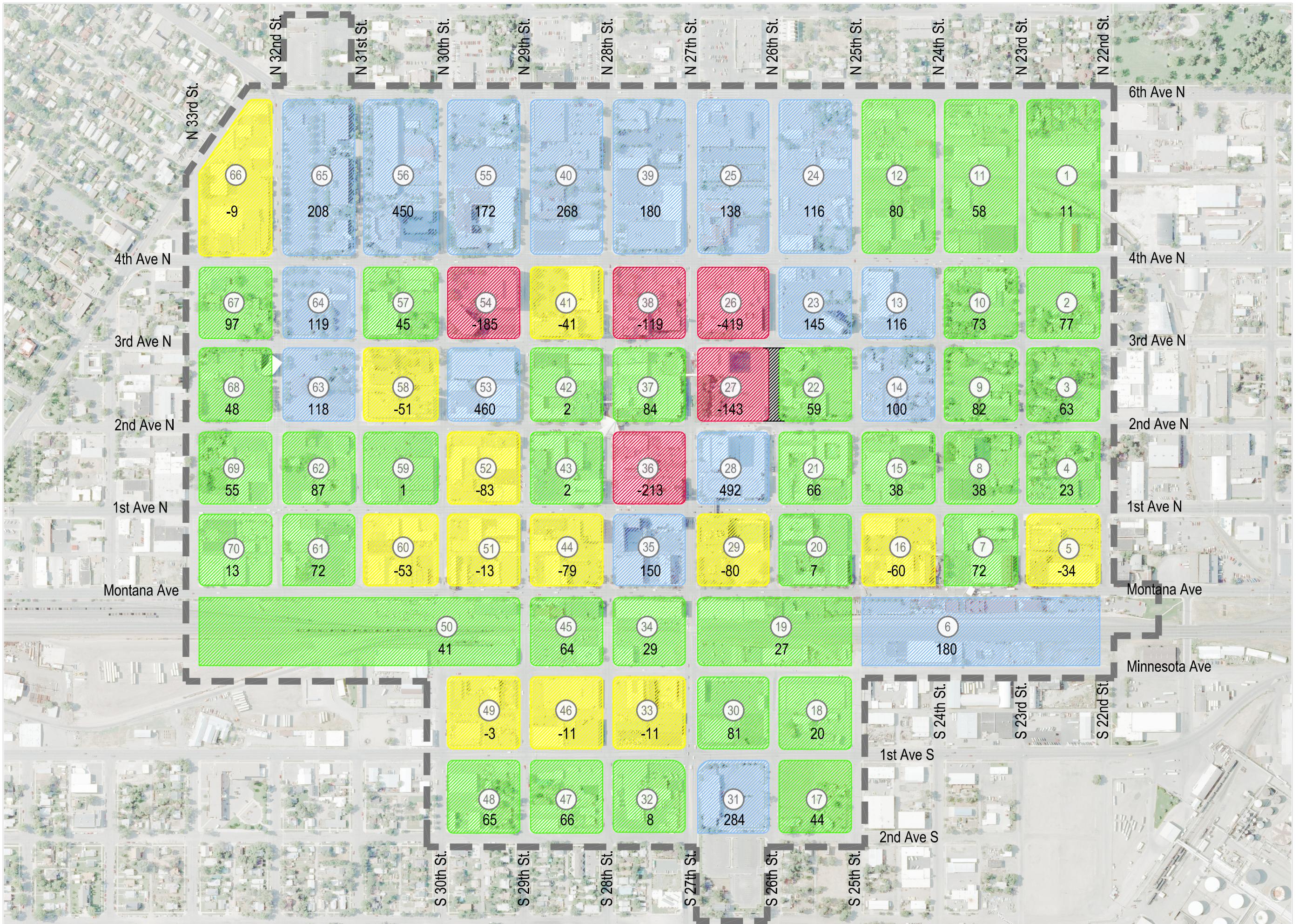
BILLINGS, MONTANA

**RICH**  
& ASSOCIATES

Parking Consultants  
Architects - Engineers  
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26877 Northwestern Hwy., Suite 208  
Lutz, Florida 33558  
Tel: 248.353.5080  
Fax: 248.353.3830  
Lutz, Florida  
Tel: 813.949.8660  
www.RichAssoc.com

LEGEND:

- # BLOCK NUMBER
- Ⓐ LOT DESIGNATION
- STUDY AREA
- SURPLUS/DEFICIT AMOUNT
- 100 +
- 99 through -1
- 0 through 99
- +100

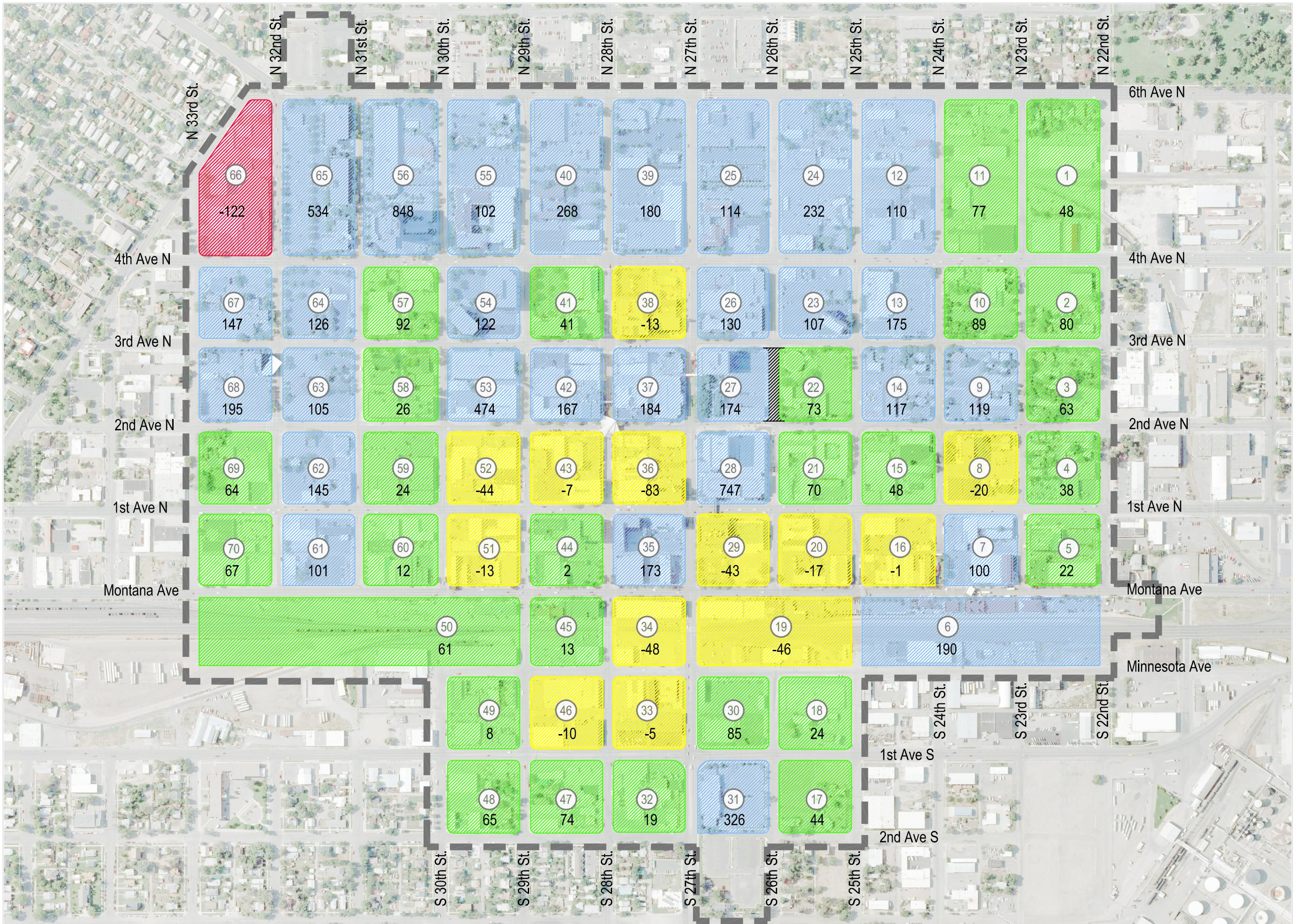
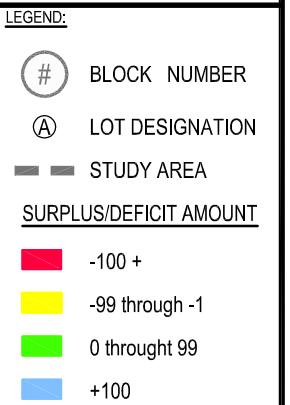


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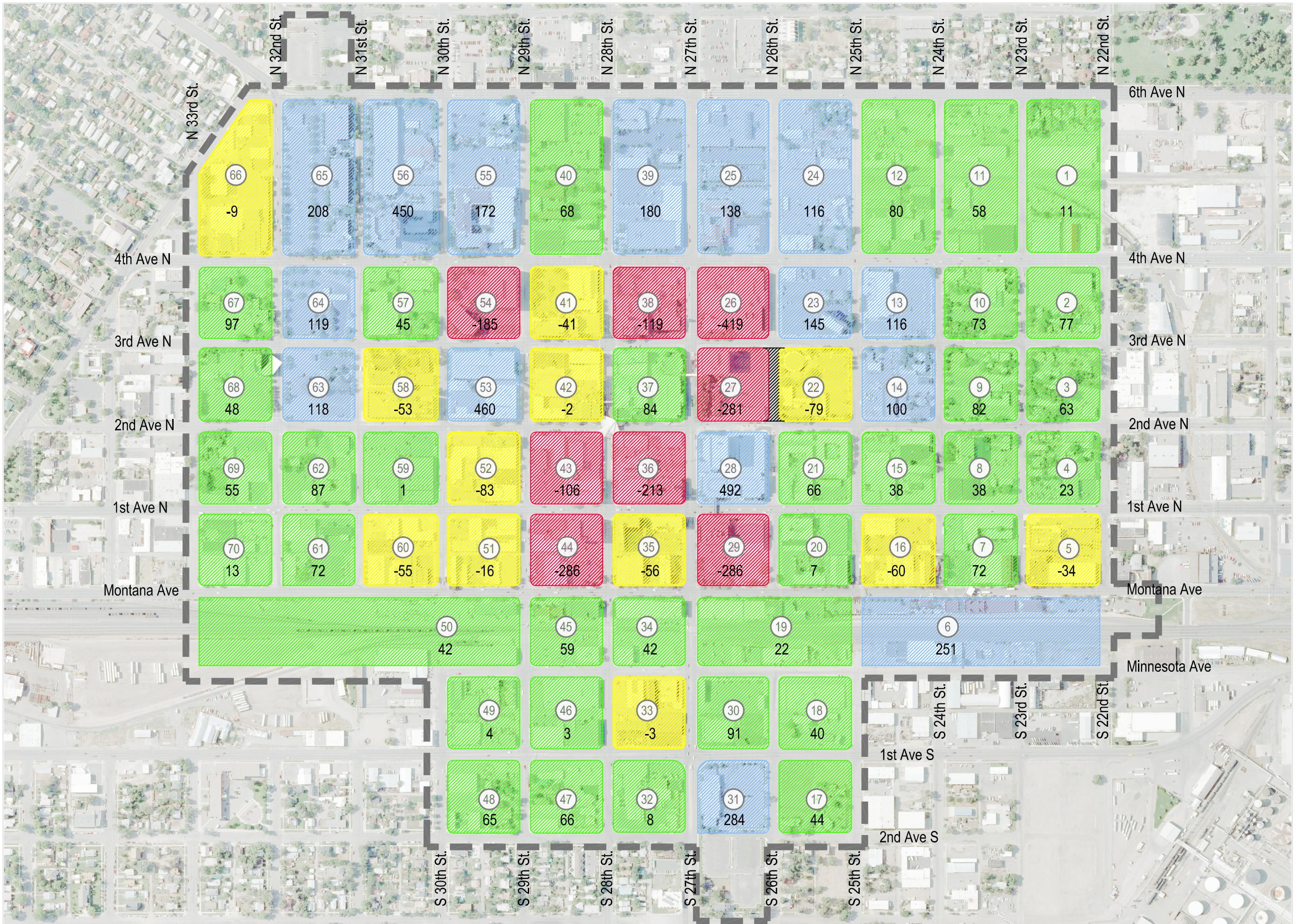
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**LEGEND:**

- # BLOCK NUMBER
- Ⓐ LOT DESIGNATION
- STUDY AREA
- SURPLUS/DEFICIT AMOUNT
- 100 +
- 99 through -1
- 0 through 99
- +100



Date	ISSUED FOR:
06-26-2009	DRAFT REPORT
07-02-2009	DRAFT REPORT
12-03-2009	DRAFT REPORT

Sheet Title:

**SURPLUS/  
DEFICIT  
(5 YEARS)**

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Scale	NTS
Last Rev.	12-03-2009
Page	

MAP Number:

MAP 6

PARKING  
STUDY  
FOR  
THE CITY OF  
BILLINGS

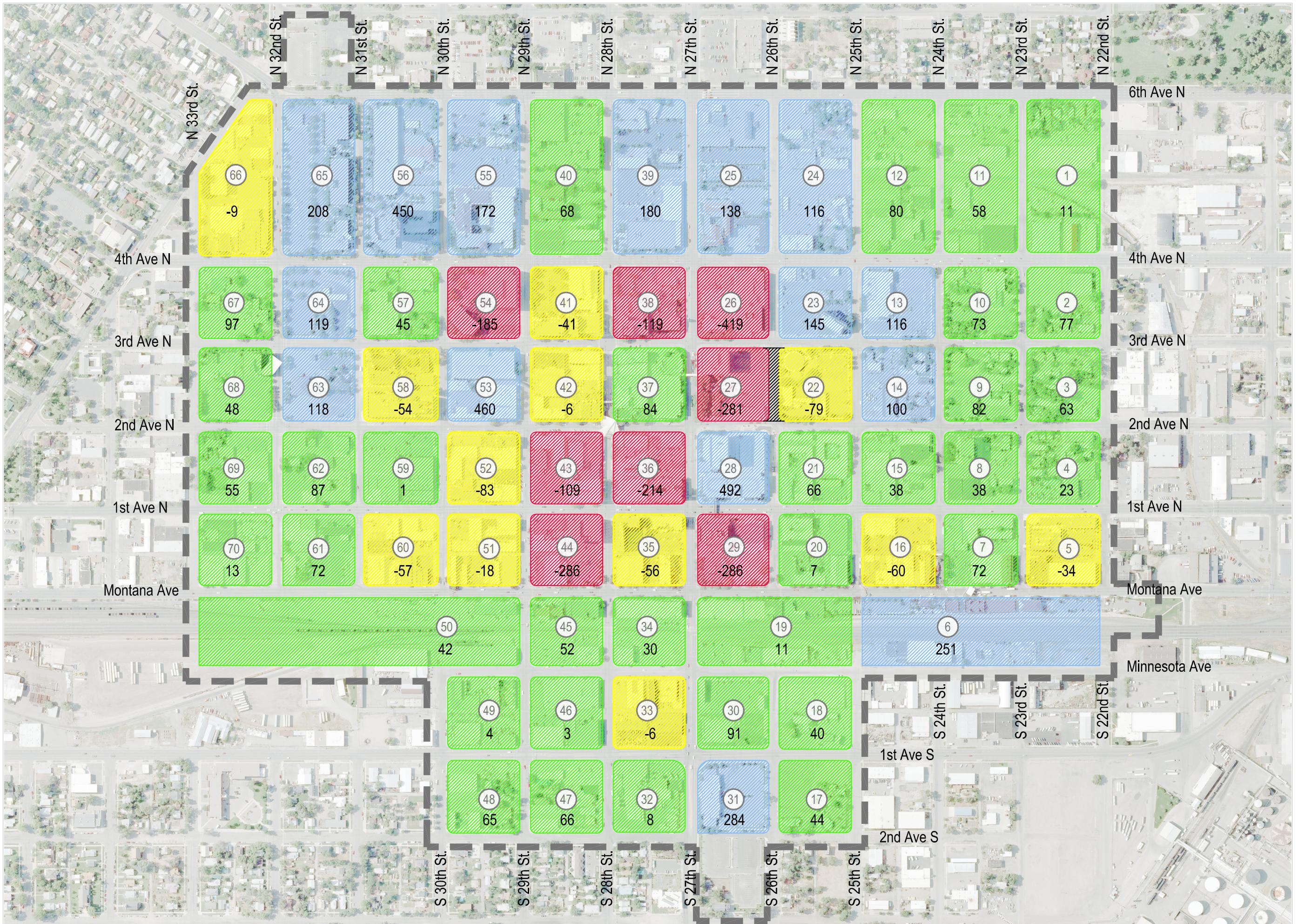
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- # BLOCK NUMBER
- Ⓐ LOT DESIGNATION
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- SURPLUS/DEFICIT AMOUNT
- 100 +
- 99 through -1
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- +100



Date	ISSUED FOR:
06-26-2009	DRAFT REPORT
07-02-2009	DRAFT REPORT
12-03-2009	DRAFT REPORT

Sheet Title:

**SURPLUS/  
DEFICIT  
(10 YEARS)**

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Last Rev.	12-03-2009
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MAP Number:

MAP 7

## 2.5 Future Parking Demand Calculations

The current parking demand in Billings is for 7,297 parking stalls. In five years the parking demand is projected to grow to 8,375 parking stalls and in ten years to 8,426 parking stalls. Future parking demand was derived from information provided by the City which included proposed and potential developments for the downtown area (**Table 2J**).

**Table 2J – Proposed And Potential Projects In Downtown Billings**

Development Name	Type	Block Number	Street Location	Parking Stalls gained/lost	Office Sq. Footage	Retail Sq. Footage	Residential Sq. Footage	Event Venue	Total Sq. Footage	Year of Development
Babcock Building Remod	Mixed use	43	2nd & 28th	n/a					0	2010
Federal Courthouse	Gov't Services	27 & 22	2nd & 26th		100,000				100,000	2012
Federal Office Building	Gov't Services	East of CBD	East of CBD	300	110,000				110,000	2012
1st Interstate Complex	Fin. Services	East of CBD	East of CBD	300	58,450				58,450	
Stockman Bank	Fin. Services	40	4th & 28th		70,000				70,000	2011
Privatization of Park 4	Parking Garage	56	6th & 31st	-695					0	
Babcock Theater Bld.	Mixed use	43	2nd & 28th			10,000	11,300	700 seats	21,300	2016
Northern Hotel	Hotel/Event/Retail	35	1st & 28th		30,000	10,000		rooms	40,000	2011
BN Building	Office	34	MT & 28th		60,000				60,000	
Northern Hotel Garage	Parking Garage	35	1st & 28th	180					0	Now Open
Old WSB Building	Office	54	3rd & 30th		53,338	8,000			61,338	
Downtown Conf. Center	Event/Retail	44,35,29	MT & 28th	650		unknown		2000 seats	0	2018
Park 5	Parking Garage	43	1st & 29th	550		hopefully		library?	0	2018
Park 6	Parking Garage	26	3rd & 26th	475		hopefully		library?	0	2018
Proposed Minnesota Streetscape Improvements	Expanded On & Off Street Public Parking	(See Map #2)	Minnesota, 24 <sup>th</sup> through 30th	170						2010 +

Future parking needs in downtown Billings were also derived based on an infill of vacant space at a rate of 15% in five years and 30% in ten years and from known/proposed new projects in the downtown area. Downtown vacant space was estimated at 224,450 square feet (s.f.) for the current time period.

Vacant space infill (15% of the total vacant space available) was calculated to be 33,668 s.f. by year five. Using a mixed use parking generation ratio (1.98 parking stalls per 1,000 s.f.) for future infill, the net increase in parking demand from vacant space is 67 parking stalls in five years.

The ten year scenario assumed that 30% of the vacant space was occupied. The total increase in parking demand over ten years attributable to the vacant space infill was calculated to be 133 parking stalls. Estimating vacant space infill is difficult as historical trends are speculative at best during times of national economic fluctuations. The 15% in five years and 30% in ten years was selected as a conservative estimate to help in calculating potential future parking demand increases. More important are the proposed and potential project identified in **Table 2J** above.

**Map 8** on the following page identifies the locations of the future developments in downtown Billings as listed in **Table 2J**. Park 5 and Park 6 locations are tentative. **Section 5** of this report examines new parking locations in the downtown. Specifically, Section 5 identifies optional locations for Park 5 and Park 6 and examines each site from a demand and locational perspective.

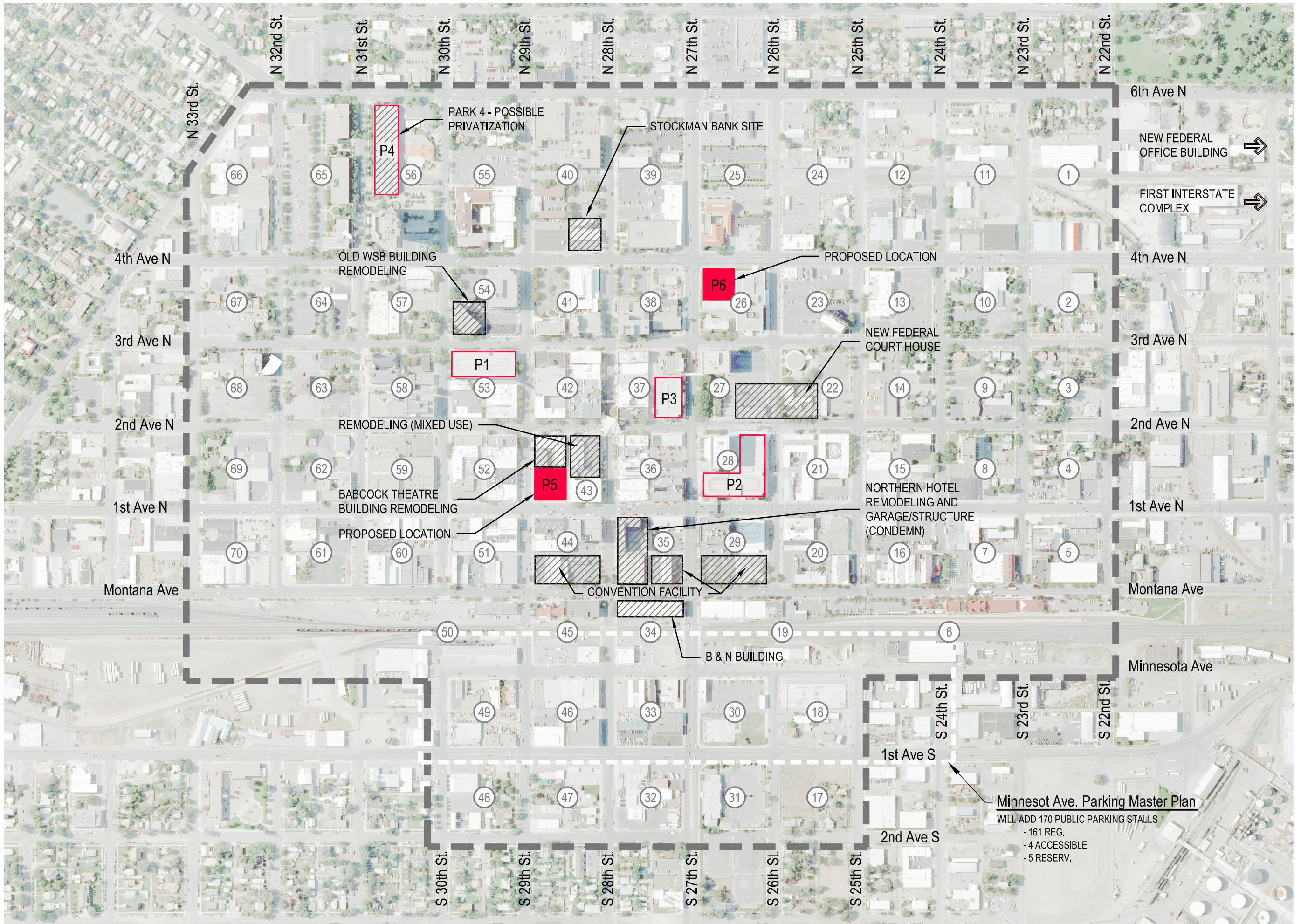
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THE CITY OF  
BILLINGS

BILLINGS, MONTANA



LEGEND:

- # BLOCK NUMBER
- STUDY AREA
- FUTURE DEVELOPMENT
- FUTURE DEVELOPMENT
- PROPOSED NEW PARKING GARAGES
- EXISTING PARKING GARAGES



Date	ISSUED FOR:
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Sheet Title:

**FUTURE  
DEVELOPMENT**

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MAP 8

BILLINGS, MONTANA

Downtown Parking Plan

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### **SECTION 3: PUBLIC INPUT**



## Section 3 – Public Input

Public input was solicited in the form of committee meetings, stakeholder meetings, input from the PAB and community surveys. In total, over 125 individuals were consulted directly or had an opportunity to help formulate the Downtown Parking Plan through their survey input.

The committee and staff provided input and feedback at the initiation of the project to aid consulting staff in formulating a project approach. Later the committee aided by providing feedback and guidance with the recommendations formulated as part of the plan. Steering the project were City staff and the Parking advisory Board.

Discussions with community stakeholders at input meetings included details on projects or buildings and situations specific to where they worked, lived or had other commercial and social interactions. Often user friendly issues emerged in the stakeholder discussions, in particular the lighting, cleanliness and appearance of the City's parking structures were identified as weak points. Stakeholders also identified the need for willingness to try new ideas, pricing strategies and public/private partnerships to encourage greater use of the public parking.

Other discussions that came out of the meetings included the need to address special needs within the downtown for situations such as jury call days. Stakeholders also stressed the importance of preemptively planning for new developments in the downtown that are proposed to take place in the near to mid-term future.

The final method employed for gaining input from the community included an on-line survey. The on-line survey was broken down into a business operator survey (parts one and two) and an employee survey. The survey response rate was as follows:

### **On-Line Parking Survey Results:**

- *Business Operator: 22 Responded*
- *Employee: 83 Responded*

The surveys included a series of questions pertaining to how individuals traveled, where they visited, how long they stayed. These questions, along with business specific questions on size of commercial area, number of employees, hours of operation and number of customers, helped the consultant staff determine the average amount of parking needed by various business types downtown.

Additional questions provided an opportunity for participants to offer an opinion on various aspects of the parking system. Questions ranged from fine amounts to overall parking adequacy. Results of the opinion based questions are located in the **Appendix** section of the Parking Study report.

**Some key opinion findings from the surveys include:**

- 96.4% of employees drive and park.
- 7.2% of employees indicated that they parked on-street in residential areas.
- The majority of employees indicated that there was too little parking in the downtown area for employees and for customers/visitors.
- Over 50% of the employees indicated that they visited three or more other businesses in the downtown each week.
- The majority of business operators indicated that there was too little parking in the downtown area for employees and for customers/visitors.
- Business owners typically indicated that the parking was reasonably close to their place of business.
- 37.5% of business operators encourage their employees to use the public parking structures.
- Business owners strongly agreed that on-street parking should be metered.

**Key comments from business operator, opinion survey:**

- Eliminating metered parking in the few blocks surrounding our building has been a life saver. Without day long on street parking, our staff parking situation would be extremely challenging. Our area has few retail businesses that need the on street customer parking. For the few businesses near us, we direct our employees not to park in their on street spaces.
- We ask our employees to park in the parking garage. I still see them plugging meters. Most of our employees work part time in the evening/night. Female employees seem reluctant to utilize the parking garage at night.
- I think a parking validation system for businesses which allows the business to limit the amount of time they are willing to pay for. That way, if customers spend three or four hours downtown and makes several purchases and maybe has lunch or dinner, each of the merchants could validate for an hour and the costs would be shared.
- Accepting credit cards in the garages or selling a prepaid card available by credit card at the gate would make it easier for some people to park and shop downtown.
- The recent price increase from \$10 to \$15 dilutes the value of the DBA parking passes.
- Customers routinely complain about the lack of nearby parking. This is an advantage for west-end businesses--even though you might walk as far in a big box store parking lot to get to the store front as it takes downtown. I know that "safe" and "easy" parking keeps people from coming downtown.
- To some extent a minor parking shortage can be a sign of success, so long as it does not become a negative perception.

**What else can be done to help the parking situation in downtown Billings?**

- More use of public transportation, more people riding bikes.
- I think that we need to continue to make improvements to our parking supply and policies. For instance, there are some prices that are still ridiculously low, like for meters and 10-hour meters, that need to come up to a more market-based value. The more we can encourage private investment in parking the better our overall parking will also be. It looks to me like we could still use more enforcement too. I feel like our area is not really well enforced.
- Additional parking structures. Employer-support bus/ped/bike programs. More bicycle-friendly streets.
- It is hard to get monthly parking spots for downtown office workers.
- I think a prepaid punch card for employers/employees who want to pay for a month with one check. Currently, while on the waiting list for a monthly spot, we pay daily for our employees parking. It would be much more convenient to pay altogether by invoice or pre-paid card.
- I think that the on street parking should be run by an organization (not the city). It should all be 2 hour free parking with a \$20 fine for overtime parking. It should be enforced by an automatic gps and license plate character scanning system. This system is available today. It would be funded by the business owners.
- Better transport system, perhaps a summer trolley to take visitors from parking structures to downtown.
- Airport - Montana Avenue shuttle would be dynamite. Many area visitors stuck at the airport or here for just a few-hour layover could dispense with dealing with a car entirely.
- More Yellow top meters.
- The Northern Hotel garage would be very helpful. Hopefully, business owners and employees can lease spots to alleviate the crunch.
- We need to plan to replace / add on to the Northern parking garage.
- Our customers use Park 2 and I have problems when I have large events. With the extension that has somewhat been solved.
- Remove Meters - go to system Downtown Bozeman uses.

**Are there certain days or times of the week or year that parking is better or worse?  
Please explain.**

- Better in summer due to vacations, lack of snow piles and more people biking and walking.

- Parking seems to be most in demand around lunch time and early afternoon in our area. This seems pretty consistent over the course of the year.
- Worse at noon.
- Mid day, and early evening are very busy and there is no parking.
- Often around lunch time it is worse.
- Farmers Market, Noon Hour, Whenever downtown streets are blocked off
- Downtown events.
- Inadequate during events and Farmer's Markets.
- Weekends and nights are much better--when the First Interstate parking lot is open to the public and business employees don't take prime spots.
- ABT events and MSU B conferences.
- Weekends are not bad unless a special event. Weekdays are worse because of the business people.

**If you experience a lack of parking, what factors do you feel attribute to the circumstance?**

- General lack of sufficient parking for School District, Gazette, Federal Building etc.
- Right now parking in our area is pretty good. When we do see problems from our perspective it appears that it is related to not adequately enforcing violators. At times there are large delivery trucks that block 10-minute spaces near our business as well. We had many more problems when there was a bowling alley nearby--particularly with enforcement issues.
- We lost the use of about 50 parking spaces when the City Engineering division moved into the Depot office building. We compensated by leasing 15 spaces in a lot a block away. Those spaces go largely unused as staff have found on-street spaces closer to our office.
- General lack of parking spaces.
- Lack of parking spaces.
- Only two lanes of traffic are needed from 27th Street to the East on Montana Ave. If the south lane were eliminated nose in parking would add several spaces.
- Local business employees parking on the street.
- Insufficient signage directing drivers to nearest public parking.
- Event & Farmers Market.
- Meter-plugging is an issue for us.....This ties up parking spaces for the entire day.
- Inadequate enforcement.

BILLINGS, MONTANA

Downtown Parking Plan

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**SECTION 4: RECOMMENDED PARKING STRATEGY FOR  
DOWNTOWN BILLINGS**



## Section 4 - Recommended Parking Strategy for Downtown Billings

The comprehensive parking management strategy for downtown Billings encompasses two areas of recommendations. The first, ***Effective Management of Existing Parking Supply***, consists of recommendations included in **Section 4**. These recommendations largely center on:

- A) The overall operations and management of parking resources in the downtown area.
- B) Improving customers' experiences and perception of parking in downtown Billings.

The second group of recommendations, ***Increasing the Supply of Public Parking*** in **Section 5**, outlines the need for new parking solutions and locations, as well as details on projected costs and parking system revenues and expenses.

Examination of Billings parking system revealed that there are several 'best-practice' strategies that are currently in practice in Billings and worth mentioning as positives for the community:

1. First the City has a Parking Advisory Board. This Board reviews and considers changes, acquisitions and amendments to the parking system and serves as an advisory body to City Council. The detailed consideration offered by a community based body helps optimize the role of parking within the community and allows for an active approach to parking management by assisting with management decisions and policy framework on an on-going basis.
2. Secondly, the City has a dedicated parking management position, where one individual oversees daily operations. This important function allows for more in-depth examination of parking data and information, and provides a single point of reference for user interface with the City.
3. Third, current parking policies and ordinances include both a graded fine schedule and courtesy ticket provisions. These two parking enforcement elements enhance the parking function by being customer/visitor friendly, while penalizing repeat offenders.

**Table 4A** is a recommendations summary chart that is ordered according to suggested implementation. Along with a description of each recommendation, costs estimates and agency assignments are offered.

**Table 4A – Parking Recommendations Summary**

<u>Sec.</u>	<u>Time Frame</u>	<u>Category</u>	<u>Condition</u>	<u>Recommendation</u>	<u>Budget</u>
4.1	3 to 6 months	<b>Anti-Shuffling Ordinance</b>	Current parking regulations are comprehensive, but do not cover anti-shuffling	Develop an anti-shuffling ordinance.	None
4.2	3 to 6 months	<b>Handheld Technology &amp; Enforcement Routing</b>	Routing of enforcement and 100% stall monitoring will be needed.	Use full capability of handheld to deter shuffling.	May require a software upgrade for handhelds, some handhelds come with free software upgrades, new system software can cost up to \$20,000.
4.3	6 to 18 Months	<b>Parking Meters</b>	On-street meters have been removed from Montana Avenue.	Replace meters on Montana Avenue, consider multi-space meters as opposed to individual space for greater flexibility with parking configurations, pricing and payment options.	Budget \$15,000 per block face.
4.4	6 to 18 Months	<b>Transportation Alternatives</b>	A large percentage of employees in the downtown drive and park, some survey comments suggested a desire for more transportation options for individuals.	Consider adding in bicycle racks and possibly lockers in parking facilities. Parking service area is then expanded with more alternative options.	Budget \$150 per bike rack or \$1000 per bike locker.
4.5, 4.6	On-going	<b>Transportation Alternatives</b>	Pedestrian enhancements are a key component of the Downtown Framework Plan.	Continue with the efforts outlined in the Downtown Framework Plan and encourage transportation oriented development and pedestrian enhancements in the CBD.	Per Downtown Framework Plan.
4.7	3 to 6 months, on-going annually.	<b>Marketing and Parking Information</b>	Information on Parking system needs to be expanded over a variety of media types and include details on rates, proximity to key locations and maps	Expand on marketing initiatives and information regarding the parking system, notify the business community whenever changes to parking are pending and offer visitors information through publications and on-line.	\$2,000-\$7,000 per year for on-going marketing efforts.
4.8	6 to 18 Months	<b>Parking Signs, Vehicle and Pedestrian Wayfinding</b>	Parking signs need to be more comprehensive by directing vehicles and pedestrians to key locations and parking areas in the CBD.	Undertake a new sign program that covers all parking related and directional signs for vehicles and pedestrians in the CBD.	TBD, start with \$150,000 for complete design study, sign acquisition and installation.
4.9	6 to 18 Months	<b>Parking Structure Equipment and Operating Methodology</b>	Existing parking control equipment could be upgraded in certain locations and more efficient methods could result in long-term cost savings for the City.	Upgrade the Parking operating equipment, transition to an automated PILM system.	Varies, approximately \$525,000. \$525,000 for PILM

**Table 4A (con't) Parking Recommendations Summary**

<b>4.10</b>	6 to 18 Months	<b>Parking Structure Signs, Conditions and Security Equipment.</b>	Existing parking structures need to have sign upgrades and in some cases may require further consideration for remediation. Non functioning security cameras present a liability issue for the City.	Upgrade parking signs in parking structures, further assess issue areas and remove non-functioning security cameras.	TBD
<b>4.11</b>	6 to 18 Months	<b>Residential Permit Program (RPP)</b>	Neighboring residential areas could experience overflow parking from the downtown or other parking intensive land uses.	Consider an RPP in residential areas that experience parking shortages and issues from neighboring land uses.	Varies depending on RPP area scope and fee determination.
<b>4.12</b>	6 to 18 Months	<b>Revised Parking Structure Allocation</b>	Currently, transient or short-term parking takes place on roof levels or further from the entrance/exit points of parking facilities.	Transition short-term parking to main floor locations near entry/exit points.	Minimal, some new signs.
<b>4.13</b>	6 to 18 Months	<b>Parking pricing revision</b>	Parking rates are too low in some locations, discouraging the use of long-term parking and off-street parking options.	Revised pricing of parking for the long-term on-street and parking structures.	Included above.
<b>4.14</b>	1 to 3 Years	<b>New Parking</b>	Current shortages of parking will be compounded by future building expansion in the CBD.	Consider initiating Park 5 to coincide with the new Federal Court facility. Consider disposing of Park 4	TBD

Detailed descriptions of the each of the recommendations for Billings are offered in the following subsections. A description of the recommendation along with the issue addressed, expected outcome, budget implication guideline and agency assignment are offered where applicable.

Overall, the recommendations prioritize the efficiency of the existing parking system over capital expansion. This approach allows the City to adopt initial recommendations that offer the best cost to benefit ratio. Long-term solutions have higher costs associated with them and are incrementally phased to allow the City to make necessary budget decisions when considering implementation.

#### **4.1 Institute Anti-Shuffling Measures**

Rich and Associates observed 16 parkers actively shuffling vehicles on December 18, 2008 and 8 shuffling on October 1, 2009 at the two-hour meters. The City provides ample opportunity for longer-term parking at the 4 and 10 hour meters, and in the parking structures. Parking shuffling activity should be discouraged in the downtown to ensure that the short-term parking is reserved for customer and visitors.

An anti-shuffling ordinance will be needed for legal enforceability. Several options are available to the City for writing such an ordinance, ranging from no shuffling within a 24 hour period to no shuffling within one block of the originally parked location. New software will most likely be needed for the parking ticket (handheld) writers that the City currently uses. Manufacturers will typically aid the City in setting up anti-shuffling parameters as part of their services with new software acquisition.



Anti-shuffling tickets do require the use of a handheld ticket writer, with appropriate software to store license plate data. Courtesy tickets can also be applied as a means of warning drivers that shuffling is not permissible. The software stores license plate information in the handhelds to identify overtime parking and shuffling adding to the officers observations of infractions.

**Action:**

**Recommendation:** Institute a policy of issuing courtesy tickets for the first month the parking enforcement system is introduced. Also establish a policy that the first ticket for any user is always a courtesy ticket.

**Cost:** Requires the use of handheld ticket writers. A software upgrade may be necessary to the existing software used, budget \$20,000 (some handheld companies offer free upgrades, though new parking system software could cost up to \$20,000).

**Benefit:** Parking turnover is maintained, long-term parking is moved to appropriate locations.

**Time Frame:** 3 to 6 Months

**Responsibility:** Parking/City Council

**Issue Addressed:** Shuffling activity is taking place and will become more prevalent as parking demand increases. This recommendation will require an anti-shuffling ordinance.

## **4.2 Enhanced Parking Enforcement**

The key goal for parking enforcement is to promote compliance with parking regulations that are designed to maximize the efficiency of public parking use. Specifically, a high turnover of on-street parking and the use of off-street parking for long-term purposes are two key goals for enforcement.

Emerging best practices with enforcement include the dual role of enforcement combined with downtown ambassadors, so that enforcement personal are also information resources for visitors and customers. Routing of parking enforcement and the use of the handheld technology to track all parking activity is needed to comprehensively monitor and control parking.

Some guidelines on efficient and effective parking enforcement include:

- Routing of parking enforcement officers (PEO's) so that a complete circuit is followed every two hours in the downtown area.
- Handheld parking ticket writers should be used to track license plate numbers.
- Every parking stall, whether occupied or not, is then entered into the handheld.
- The handhelds should be programmed to issue tickets for overtime parking and vehicle shuffling (moving vehicle to a different on-street stall every two hours throughout the day to avoid a ticket).

- Generally, a PEO can cover or enforce between 600 and 800 spaces in a two hour route.
- Parking enforcement officers should be dedicated to parking duties, only being reassigned during emergencies or special circumstances that may arise.
- Street signs should indicate the hours of enforcement.
- Enforcement times should vary so that employees are not timing the movement of their vehicle to avoid receiving a ticket.

Billings currently has adequate staff to properly enforce parking. Routing and the added roles as downtown Ambassador should be included in the duties of the City's PEO's.

**Action:**

**Recommendation:** Upgrade parking enforcement officer's duties and develop enforcement routing.

**Cost:** TBD

**Benefit:** On-street turnover is achieved.

**Time Frame:** 3 to 6 Months

**Responsibility:** Parking Department

**Additional Comments:** The recommendations need to be initiated slowly to allow for changes in the parking system. Courtesy tickets should be used extensively for the first month of operation, advising parkers that system changes are being implemented.

#### **4.3 On-Street Parking Meters:**

Rich and Associates recommends that the City replace or install on-street parking meters along Montana Avenue to aid in parking revenue generation, create equity in the downtown and to limit daytime users to two-hours. The meter's primary function is to encourage parking turnover and the optimization of on-street parking for customers and visitors. The secondary function of the meters is to help generate revenue for the public parking system, to finance improvements and expansion. Another aspect to consider is that having metered parking in one area and not another creates an economic discrepancy where some businesses benefit and others do not within the downtown.

Consider using multi-space meters to maximize flexibility with reorienting angle parking and user payment options. Multi-space meters offer the greatest degree of flexibility in terms of reconfiguration, rate changes and payment options. Also, consider changing the existing ten-hour meters to a different color scheme than is used on the two and four hour meters. The duplication of the yellow scheme on two and ten hour meters can be confusing to users.

**Action:**

**Recommendation:** Re-implement on-street meters on Montana Avenue. Consider using multi-space meters as a better option for on-street parking. Re-color ten-hour meters.

**Cost:** Budget \$600 per stall for individual space meters or \$5,000 per unit for multi-space meters. Installation and signing costs will vary.

**Benefit:** Parking efficiency is maximized through simplicity. Long-term parking takes place in lots where permits and hourly parking can be utilized. Short-term parking is located on the streets near the business where it is needed the most for customers and visitors.

**Time Frame:** 6 to 18 Months

**Responsibility:** Parking/Public Works Departments

#### 4.4 **Bicycle Enhancements:**

Billings is a bicycle friendly community. Some suggestions for building on this strength include providing adequate and useable bicycle parking, creating a marketing program to promote bicycle use as an alternative to driving, and linking the existing biking trails to the downtown. Install additional bicycle racks in the downtown and institute a marketing program to promote new locations to park bicycles. Consider creating a special event to promote bicycle ridership in a city wide effort to use alternative modes of transportation, which in turn cuts down on the number of parking spaces needed.

#### **Guidelines on Bicycle Racks:**

- Racks should allow bike frame to make contact at two points.
- Should allow for more than one bike per rack.
- Needs to allow for popular "U" shape lock.
- Racks should be placed where they will not impede upon pedestrian traffic, though need to be readily identifiable.
- Should be clearly signed with a bicycle parking sign.

#### **Marketing Bicycle Ridership**

- There is National "Ride Your Bike to Work Day/Month" in May. There are several communities throughout the U.S. that participate. Information can be found through the League of American Bicyclists [www.bikeleague.org](http://www.bikeleague.org).
- Source of possible grant funding through Bikes Belong Coalition, <http://bikesbelong.org>
- Pedestrian and Bicycling Information center is a great link that offers advice on funding and marketing bicycling in downtowns. <http://www.bicyclinginfo.org>



Two examples of user friendly bike racks

**Action:**

**Recommendation:** Add bicycle racks and encourage bicycle activity as a launch to more transportation alternatives for Billings.

**Cost:** Budget \$150 per rack for simple two bike racks, up to \$1,000 for weather proof bike lockers.

**Benefit:** Introduces an alternative means of transportation to the downtown area. Long-term impacts can include a reduced need for parking and make the downtown more attractive as an activity center.

**Time Frame:** 6 to 18 Months

**Responsibility:** Planning/Public Works Departments

#### **4.5 Pedestrian Enhancements:**

Pedestrian movement is an important aspect of parking. It is very difficult to get people to park beyond the front door of their destination if there is a worry about safety or if the experience is not pleasant. Maintaining the principals in the Downtown Framework Plan is an important step in enhancing the pedestrian orientation of Billings.

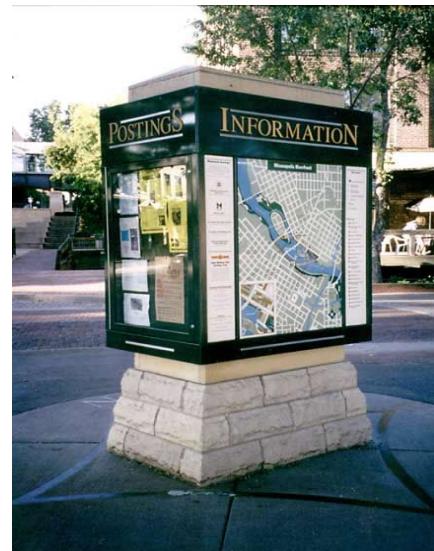
Lighting and landscaping can greatly change a perception of safety in lots and along sidewalks. A police presence after dusk can also give a feeling of safety. Murals, art, window decorations and flowers can create a pleasant walking experience. Lighting levels for outdoor public areas where safety and security are important should adhere to the following standards:

The Illuminating Engineering Society of North America (IESNA) recommends the following design criteria for parking lot lighting in the 9<sup>th</sup> edition of The IESNA Lighting Handbook Reference and Application: (Note: parking facility lighting is adequate (see **Appendix F**).

- Parking lot lighting levels should be illuminated to a minimum horizontal luminance of 0.5 foot candles (fc) maintained as measured horizontally on the pavement surface without any shadowing effect from parked cars or columns.
- A minimum maintained vertical illuminance of 0.25 fc should be achieved as measured 5 feet above the parking surface at the point of lowest horizontal illuminance.
- Maximum of Minimum uniformity ratio should be 15:1.

Minimizing surface lots and large breaks between buildings will help to promote walking in the downtown. People tend to walk further without complaints if the walk is pleasant and enjoyable. Landscaping, murals, and decorated store windows tend to create an enjoyable walking experience. Parking areas are important, though large parking lots without landscaping can be viewed as unsightly and unsafe.

Consider adding more pedestrian wayfinding to the downtown (as referenced in the sign recommendation). Kiosks near parking areas (such as the one near Park #2) and on busy corners with maps and listings of businesses in the downtown are very helpful in directing visitors/customers of the downtown. Pedestrian Wayfinding will work hand in hand with marketing and signage in the downtown. The maps should show where long term parking should occur.

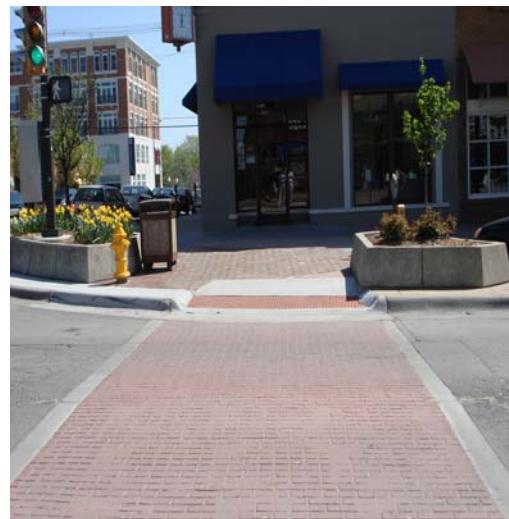


Two examples of pedestrian wayfinding kiosks

Minimize pedestrian and vehicular interaction by creating a clear differential between the street and sidewalk. This can be done by using texture, colors, trees, or planters between the sidewalks and streets. The pictures below show a clear distinction between the street and sidewalks. It is also important to provide barrier free access at all intersections. When all sidewalks are accessible it is then possible for someone with less mobility to park at a non-barrier free designated parking space when all designated barrier free spaces are full.



Example of a sidewalk separating pedestrians from vehicles with texture color and light poles.



Another example of using color and texture to create a clear path for pedestrians. This example uses planters to protect pedestrians waiting to cross the road.

**Action:**

**Recommendation:** Continue to follow the guiding principals of the Downtown Framework Plan, particularly the elements that interrelate with parking to help reduce parking need in the downtown area and to make the downtown more desirable.

**Cost:** As part of the Downtown Framework Plan.

**Time Frame:** On-going

**Responsibility:** Planning/Public Works/Administration Departments

**4.6 ADA Compliance:**

Accessibility for all users is equally important in a pedestrian friendly community. The following guideline is compiled as a ratio of the number of accessible stalls per number of standard stalls, suggested under the Americans with Disabilities Act (ADA). Along with the parking guidelines, it is also important to check with State requirements for accessible parking design parameters, to ensure that each community is in compliance with State requirements. Billings currently exceeds ADA requirements with regard to Handicap Parking provision. **Table 4B** is offered as a guide for ensuring that future public and private development follows the standards.

**Table 4B** is a breakdown of the recommended number of barrier free ADA stalls suggested under the act. The ADA also defines that *“one in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 in (2440 mm) wide minimum and shall be designated van accessible”*.

**Table 4B: ADA Parking Guidelines**

Total Parking in Lot	Required Number of Spaces	Minimum Accessible
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 to 300	7	
301 to 400	8	
401 to 500	9	
501 to 1000	2 percent of total	
1001 and over	20, plus 1 for each 100 over 1000	

**4.7 Marketing/Education:**

Develop materials to both market parking resources as well as to educate users, including business owners, employees, and visitors on where to park and how to use the parking system. Materials can include direct mailings, brochures, maps, kiosks, on-line web pages or articles in magazines. Information contained in the marketing material should include location, up-coming changes, regulations, fine payment options and any other information relating to the parking system.

Marketing should be used every time there is a change to the parking system and should be directed towards downtown employers, employees and customers/visitors. It is very important to help encourage downtown employees to park in the long-term parking areas to preserve the on-street parking for customers and visitors. Additionally, an individual's perception of Billings is greatly enhanced if they know ahead of time where they can park based on their destination or event being attended.

**Action:**

<b>Cost:</b>	Budget \$5,000 to \$10,000 per year for on-going marketing efforts.
<b>Benefit:</b>	Customer/visitor experience of Billings will be greatly enhanced. Also helps to encourage employees to park in long-term lots, providing a greater effective supply of parking for customers and visitors.
<b>Time Frame:</b>	3 to 6 Months
<b>Responsibility:</b>	TBD
<b>Issue Addressed:</b>	Understanding of parking regulations and where to park.
<b>Additional Comments:</b>	Consider combining parking information with other promotional and downtown publications to help lower costs and reach a larger audience.

#### 4.8 Signage/Wayfinding:

Develop and install a system of signage that will lead visitors to parking facilities and educate parkers about how the system works. Rich and Associates recommends that Billings develop plans for a new sign program. Existing signs directing traffic, identifying various downtown destinations and parking areas are sporadic and mismatched. However, signs in the parking structures are relatively good (See **Appendix F**).

The City should develop a comprehensive new sign program that directs motorists and pedestrians from key origin locations to key destinations. Additionally, new parking signs will be needed as parking regulations and operating parameters evolve for on and off-street public parking.

**Action:**

**Recommendation:** Signage/Wayfinding Project.

**Cost:** Budget TBD, initially assume \$150,000 for design program, creation and installation.

**Benefit:** Customer/visitor experience of Billings will be greatly enhanced by a comprehensive new sign program, as will the overall perception of Billings as a quality tourist destination place.

**Time Frame:** 6 to 18 Months

**Responsibility:** TBD

**Additional Information:** As a best practice the following five types of parking signs that increases drivers' wayfinding experience are strongly recommended. Communities often miss the important role that signs play in making visitors comfortable with their surroundings and the effect that signs can have on vehicle travel and parking use efficiency. These include:

**Introduction:** Introduction signage alerts drivers approaching the downtown of the locations to the publicly owned, off-street parking areas. This type of signage is distinctive in color and size, and it can be characterized by unique logos. The signs can display the names of the off-street parking areas and the names of adjacent streets. The signs are located on the street, and are mounted on poles of standard heights.



**Directional/Location:** Directional-signage is distinct in color, size and logo, and directs drivers to off-street parking areas. Parking location signage complements the directional parking signage. The signs have arrows pointing to the off-street lots. The signs are mounted on poles at standard heights, on the streets.



**Identification:** Identification signage is placed at the entry of each off-street parking area. The name of the parking area is identified and the type of parking available is listed on the signage. The identification signage is distinctive in color and size, and it is located on a pole at a lower height.



**Vehicular Wayfinding:** Vehicular wayfinding signs are placed at the points in the downtown to lead to places of interest and parking locations. The sign also points out the various landmarks or attractions that can be found. These types of signs are placed at locations easily found by a driver and are intended to help that driver orient themselves to the downtown area.



**Pedestrian Wayfinding:** Pedestrian wayfinding signs are placed at the points of pedestrian entry/exit to parking lots and structures. Typically a map illustrating the downtown area that points out the various shops or attractions. These types of signs are placed at locations easily found by a pedestrian and are intended to help that person orient themselves to the downtown area to locate their destination and then be able to return to where they parked.



**Quality signs for parking and wayfinding have the following elements incorporated into their design and placement:**

- Use of common logos and colors.
- Placement at or near eye level.
- Use of reflective, durable material.
- All five types used in conjunction to guide motorist and pedestrian activity.
- All entrances to the downtown need to have introduction signage.
- All parking areas need to have identification signage.
- All routes through the downtown need to have directional and location signage.
- All pedestrian routes to and from major customer/visitor parking areas need to have wayfinding signs.
- The identification signs located at parking areas need to convey parking rates, hours of operation, maximum durations, and validation availability.

**Design Specific Criteria Recommendations:**

- In general, sign lettering should be four inches in height. Smaller lettering may be difficult to see and cause traffic slow-downs as drivers read signs before entering a parking area.
- Depending on the location for the signs, some may need State Department of Transportation approval before installation. The City Engineering Department will need to be consulted on specific locations that fall under State control and the various regulations that may need to be met.
- Logos and sign colors can be customized to suit the communities desired design criteria. The important element is to be sure that signs can be read easily by being a distinctive color that stands out from background colors of adjacent buildings.
- The signs colors and logos need to be consistent for ease of understanding and quick visual reference by drivers.
- Sign programs are usually best undertaken at a community-wide level and include all the relevant signs for parking and directions to major destinations. The comprehensive nature of a large scale sign program helps ensure that all forms of wayfinding signs (vehicular and pedestrian) are taken into account.
- Vehicular wayfinding needs to be laid out initially in a coordinated fashion to determine what the preferred entry points to the community should be. Often directed traffic flow is a more efficient option that allows the community to take advantage of planned vehicle routes and entry points. A key 'rule of thumb' is that fewer, well thought out and well placed signs are far better than too many signs scattered randomly throughout a community.
- Vehicular wayfinding should include direction arrows to key destination places such as theaters, museums, shopping districts, etc. These should be used in conjunction with the parking direction signs to allow a driver to quickly orient themselves to their destination and best parking options. Arrows should always be oriented to indicate forward, left or right movement. Reverse arrows or arrows indicating that a destination has been passed should be avoided to reduce confusion.
- Pedestrian wayfinding is critical once a person parks and transitions to walking. Being able to find wayfinding maps or signs to aid pedestrians in locating key destinations and then the way back to where they parked are important elements in tourist/customer/visitor oriented downtowns.

**4.9 Parking Access and Revenue Control Equipment:**

Rich and Associates prepared a review of the potential of transforming the parking and revenue control equipment in the existing parking structures from a cashier system to a cashierless system. The trend across the country in the past few years has been to reduce staffing costs by going to a cashierless parking control system.

The existing system consists of the following:

- On the inbound the hourly parker receives a printed ticket from a ticket issuing machine (Note: in Billings the ticket dispenser does not machine code information on either a magnetic stripe or bar code information and it is only man-readable by imprinting on the ticket).
- The inbound time and date are printed on the ticket.
- A permit parker uses a card reader system.
- On the outbound the hourly parker presents their ticket to a cashier who manually reads the ticket and calculates the hours used.
- Since the tickets are not encoded with electronic data, there is no need for a fee computer. Any validations are deducted from the time spent/dollars owed and the fee is paid by the parker.

There are two types of cashierless system that would be applicable to the parking in Billings. One is a Pay on Foot (POF) machine and the other is a Pay in Lane Machine (PILM). Both systems are similar by the fact that the parking ticket and any associated validations are processed at a machine either located in convenient locations, near a stair/elevator tower in the case of the POF, or in the exit lane in the case of the PILM.

### **Pay on Foot System**

In the case of the Pay on Foot (POF), a patron would put their ticket (pulled on the inbound) into the POF machine. The machine will read encoded tickets issued by ticket dispenser, compute parking fees based on time spent and the applicable fee schedule. The POF will accept validations, which either offer an increment of time or fee, from a ticket or then recalculate the fee. The machine accepts payment in cash, credit card, or value card and then issues a machine readable validated ticket for use at the exit along with a receipt.

Once the parker has completed the transaction at the POF, they proceed to their vehicle and exit. At the exit they insert their validated ticket in an exit-validator, which is then read to ensure that the ticket has been paid and that the grace period has not expired. The grace period is programmable time set by the operator from the time someone pays to the time they have to the exit, generally set at 15 minutes. This helps ensure that someone has not prepaid too early.

This system can also allow someone to pull a ticket at the entry, by-pass the POF, and insert their ticket into the exit validator and use a credit card to pay. In either case, the parker using a validated ticket to exit or completing the transaction using a credit card at the exit verifier, the transaction time is between eight and 20 seconds.

### **Pay in Lane Machine**

The second system is the Pay in Lane Machine (PILM). The PILM is a version of the POF however, it is installed directly adjacent to the exit lane. The parker proceeds to the exit and

then processes their ticket similar to the transaction at the POF. The transaction time averages about 20 seconds with no merchant validations.

With either the POF or the PILM, the issues have been:

- User's acceptance of the technology.
- What happens if someone ends up at the exit validator and they have not pre-paid at the POF and they do not have a credit card?
- What is the reliability of the equipment and what do you do in case of a malfunction?
- Are there enough lanes to accommodate the potential added transaction time at the exit validator or PILM?

### Costs

Rich and Associates reviewed capital costs for both the POF and PILM systems. The estimate includes the costs for:

- new ticket dispensers (these will be required because the existing ones only print manual tickets that must be read and entered by staff),
- software update,
- intercom system and then
- PILM,
- POF machines and
- exit verifiers.

We also included a cost for signage that will be required (both temporary and permanent) to alert parkers that they have to pre-pay (POF) or that they will be paying at a machine upon exit.

The estimated capital cost for the PILM is \$521,500 and for the POF \$1,310,450. The PILM cost estimate assumes that there will be a PILM at each exit lane. The POF cost estimate assumes that there will be an exit verifier at each exit lane. We also assume that validators will be required to prepare machine readable merchant validations.

Further, we have assumed only two POF machines per parking structure. We reviewed each structure and locating POF machines was problematic due to limited space. In order to promote their use prior to someone reaching the exit lane, the location needs to be well signed, they must be easily seen, in an area open enough to allow for queuing without disrupting other pedestrian flows, and finally takes into account that in the winter standing outside to pay for parking may be uncomfortable.

There are no good places to locate the POF machines in any of the existing parking structures. In some cases we recommend more than two POF machines to get proper coverage to maximize accessibility and ease of use. Based on the existing capacities of the parking structures and the allocation of permit and hourly parkers, it made more sense to recommend pay in lane machines at this time.

### **Current Costs for Operations**

The current parking operations have cashiers at all locations. In Park 4 the cashier is not staffed past 6:00 P.M. As will be discussed, by going to a cashierless operation there is still a need for some staff interaction with the equipment and with parkers who have issues at the POF, exit validator or the PILM. The cost estimate on the previous page has assumed an intercom system that will allow a staff person to communicate with a parker at a machine and if needed remotely open a barrier gate, either in an office or by phone/cell phone.

There is a substantial savings on labor with a cashierless system. In 2006 Billings estimated that there would be a total average savings of \$320,300 per year over a 10 year period by going cashierless. Rich and Associates has estimated that the savings for manpower, beginning in FY 2010, will be \$310,400. Over a 10 year period the estimated the savings would be \$3,558,400 in total, for an average savings of \$355,840 per year. The largest cost savings will come from eliminating cashiers except where staff will need to be available to respond to issues with customers at equipment.

The new equipment should have a one year warranty; therefore repair costs will be lower the first year. Additionally, other supply costs may also be lower than anticipated in Rich and Associates estimates.

### **Additional Revenue Generating**

A positive aspect of the cashierless operation is that there is potential to generate additional revenue that is generally lost when the cashier leaves and the barrier gates are then opened to allow free parking. It is difficult to estimate the additional revenue that can be generated by keeping the barrier gates down. However, we made a conservative preliminary estimate of potential revenue of \$87,000 the first year.

One issue that will have to be addressed with the equipment will be the hotel parking in Park 2. Specifically, how hotel patrons exit from the structure will require further consideration in order to offer parking validation as an option.

### **Review of Cost and Savings Benefits**

The **Table 4C** and **4D** illustrate the analysis for the PILM and the POF options for going cashierless. In both cases there is a net positive financial impact. To complete the analysis we assumed that the funds to purchase the equipment would be borrowed. If the funds are not borrowed then the time value of the funds expended will need to be taken into account. The operating cost savings and the additional revenue would be retained by the parking operation and the net financial impact is simply the retained funds less the debt service. In both cases there is a positive financial impact.

**Table 4C: Analysis of Pay In Lane (PILM)**

			<b>Additional</b>	<b>Net</b>
	<b>Amortized</b>	<b>Cost</b>	<b>Revenue</b>	<b>Financial</b>
	<b>Costs</b>	<b>Savings</b>	<b>Potential</b>	<b>Impact</b>
(1)				
2010	-\$70,100	\$310,400	\$87,000	\$327,300
2011	-\$70,100	\$319,712	\$88,740	\$338,352
2012	-\$70,100	\$329,303	\$90,515	\$349,718
2013	-\$70,100	\$339,182	\$92,325	\$361,408
2014	-\$70,100	\$349,358	\$94,172	\$373,430
2015	-\$70,100	\$359,839	\$96,055	\$385,794
2016	-\$70,100	\$370,634	\$97,976	\$398,510
2017	-\$70,100	\$381,753	\$99,936	\$411,589
2018	-\$70,100	\$393,205	\$101,934	\$425,040
2019	-\$70,100	\$405,002	\$103,973	\$438,875
(1) assumes 7 percent for 10 years				

**Table 4D: Analysis of Pay On Foot (POF)**

			<b>Additional</b>	<b>Net</b>
	<b>Amortized</b>	<b>Cost</b>	<b>Revenue</b>	<b>Financial</b>
	<b>Costs</b>	<b>Savings</b>	<b>Potential</b>	<b>Impact</b>
(1)				
2010	-\$175,050	\$310,400	\$87,000	\$222,350
2011	-\$175,050	\$319,712	\$88,740	\$233,402
2012	-\$175,050	\$329,303	\$90,515	\$244,768
2013	-\$175,050	\$339,182	\$92,325	\$256,458
2014	-\$175,050	\$349,358	\$94,172	\$268,480
2015	-\$175,050	\$359,839	\$96,055	\$280,844
2016	-\$175,050	\$370,634	\$97,976	\$293,560
2017	-\$175,050	\$381,753	\$99,936	\$306,639
2018	-\$175,050	\$393,205	\$101,934	\$320,090
2019	-\$175,050	\$405,002	\$103,973	\$333,925
(1) assumes 7 percent for 10 years				

### Discussion of Options

As illustrated in **Table 4C** and **4D**, there is a positive financial reason for transitioning from a cashiered parking operation to a cashierless parking operation. In order to make a successful transition to a cashierless system, there are other issues that will need to be considered. These issues are:

1. Acceptance of the Technology by the General Public: There are issues with either the PILM or POF. It is our experience that the older population has a difficult time with the technology, similar to individuals who are not comfortable with technology such as ATM's. With the POF, a parker can be talked through the process using the intercom, which can be further enhanced through the use of CCTV cameras for staff to be able to see what the parker is doing.

There are steps that can be taken to assist the parkers in the transition period. This could include ambassadors that would be stationed near the POF machines or the PILM to assist people in using the equipment. Another possibility would be to transition from cashier to cashierless by still having a cashier in a booth at peak times but to give parkers a discount if they use the POF or the PILM for the first few months. In general, there will need to be a major public relations campaign and marketing effort to make either system successful.

2. Capacity of Exit Lanes: The real issue would be with the PILM or if someone did not pay at the POF machine and arrives at the exit lane with an unpaid ticket. In each of the parking structures there is insufficient exit lane capacity to handle someone who has an issue either at the PILM or the exit verifier, while still allowing someone who has prepaid correctly or is a permit parker to exit.

The result could be a decreased level of service for all parkers. There could be significant back-ups at the exits during peak time, which could result in a loss of revenue. The loss of revenue would be the result of remotely opening up the barrier gate and letting the parker go without paying if there is significant back-up at the exit due to issues with either the PILM or the exit verifier.

When speaking to a representative from Federal APD in the Northwestern region, they stated that they have not seen the PILM successfully implemented where there was not a cashier available to handle issues. In general, they stated that the PILM is used to capture after-hours revenue that would normally be lost when the cashier closes at night.

To help reduce these issues, staffing ambassadors should be available at the exit lanes during peak outbound times. This would reduce the total savings of going cashierless, but it would eliminate some of the issues discussed above.

3. POF Locations: As discussed earlier in the report, in order to make the POF successful, the location of the POF machines needs to be well thought out. Rich and Associates reviewed each parking structure and determined that locations for the POF machines are very limited.

For maximum success, the POF machines need to be close to where the returning parker would be entering the parking structure to return to their vehicle. The location should be protected from the weather (for the convenience of the user not necessarily the machine) and should be in an area that has enough space to allow the queuing of at least two people in addition to the person using the machine.

Finally, the POF should be located in a place where the user will feel secure. This means that the area needs to be well illuminated and visible by others (i.e., not blocked by walls or landscaping). In order to make the cashierless operation successful using POF, there would need to be more than the two units per parking structure. The use of more than two units reduces the positive financial impact such that the expenditure would no longer be cost effective when considering a cashier less operation.

### **Recommendation Summary**

Based on this review, there are positive economic reasons for going cashierless. Rich and Associates does not recommend the POF system due to the costs and other associated problems of adequately locating the POF machines. In order for the PILM system to be successful there will have to be a substantial public relations effort and marketing campaign developed. Further we recommend that the City use parking ambassadors to assist parkers at peak time to minimize back-ups at the exits.

#### **Action:**

**Recommendation:** Adopt and implement a PILM system wherever a parking facility has both permit/monthly and transient parking.

**Cost:** Budget \$521,500.

**Benefit:** Cost saving achieved with cashierless operation, multiple payment options adds to customer usability and improved revenue control.

**Time Frame:** 6 to 18 Months

**Responsibility:** Parking Department

**Additional Comments:** Retrofitting existing parking facilities for PILM equipment is difficult and may add to the overall project cost. Further review by a potential contractor is needed for definitive installation costs.

### **4.10 Security Cameras:**

Rich and Associates recommends that the security cameras in Park 2 parking garage be removed. These cameras are currently operational in the record mode only. Even in this mode the resulting pictures are reportedly grainy. Monitoring by a person only occurs when taped footage of an incident takes place. There are several critical issues for the City in this regard.

The first and most important issue is the fact that there are CCTV cameras in a parking structure that are recording only and are not being "real time" monitored by an individual. The mere fact that there are CCTV cameras in the parking structure provides a user with two expectations.

The first expectation is that the cameras are real time (or live) monitored so that there can be some type of intervention to stop or minimize an incident. The second is that the CCTV cameras are recorded so that they can provide identification and possibly be introduced as evidence.

The first expectation offers the most exposure for liability to the City. The second point is true in that video recording does take place. However, based on stakeholder input, there have been complaints about image quality, zoom and camera angle from past incidences.

The liability and exposure is dependent on several factors such as the crime history in the area and the expectations of the City. If a camera is real and is monitored by an individual, then there is very limited exposure for liability. If a camera is recorded but not real-time monitored, as the Park 2 cameras currently are, then there is more of a liability issue from a legal standpoint due to the expectations presented to the public when there is a camera present.

Many installations of CCTV cameras promote a false sense of security. The prime example is the use of dummy cameras, or in Billings' case cameras that are record only. These cameras may lead an individual to believe the area is being monitored in real time and any criminal activity will generate an immediate response. Also, the fact that one parking structure has these cameras and the others do not provides a condition of disproportionate care with respect to security issues in the parking facilities.

Therefore the use of dummy cameras, not removing inactive cameras or only recording images from cameras can create a liability in parking structures. The idea that a dummy camera or record only camera will possibly deter crime may be applicable to a retail setting where the issue is theft. While theft in a parking area is of concern, the more important issue is personal safety.

Rich and Associates recommends the City consider one of the following options:

1. The City removes the existing cameras from the Park Two structure all together.
2. Upgrade the existing cameras to have real time monitoring ability at the parking office, expand the camera network to all parking structures, and assign an individual to security duties.
3. Continue to use record only cameras with upgraded equipment for better image quality and DVD or computer hard-drive recording of images, expand the camera network to all City parking structures and add in panic button stations in parking structures so that an individual can summon help. Also, provide signs that clearly state that the cameras are only recording.

**Action:**

**Recommendation:** Consider one of the three options identified above.

**Cost:** Dependant on selected action, TBD.

**Benefit:** Reduces City's liability, can provide improved security for users.

**Time Frame:** 6 to 18 Months

**Responsibility:** Parking Department

**Additional Comments:** Consult with the City Attorney and insurance provider on liability, develop revised policy with input from the Parking Advisory Board and task the Parking Department with implementation of selected option.

#### **4.11 Residential Parking Permit Program (RPP)**

The City of Billings requested that information relevant to residential parking permit (RPP) programs be included in the report to aid in considering requests for RPP's in residential areas outside of the downtown study area. Rich and Associates included the following best practices dialogue as a guide in considering RPP requests.

Typically, a city will receive requests to provide a residential parking permit (RPP) program on given public streets directly from the citizens of that area. The motivation for such a request can range from commuter parking issues to student parking near schools. Overall the common issue is a shortage of on-street parking within residential areas.

Older downtown residential areas were often designed and built prior to the mass use of automobiles, in some cases prior to the automobile. The result has been that building lots were laid out without on-site parking resulting in minimal parking for local residents. When secondary user groups such as school students or other commuter traffic are introduced, the result is an even greater shortage of on-street parking.

Residential permit programs aim to allocate the scarce on-street parking spaces to residents of an impacted neighborhood over non-residents. Pitfalls of RPP can include: prohibitive cost of administering and enforcing parking programs, general scarcity of parking on public streets and the inability to meet the parking needs of residents, businesses and visitors at the same time. However, many cities successfully use RPP's to aid with parking issues near schools, hospitals and/or adjacent to downtowns.

In order to implement a successful RPP, the following basic requirements or guidelines should be met:

- 75 percent of the area's residents should request the program (verified through the circulation of a petition or sign-up sheet in the neighborhood).
- 80 percent or more of the property in the area should be residential (only block faces in front of actual residential dwelling units would be designated permit areas).
- On-street parking spaces in the area should be occupied at a rate of 85% or greater during peak parking periods, and at least 25 percent of the vehicles that are parked during the peak periods should belong to non-residents of the area.

- The area's boundaries must be far enough from the parking intensive land use(s) to ensure that the parking problem is not shifted outward.

**Action:**

**Recommendation:** Explore potential RPP programs in affected residential areas at the request of residents. An alternative to an RPP is the implementation of 2 hour-on-street parking in residential neighborhoods.

**Cost:** Administration costs vary and most communities charge a minimal amount for the annual permits (typically ranging from \$0 to \$25). Some communities find that RPP cost the City money to operate as the full administration cost is too high to stimulate participation by residents.

**Benefit:** Expansion of needed public parking can be used as part of an incentive package for development.

**Time Frame:** As requested by residents.

**Responsibility:** TBD

**4.12 Parking Allocation:**

Consideration should be given to re-allocating the City's parking. Specifically, the 2-hour on-street parking west of 30<sup>th</sup> Street (between Montana Avenue and 6<sup>th</sup> Avenue) could be transitioned to ten hour metered parking. Rich and Associates' research discovered that the two-hour parking stalls are underutilized and demand for long-term employee parking is greater than short-term parking in this area.

The transient (customer/visitor) parking in the City's parking structures should also be re-located to the first level of the City's structures. Transient parking typically involves short-term customer/visitors who may be less familiar with the parking structures or the City. Making the transient parking easier to locate, easier to access and quicker to use, aids in benefiting the City's customers and visitors.

Finally, Rich and Associates was tasked with considering transitioning Park 1 to be wholly permit parking through the conversion of the 27 transient parking stalls in this facility to permit. Closer examination revealed that there are ample on-street parking opportunities for transient parkers in the area and transient parking in Park 1 is somewhat redundant. Consider making this facility all permit parking to simplify the operation and reduce expenses.

**Action:**

**Recommendation:** 1) Transition 2-hour on-street parking west of 30th Street to 10-hour. 2) Shift transient parking to be on the first floor of the City's parking structures. 3) Convert transient parking in Park 1 to all permit parking.

**Cost:** TBD

**Benefit:** Greater supply of long-term parking and easier access to transient parking.

**Time Frame:** 6 to 18 Months

**Responsibility:** Parking Department

#### 4.13 Parking Pricing:

A comprehensive review of the City's parking pricing revealed that overall pricing is in line with other similar communities in the region. (see the **Appendix** section for a complete comparison chart). Only two pricing revision are recommended for Billings.

- 1) The on-street parking rate at ten hour meters should be \$0.20 (currently \$0.10) per hour and the permit rate should be \$30 (currently \$10) per month. Currently, this parking is less expensive than the permit price for parking in the parking structures. In order to encourage the use of parking structures and to bring the pricing structure in line with intended allocation within the City, the price per hour needs to be increased to \$0.20 per hour at the meters or \$30 per month for permits. The revised pricing conforms better to the best practice of having on-street parking priced higher than off-street.
- 2) The transient rate for parking in the City's parking facilities should be increased to \$0.35 per hour. The current rate of \$0.25 per hour is too low when compared to other communities and to the City's own overall pricing structure. This would help generate additional funds to help pay for many of the recommendations proposed by Rich and Associates

##### Action:

**Recommendation:** Revise pricing of 10-hour on-street to be \$0.20/hour, \$30/month and transient parking in the City's parking facilities to be \$0.35 per hour.

**Cost:** Will require updating 10-hour meters, TBD.

**Benefit:** Use of market pricing theory to help achieve better allocation of parking within Billings.

**Time Frame:** 6 to 18 Months

**Responsibility:** Parking Department

**Issue Addressed:** Pricing structure is currently out of synchronization between on and off-street parking. Adjustments will aid in using pricing strategy to help allocate parking.

**Additional Comments:** Parking pricing should be reviewed every three to five years to ensure that market rates are being charged. Typically, parking rate increases should occur in 5% to 10% increments every three to five years.

#### 4.14 Disposition of Park 4:

The City of Billings requested that Rich and Associates offer an opinion on the potential sale of Park 4 to a private entity in the downtown. Park 4 is used primarily for long-term parking with some short-term parking use. The long-term parking is primarily made up of two key user groups. The first is local employees of several businesses. The second long-term parking user group consists of the tenants and owners of neighboring residential units. Overall Park 4 occupancy reached 58%, of which the residential component was the most occupied at 80% during the day.

Of primary concern to the City is the ability to offer parking to promote the economic and livability aspects of the downtown area. Park 4 fulfills these needs by offering local parking. The secondary consideration for the City is the ability to economically maintain and operate the parking system. Park 4 presents a lower use facility (58% versus 73% to 80% for the City's other parking structures) that only achieves modest revenues, falling short of providing adequate surpluses for a replacement fund.

A decision on the sale of Park 4 needs to include consideration given to the potential relocation of the Billings Public Library. If this facility is relocated to a site near Park 4 and places new transient and long-term parking demand on Park 4, then the structure's revenues could be increased. As a result, Park 4 then fulfills a stronger public service role.

As the situation currently exists, with mainly long-term parking and limited revenue potential, Park 4 may be considered as a potential asset that could be sold so that the capital investment in the structure could be transferred to help initiate Park 5. The logic is that the City's capital is transferred to a new parking facility that will serve the greater public good, provide economic stimulus, a greater life-span, potentially lower maintenance costs and greater revenue generating potential.

**Table 4E: Park 4 vs. Park 5 Net Revenue**

Park 4/Park 5 Comparison	Park 4 (from 2008 budget, with estimated administration costs)	Park 5 (hypothetical, 371 stalls)
Revenue	\$370,000	\$219,530
Expenses	\$262,175	\$102,025
Net	\$107,825	\$117,505

Overall, the best practice is for the City to continue to own or have control over 50% or more of the available downtown parking. Selling Park 4 may initially seem a step away from this goal, but could be counteracted through the sale agreement. Specifically, the City could place conditions on the sale that would require the new owner to maintain a specified amount of publically available parking.

The public parking could then be available to anyone on a first come first basis, supporting local parking needs. The new owner would then simply operate the parking and autonomously set parking rates accordingly. Alternatively, the City could place an option in the sale agreement to lease back a percentage of the parking at will (for a pre-determined amount) to provide public metered or leased parking within the parking facility.

**Action:**

<b>Recommendation:</b>	Consider selling Park 4.
<b>Cost:</b>	Net gain of approximately \$9,680 per year, will increase in future years since Park 4 will require age related repairs and replacement sooner than Park 5.
<b>Benefit:</b>	Reallocates capital resources from the sale of Park 4 to Park 5, which offers more economic development incentive.
<b>Time Frame:</b>	TBD
<b>Responsibility:</b>	Parking Advisory Board/City Council/City Staff
<b>Issue Addressed:</b>	Helps expedite Park 5 and lowers the dept re-payment with a capital injection.
<b>Additional Comments:</b>	Park 4 will need to have a valuation estimate undertaken by a property assessment company to determine the market value. Pending the evaluation, Council can move forward with further discussion and consideration of a sale.

**4.15 Structured Parking Facilities:**

The parking analysis confirms the need for an additional parking facility in downtown Billings. This facility would be best delivered as a parking structure to help conserve land resources and to help achieve the City's greater vision for urban development. Tentatively the City will need to provide two parking structures. Specific sites and size projections are outlined in **Section 5**.

BILLINGS, MONTANA

Downtown Parking Plan

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## **SECTION 5: NEW PARKING**



## SECTION 5: NEW PARKING

### 5.1 Parking Requirements for Current and Future

Rich and Associates recommends that the City provide sufficient parking to accommodate customer/visitor and employee needs. As demonstrated in **Section 2**, the City has adequate parking in most areas. However there are groups of blocks with parking shortages. Parking shortages in some locations will be further compounded by proposed and potential future developments. **Table 5A** demonstrates the estimated parking impact or generation of each of the major future changes that were examined as part of this study.

**Table 5A – New Planned and Proposed Downtown Development Summary**

<u>Development Name</u>	<u>Estimated* Parking Generation</u>
Babcock Building Remodeling	(-) 105
Federal Courthouse	(-) 275
Federal Office Building	(-) 305
1st Interstate Complex	(-) 135
Stockman Bank	(-) 160
Babcock Theater Building	(-) 105
Northern Hotel	(-) 160
BN Building	(-) 137
Northern Hotel Garage	(+) 183
Old WSB Building	(-) 137
Downtown Conference Center	(-) 618
Minnesota Avenue Streetscape Proposal	(+) 170
Existing Vacant Space Infill	(-) 195 (5-yr), (-) 390 (10-yr)

\* Parking Generation is estimated in some cases as facilities and programs are still in the planning stages and subject to change.

Consultation between the consulting team, City staff and the Parking Advisory Board led to the selection of five potential parking facility locations within the downtown area. The locations were selected based on available parcel size, site requiring the least amount of demolition of historic or significant buildings in the downtown and how the sites could be obtained. The sites selected as optimal are illustrated on **Map 9** in conjunction with a parking zone analysis of each site.

Other potential parking sites had been examined, but eliminated based on stakeholder and community input. Essentially, the other potential parking sites within the downtown would have had significant negative impact as new parking locations. The zone analysis illustrates a typical parking service area of 350 feet. The radius is selected as a sound approximation of the service area based on acceptable walking distances for the parking users. In some instances, employees or other regular parking users are willing to walk further, however the 350 foot radius captures the majority of the parking users, especially during winter months or inclement weather.

PARKING  
STUDY  
FOR  
THE CITY OF  
BILLINGS

BILLINGS, MONTANA



**LEGEND:**

- # BLOCK NUMBER
- STUDY AREA
- POTENTIAL SITES
- POTENTIAL NEW PARKING STRUCTURE SITES
- POSSIBLE EXPANSION OPPORTUNITIES
- PARKING DEMAND
- (+) PARKING SURPLUS
- (-) PARKING DEFICIT
- STREET TO CLOSE
- PARKING SERVICE AREA ±350' RADIUS
- EXISTING PARKING STRUCTURES

Date	ISSUED FOR:
06-26-2009	DRAFT REPORT
07-02-2009	DRAFT REPORT
12-03-2009	DRAFT REPORT
01-14-2009	FINAL REPORT

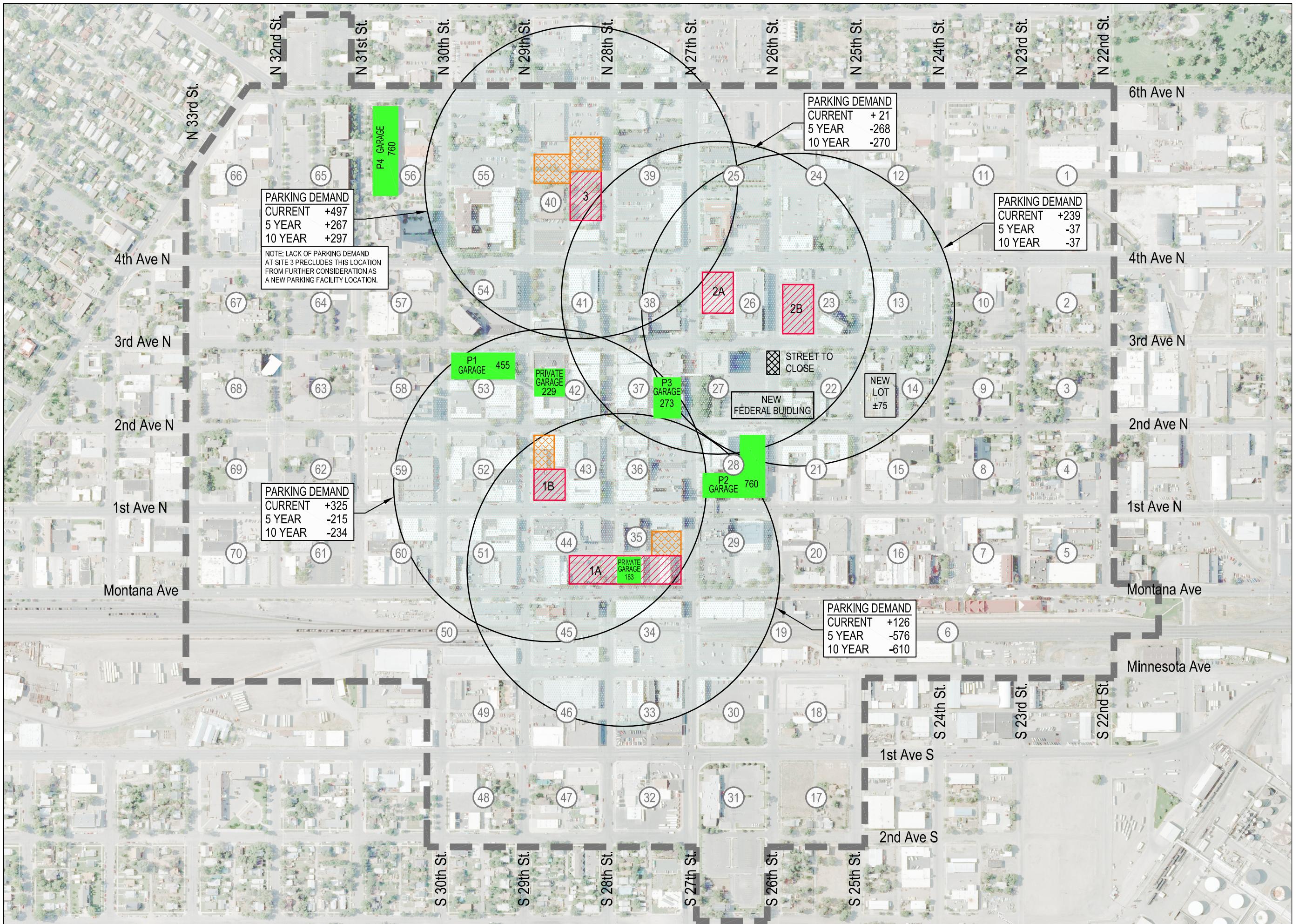
Sheet Title:

POTENTIAL  
STRUCTURE SITES  
PARKING

File No	0918
Scale	NTS
Last Rev.	01-08-2010
Page	

MAP NUMBER:

MAP 9



The zone analysis for each potential parking structure site illustrates the parking demand that would be serviced by a parking facility central to the location. The three numbers expressed for each circle represent the current demand, 5 and 10 year scenarios.

Based purely on demand, Site 1A has the greatest need (610 spaces). Demand at this location is primarily driven by the proposed new convention facility. Without the convention facility, parking demand at this site is readily accommodated by existing parking and a new parking facility is not needed. Similarly, Site 1B also has sufficient parking demand that makes it a viable location. Again, however, the parking demand for this site is driven by the presence of the convention facility. The need for a new parking structure on Site 1A or 1B hinges on the development of the proposed convention facility.

The other location that has identifiable parking demand is site 2A. The demand at this location is driven by the presence of the new Federal office space and in part by the proposed Stockman Bank project. Parking demand at this location is more pressing as construction plans for the Federal office facility are underway. The adjacent site (2B) does not have the same level of demand since it is further to the east and doesn't serve other parking demand generators more central to the downtown. Further this site is closer to large sources of available surface lot parking, creating a competitive situation that dilutes parking demand.

## **5.2 Parking Requirements for Current and Future**

Our recommendation is that Site 2A be considered a priority location for a new parking facility. This site needs approximately 300 parking stalls plus the replacement of the 71 parking stalls currently on site (for a total of +/-371 parking stalls). The exact layout, interior ramping, number of floors and access points will need further study to determine the specific number of parking stalls.

Site 1A demonstrates a parking demand for slightly over 600 new parking stalls. This translates into a need for a +/- 783 space parking structure because we need to replace the existing spaces in the Northern Hotel parking facility (183 stalls). With this location, it may be worth considering developing both 1A and 1B as potential sites. The following is an examination of the new or additional parking options available to the City.

### Review of Options for Additional Parking

Rich and Associates reviewed options for addressing the projected need for additional parking. There are three options that should be considered; do nothing, new surface lots or build a parking structure. The following is a review of those options.

#### **1. Do Nothing Option**

While this is an option for the City, selecting this option will severely limit the development potential in the core downtown, will affect the businesses that are currently downtown as well as how the downtown currently functions.

Even with the recommended policy changes, increased enforcement and reallocation of parking, it will not be sufficient to increase the availability of parking in the downtown

when and where it is needed. Therefore, Rich and Associates does not recommend this option.

**2. Provide New Surface Public Parking**

Another option for adding additional spaces to the downtown is to redesign existing surface parking lots to gain more spaces or to develop additional surface parking on vacant or underutilized property. Rich and Associates analyzed the potential for redesign of existing City parking areas and determined that there were no opportunities for adding additional parking spaces.

With respect to the construction of additional surface parking spaces within the core downtown, we did not identify any potential sites that were owned by the City or privately owned that could be converted to surface lots. We did not consider the option of acquiring property for surface parking if it involved demolition of buildings as this goes against the best practice of breaking up block faces with open surface parking lots.

We did however; consider ways of providing additional public parking. The City should look at negotiating deals with private parking owners whose lots have available parking spaces during the day or evenings. The City would agree to clean and insure the parking area and then market this parking for customer and visitors, if the parking area is within a reasonable walking distance, or for employees if the parking area is farther from the core downtown. As part of the marketing program, the City would promote these private/public parking areas on their website as part of the public parking supply and provide signage at the parking areas as well.

**3. Structured Parking**

Several potential sites for new parking were examined for a parking structure with input from the City and Parking Advisory Board. These sites, located on blocks 23, 26, 35, 40, and 43 (see **Map 9**), were all deemed to have the qualities necessary to be considered as potential new parking locations. Each site was analyzed from a demand perspective. Sites 1A, 1B, 2A and 2B proved to have sufficient demand to consider further. The following is a review of those sites.

**Sites 1A and 1B**

Both Sites 1A and 1B depend on the development of the proposed convention center. Until planning for this facility moves forward these sites should be considered as potential new parking locations. Site 1B should be considered as a primary location, pending further consideration. Site 1A should be considered a secondary location that could be developed as an auxiliary parking facility if site 1B is developed as a smaller facility.

**Site 1A:** This site which spans blocks 44 and 35 includes the proposed new parking location for the convention center. It would require the demolition of the Northern Hotel parking garage, resulting in a needed capacity of approximately 783 parking stalls. The actual parking demand at this location is projected to be 618 parking stalls based on the proposed convention center. This parking demand will need to be added to any parking spaces lost on-site due to the construction of the new parking facility and the convention

center. Site 1B has considerable future parking demand, but has the issue of needing to either span 28<sup>th</sup> Street or have the street closed at this location altogether to create a site size sufficient for a parking structure. An in-depth parking structure design analysis will need to be undertaken before a final decision can be made on this location.

Site 1B: This site, on block 43, is centrally located to the downtown area and would aid in serving the parking needs of the proposed new convention center. However, being close to the City's other parking facilities; actual demand demonstrated at this site is only for an additional 220 to 240 parking stalls. Parking need at site 1B hinges on the development of the convention center and how much parking is developed as part of the convention center facility. Specifically, if all of the parking needed for the convention center is built on site 1A, then site 1B is no longer needed.

#### Sites 2A and 2B

Both of these sites are close to the Federal services to be relocated to a new building on blocks 22 & 27 and to several other local developments. The parking demand analysis dictates that only one smaller facility needs to be considered. Site 2A has the higher parking demand since it is closer to other downtown developments and slightly further away from some large surface parking lots located to the east. Site 2B is further away from the key demand areas and because of its proximity to alternative parking locations within a reasonable walking distance, has little merit for further consideration.

Site 2A: This site is the surface parking area adjacent to the existing Federal building. The Federal services currently housed at this location will be moving to a new facility approximately one block south east. Once relocation has occurred, the existing building on this site will potentially be refurbished and used as leasable commercial space. Site 2A has identifiable parking demand related to the relocation of the Federal services, re-use of the existing building as commercial space and to the proposed Stockman Bank building on block 40. The overall parking need on this site approaches 300 parking stalls as all of the developments take place. Overall this site has the most eminent need for additional parking since the planned developments nearby are in an advanced stage and tentatively will be developed within the next one to two years.

#### Site 3

Site 3 is located north of 4<sup>th</sup> Street, between 28<sup>th</sup> and 29<sup>th</sup> Streets. The site was analyzed for parking demand based on the known and proposed developments within the service area. The result of the analysis was that parking demand at this location was too low to warrant further consideration for a new parking facility at this time. Re-examination as a potential parking structure location may be warranted in the future, depending on the scale and scope of development proposals presented to the City.

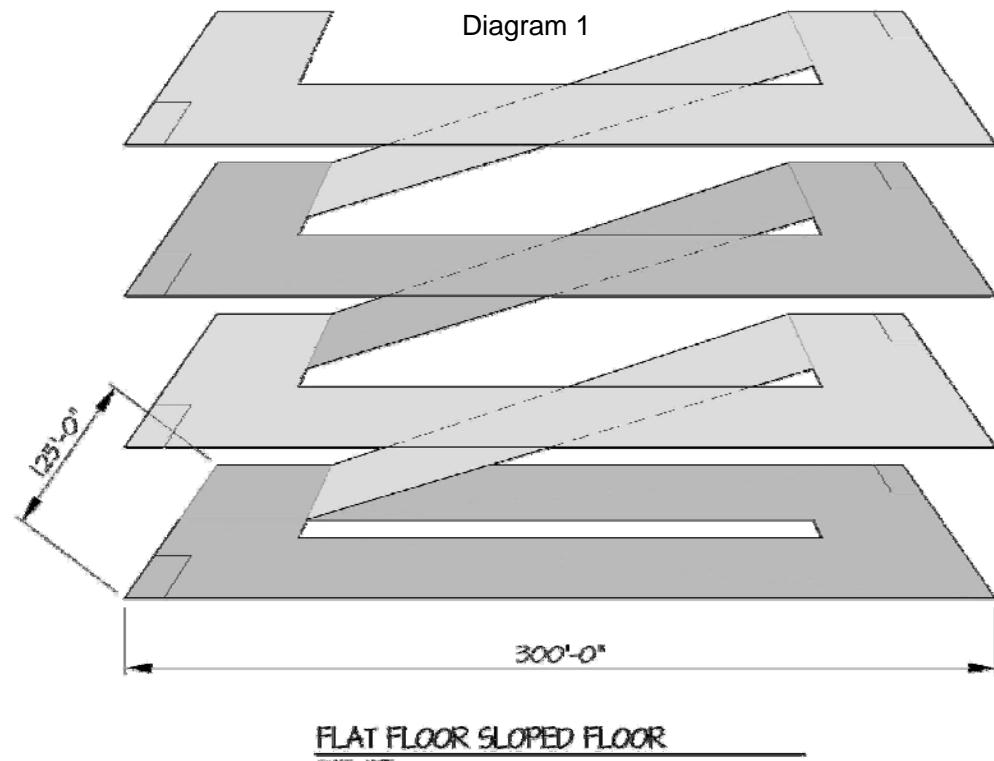
Based on a review of the existing and projected parking needs in the core area, Rich and Associates recommends that the City move forward with plans for developing Site 2A as Park 5. This site has the most pressing need for more parking in the short-term and best serves impending local development needs.

### 5.3 Preliminary Site/Design Analysis

In considering sites for parking structures in the downtown, the potential for development and redevelopment on the blocks surrounding each potential site needs to be taken into account. The general design considerations recommended by Rich and Associates for a parking structures are;

#### Flat Floor/Sloped Floor Design

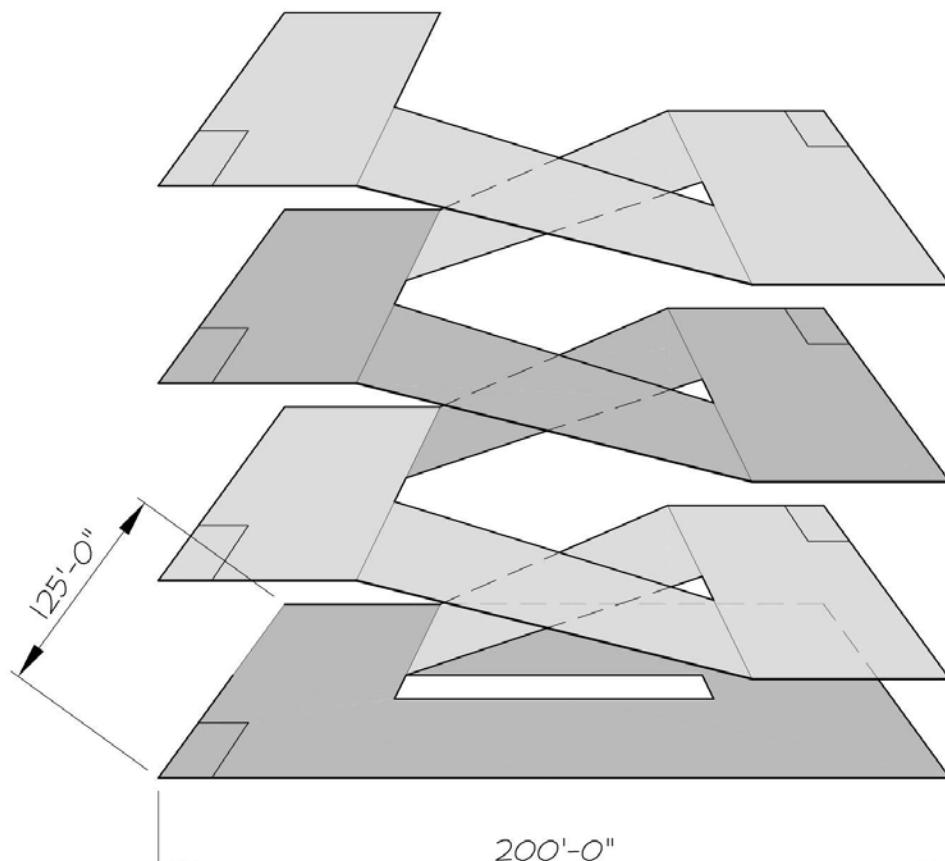
- To design a flat floor/sloped floor parking structure the optimal site length exclusive of setbacks, is +/- 300 feet and a width of +/- 125 feet for a two module layout (Diagram 1).
- A flat floor/sloped floor system allows one long dimension elevation to be flat and can maximize occupied space on the ground floor. Only the ends of the building will have flat floors.
- In general, the flat floor/sloped floor layout is the most efficient layout as measured by square foot per parking space.



Sloped Floor/Sloped Floor Design

- A sloped floor/sloped floor design is typically used on smaller sites.
- To design a sloped floor/sloped floor parking structure the optimal site length exclusive of setbacks is +/- 200 feet and a width of +/- 125 feet for a two module layout (Diagram 2).
- A sloped floor/sloped floor parking structure will have no flat facades on the long dimension and only the ends of the building will be flat.
- In general, the sloped floor/sloped floor layout is an efficient layout as measured by square foot per parking space (generally not as efficient as the flat floor/sloped floor layout though).

Diagram 2



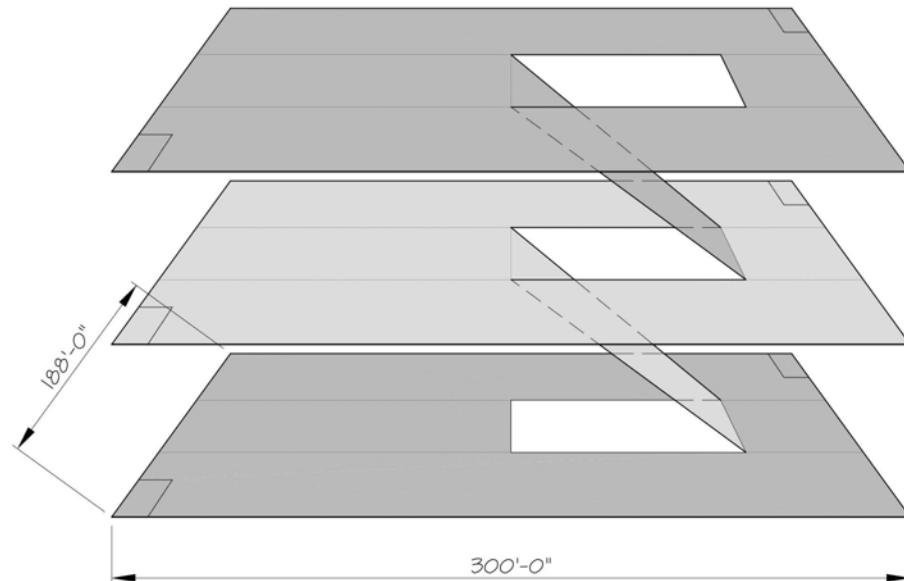
SLOPED FLOOR SLOPED FLOOR

SCALE: NONE

Other Design Options

- There are other parking structure layouts that involve more than two modules. One of these is the all flat floor with an express ramp. This can only be done with a site that is +/- 188 feet wide and ideally at least 300 feet long exclusive of setbacks (Diagram 3).

Diagram 3



3 MODULE W/ EXPRESS RAMP

SCALE: NONE

- Other site dimensions are possible, especially if they are incorporated with a building, though their efficiency will be less than either the flat floor/sloped floor or the sloped floor/sloped floor layout.
- Underground parking structures, especially those below a building will generally be less efficient than any other type of parking facility (more square feet per parking space) and the construction costs are at least 150 percent of an above grade structure. Additionally, an underground parking structure will have higher operating costs due to mechanical ventilation and additional lighting that needs to run more hours of the day.
- In general, both an underground and above grade parking structure with another building type above it will require fire suppression (sprinklers), which adds to the overall construction and operating costs.
- To incorporate ground floor commercial/retail or office there needs to be a minimum of +/- eight to nine feet of clear head room which translates into a finished floor of +/- 12 feet for the first finished floor. This can be done easiest in a flat floor/sloped floor scheme.

#### Additional Site and Design Considerations

- Distance from key intersections (ingress/egress considerations...stacking of vehicles).
- Traffic flow on adjacent streets.
- Distance from key intersections with respect to demand generators. Plan on no more than +/- 350 foot walk from parking to destination.
- How the parking structure will fit into surrounding context...respects historic character of downtown, won't overwhelm existing development...maintains "small town" charm.

#### **5.4 Green Design**

Green design elements can be included in the design and construction of a concrete parking structure. In the plan, the amount of pervious land area will be increased by the landscape areas that will be added and that storm water will be held. Another element that meets the green design principles is that several hundred parking spaces are under cover and therefore they are not on surface lots that reflect solar light. Consideration for the top level of the parking structure would be a reflective surface (high albedo level) which do not absorb as much solar radiation.

From a construction standpoint, the use of recycled materials is a principle of green buildings. For the concrete part of the building, which is the majority of a parking structure, there can be concrete add mixtures such as fly ash, silica fume and slag cement. These are all considered post-industrial recycled material. Rebar, which is generally from recycled steel, is also considered recycled material.

Finally, there is the use of regional materials which supports local industries and reduces transportation distances. Generally, the requirement is that a minimum of 20 percent of the materials are manufactured regionally, within 500 miles. This can also assume landscaping and the use of native planting material to screen the parking structure or on the face or roof of the structure which will help reduce solar heat.

#### **5.5 User Groups and Requirements**

The parking structure should be planned for several user groups: customers/visitors of the downtown, employees and specifically for reoccupied vacancy, and infill development that will occur within downtown.

#### Interior and Exterior Structure Best Practices

##### Lighting

- Light levels on parking floors have a minimum of six foot candles.
- Light levels at vertical cores and at entry and exit have a minimum of 20 foot candles.

- Lighting on the roof level must take into account lighting affects on surrounding buildings.
- Lighting spill over from parking floors must also be considered.
- Type of lighting is not specified.

#### Safety and Security

- At a minimum, the parking structure should be wired to accept CCTV if the system is not installed up front.
- The parking structure and site design should use the principles of Crime Prevention Through Environmental Design (CPTED).
- Limit hiding places in parking structure.
- Use glass elevator cabs, shafts and glass enclosed stairways.
- Use landscape that will not conceal a person.
- Appropriate outdoor/indoor lighting, and
- Make wayfinding easy.

#### Parking Operations

- Rich and Associates reviewed different cashierless options for the existing parking system. Any new parking structure design should incorporate either pay-on-foot or pay-in-lane technology.
- Permit or monthly parkers would continue to use a card reader system.

#### Facade and Massing

- The facade should not look like a typical gray concrete parking structure.
- Glass should be used for the stair and elevator towers consistent with Safety and Security discussed above.
- Buildings surrounding the proposed parking structure should be carefully thought of in the design process so the parking structure blends in with adjacent buildings.
- Several examples of facades that address these issues:

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Downtown Parking Plan

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## 5.6 Issues Related To Construction Period

### Interim Parking

Regardless of when the construction period occurs, there will be a temporary loss of parking on any of the blocks that were identified as possible sites. During the next phase of the project (design), specific plans need to be developed on using existing parking locations (such as the bus transfer lot) for interim overflow temporary parking. It would be premature to identify a location(s) now. There are several issues to be considered with the temporary parking.

- **Employee Parking:** This group will be the easiest to handle from a logistics and location standpoint. Since an employee is a reoccurring parker, we are not as concerned about temporary signage. The parking locations can be further away than a visitor/customer location. This may require a shuttle. Additionally, the ability to communicate with the employee is easier than with a customer/visitor.
- **Visitor/Customer Parking:** These parkers may not be frequent parkers, thus signage must be used. Where temporary visitor/customer parking will be located is important. If the parking area is remote, a shuttle will have to be incorporated, though we would prefer not to use a shuttle. A marketing plan should also be developed for customers and visitors.

### Access During Construction

Questions may come up regarding alley access and loading/unloading during construction. Depending on the block and site there could be issues with alley access. It may be possible for a portion of an alley to remain open during construction. This will be written into the specifications for the contractors. Temporary signage will be used. Information on construction should be put in the monthly newsletter.

### Effects of Construction

There are several issues with the construction of the parking structure:

- **Noise:** While noise is a factor during construction, it should be written into the specifications specific times when construction may occur i.e. not before 8:00 a.m. and not after 5:00 p.m.
- **Dust and Dirt:** This may also be a problem during construction. The specifications should contain requirements for debris removal, dust mitigation and general maintenance of the site.
- **Safety:** The construction will need to be fenced in and include a storage area for materials.
- **Damage to Surrounding Buildings:** During the normal construction process there is the possibility of vibration damage. Buildings with basements in the near vicinity should be photographed both inside and outside walls of all buildings should be included.

In general, the contractor will be required to present a plan to address these issues.

Monthly Newsletter

Rich and Associates strongly recommends that a newsletter be sent out each month during the design and construction phases. During the design phase, planning for the structure may be highlighted, including the issues discussed above (temporary parking, access and effects from construction). During construction, the newsletter should discuss schedule, closures and general progress of the project.

During construction, it is recommended to hold monthly meetings to discuss progress and any specific problems. Area businesses, residents and property owners should be on the mailing list.

**5.7 Project Cost and Finance Worksheet Example**

Rich and Associates prepared Project and Finance Costs for a possible 371 space parking structure. The “bricks and mortar” construction costs were estimated at \$18,000 per parking space and assumed 2010 dollars. This cost does not take into account the fact that there would be additional costs associated with occupied or commercial space in the parking structure if it were included as part of the program and design. Additionally, the costs assume a façade with the use of precast and quarter brick.

Currently, the parking system has outstanding debt on the expansion to Park 2. The financial agreement stipulates that all of the revenue generated by the parking system is dedicated to operating expenses of the parking system and then to the debt service. It appears, though not directly stated in the agreement, that the City could issue additional debt as long as it did not affect the ability of the parking system to pay the existing debt service from existing revenues. This issue must be furthered reviewed when a more detailed plan is developed.

The estimated Project and Finance Costs are shown in Table 5B. The financing assumed City issued debt using a tax exempt bond issue. The following are explanations of the various line items. As noted above we have shown two scenarios based on interest rates.

1. Construction Costs: The assumptions also assumed spread footings which will need to be confirmed by soil borings and a geotechnical report.
2. Professional Fees: These are the design fees and reimbursed expenses. It assumes a conventional design/bid scenario.
3. Insurance: Testing during construction paid for by the owner
4. Geo-Tech and Survey: Fees for a survey and topographical of the site and soil borings and report on foundations.
5. Legal and Accounting: The legal and accounting costs for the City during the course of construction.
6. Land Costs and Demolition: There was no estimate made of these costs.
7. Contingency: Rich has used a 10% contingency for the design and construction to cover design issues and issues during construction.

8. Project Costs to be Financed: Project costs represent the construction hard and soft costs.
9. Finance Term: The term of the bond is 20 years. A longer amortization schedule is also possible.
10. Interest Rate: Based on an un-rated bond issue with no insurance and projected rates for 2010.
11. Term of Construction: The construction period is estimated at 10 months. This depends on the time of year that the project is started and site availability for lay-down for example.
12. Interest During Construction: All bond proceeds are received up front and draws are made on these funds to pay for construction. This represents capitalized interest for the term of construction.
13. Interest Income: The bond proceeds are put into an interest bearing account and generates interest income that is used to offset costs.
14. Legal and Accounting Fees: These are the legal fees and accounting fees of the bond issuer.
15. Debt Service Reserve: No debt service was assumed.
16. Financing Fees: These are the points paid to the bond underwriter.
17. Cost of Issuance: These are expenses such as printing of offering/official statements.
18. Total Financing Fees: Total soft costs for financing.
19. Addition of the Project Costs: Total from line 8.
20. Total Amount of Bonds: Total of lines 18 and 19.
21. Debt Service: The annual principal and interest payment assuming a level payment each year.

The calculated debt service is estimated at \$705,000 for the scenario with 5.5 percent interest rate. In addition to the annual debt service cost, Rich and Associates recommends that City establish a repair and replacement fund for the repairs that are required during the life of the proposed parking structure.

## 5.8 PRO FORMA ANALYSIS

Rich and Associates prepared a preliminary pro forma for the existing parking system and a possible 371 space parking structure (**Table 5C**). The pro forma included projections of revenue for the existing parking system, assuming Park 4 remains part of the City's parking system. The 15 year pro forma presented assumes a 1 percent increase in revenue each year.

To calculate parking revenue from the new parking structure we assumed that 171 spaces would be allocated to hourly parking and 200 to permit parking. For the hourly parking we assumed an average stay of 1.5 hours and we increased the utilization for the first four years of operation and then one percent each year thereafter. For the permit parkers we assumed an increase in permits culminating with an oversell factor of 110 percent in year four. Beginning in year five we increased the revenue by one percent per annum.

The operating expenses for the existing were projected based on a three percent per annum increase. For the new parking structure we assumed a cashierless operation with a three percent increase per annum.

After applying the existing debt service, we then calculated the funds remaining to service any new debt. Based on this, it appears that the City will have to use the parking system's fund balance as well as additional equity to reduce the amount of new debt service.

### Pro-forma Notes:

- 1) Existing net revenue with Park 4 as part of the City's parking system and no parking rate increases.
- 2) Short-term parking for hourly or transient customers is based on 171 parking stalls.
- 3) Long-term parking for permit or monthly parkers is based on 200 parking stalls.
- 4) Excludes new debt service for Park 5

The revenue and expenses for Park 4 (\$370,000 projected revenue in Year 1 and \$262,175 expenses in Year 1) would need to be removed from the pro forma if this facility is sold. Additionally, Recommendation 4.13 details a recommendation for a parking rate increase for 10 hour meters. This would increase gross revenues slightly. The bigger impact would be to increase overall parking rates. Though not shown in the pro forma, overall parking rates should be increase every three years and that increase should be at least 10 percent.

Table 5B – 371 Stall Parking Structure Project &amp; Finance Cost Worksheet

1	Construction Cost	371	x	\$18,000	\$6,678,000
2	Professional Fees (Architectural/Engineering & Reimbursed)				\$367,000
3	Insurance				\$25,000
4	Legal and Accounting				\$35,000
5	Geo-tech and Survey				\$25,000
6	Land Costs and Demolition				\$0
7	Contingency				\$668,000
<b>8</b>	<b>Project Cost to be Financed</b>				<b>\$7,798,000</b>

9	Financing Term	20	Years
10	Interest Rate	5.5	%
11	Term of Construction	10	Months

**Financing Costs**

12	Interest During Construction			\$386,000
13	Interest Income	40%	@ 2%	(\$49,000)
14	Legal & Accounting Fees		@ 1.00%	\$84,000
15	Debt Service Reserve			None
16	Financing Fees (Points)		@ 2.00%	\$169,000
17	Cost of Issuance		@ 0.50%	\$42,000

18	<i>Total Financing Costs</i>			\$632,000
19	+ Project Cost to Be Financed			<u>\$7,798,000</u>
20	Total Amount of Bonds			\$8,430,000
21	Debt Service			<u>\$705,000</u>

**Table 5C – Pro Forma Worksheet**

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
<b>REVENUE</b>					
Existing Revenue (1)	\$1,915,589	\$1,934,744	\$1,954,092	\$1,973,633	\$1,993,369
Transient Parking (new) (2)	\$50,018	\$62,522	\$75,026	\$87,531	\$88,406
Permits (new) (3)	\$114,000	\$120,000	\$126,000	\$132,000	\$133,320
<b>TOTAL REVENUE</b>	<b>\$2,079,606</b>	<b>\$2,117,266</b>	<b>\$2,155,118</b>	<b>\$2,193,163</b>	<b>\$2,215,095</b>
<b>EXPENSES (4)</b>					
Existing Expenses	\$1,366,500	\$1,407,495	\$1,449,720	\$1,493,211	\$1,538,008
New Parking Structure (Cashierless)	\$102,025	\$105,086	\$108,238	\$111,485	\$114,830
<b>TOTAL EXPENSES</b>	<b>\$1,468,525</b>	<b>\$1,512,581</b>	<b>\$1,557,958</b>	<b>\$1,604,697</b>	<b>\$1,652,838</b>
<b>NET AVAILABLE FOR DEBT SERVICE</b>	<b>\$611,081</b>	<b>\$604,686</b>	<b>\$597,160</b>	<b>\$588,467</b>	<b>\$562,257</b>
<b>EXISTING DEBT SERVICE</b>	<b>\$485,395</b>	<b>\$485,395</b>	<b>\$485,395</b>	<b>\$485,395</b>	<b>\$485,395</b>
<b>SURPLUS OR DEFICIT</b>	<b>\$125,686</b>	<b>\$119,291</b>	<b>\$111,765</b>	<b>\$103,072</b>	<b>\$76,862</b>

	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
<b>REVENUE</b>					
Existing Revenue (1)	\$2,013,303	\$2,033,436	\$2,053,770	\$2,074,308	\$2,095,051
Transient Parking (new) (2)	\$89,290	\$90,183	\$91,085	\$91,996	\$92,916
Permits (new) (3)	\$134,653	\$136,000	\$137,360	\$138,733	\$140,121
<b>TOTAL REVENUE</b>	<b>\$2,237,246</b>	<b>\$2,259,618</b>	<b>\$2,282,215</b>	<b>\$2,305,037</b>	<b>\$2,328,087</b>
<b>EXPENSES (4)</b>					
Existing Expenses	\$1,584,148	\$1,631,672	\$1,680,623	\$1,731,041	\$1,782,973
New Parking Structure (Cashierless)	\$118,275	\$121,823	\$125,478	\$129,242	\$133,119
<b>TOTAL EXPENSES</b>	<b>\$1,702,423</b>	<b>\$1,753,496</b>	<b>\$1,806,101</b>	<b>\$1,860,284</b>	<b>\$1,916,092</b>
<b>NET AVAILABLE FOR DEBT SERVICE</b>	<b>\$534,823.06</b>	<b>\$506,122.83</b>	<b>\$476,114.15</b>	<b>\$444,753.28</b>	<b>\$411,995.14</b>
<b>EXISTING DEBT SERVICE</b>	<b>\$485,395.00</b>	<b>\$485,395.00</b>	<b>\$485,395.00</b>	<b>\$485,395.00</b>	<b>\$485,395.00</b>
<b>SURPLUS OR DEFICIT</b>	<b>\$49,428.06</b>	<b>\$20,727.83</b>	<b>-\$9,280.85</b>	<b>-\$40,641.72</b>	<b>-\$73,399.86</b>

	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
<b>REVENUE</b>					
Existing Revenue (1)	\$2,116,002	\$2,137,162	\$2,158,533	\$2,180,118	\$2,201,920
Transient Parking (new) (2)	\$93,845	\$94,783	\$95,731	\$96,688	\$97,655
Permits (new) (3)	\$141,522	\$142,937	\$144,366	\$145,810	\$147,268
<b>TOTAL REVENUE</b>	<b>\$2,351,368</b>	<b>\$2,374,882</b>	<b>\$2,398,631</b>	<b>\$2,422,617</b>	<b>\$2,446,843</b>
<b>EXPENSES (4)</b>					
Existing Expenses	\$1,836,462	\$1,891,556	\$1,948,302	\$2,006,751	\$2,066,954
New Parking Structure (Cashierless)	\$137,113	\$141,226	\$145,463	\$149,827	\$154,322
<b>TOTAL EXPENSES</b>	<b>\$1,973,575</b>	<b>\$2,032,782</b>	<b>\$2,093,766</b>	<b>\$2,156,578</b>	<b>\$2,221,276</b>
<b>NET AVAILABLE FOR DEBT SERVICE</b>	<b>\$377,793</b>	<b>\$342,100</b>	<b>\$304,865</b>	<b>\$266,038</b>	<b>\$225,567</b>
<b>EXISTING DEBT SERVICE</b>	<b>\$485,395</b>	<b>\$485,395</b>	<b>\$485,395</b>	<b>\$485,395</b>	<b>\$485,395</b>
<b>SURPLUS OR DEFICIT</b>	<b>-\$107,602</b>	<b>-\$143,295</b>	<b>-\$180,530</b>	<b>-\$219,357</b>	<b>-\$259,828</b>

(1) Existing Net Revenue with Park 4 still in the parking system and no parking rate increases

(2) Assumes that 171 of the 371 spaces are allocated to hourly parking

(3) Assumes that 200 of the 371 spaces are allocated to monthly parking

(4) Excludes debt service



BILLINGS, MONTANA

Downtown Parking Plan

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## **SECTION 6: APPENDIX**



City of Billings, Montana  
Turnover / Occupancy Thursday, December 18, 2008

Block/ Face	Block/ Face	Description	On/Off Street	Public/Privat e	# of Spaces	8:00am - 10:00am	% Occ.	10:00am - 12:00pm	% Occ.	1:00pm - 3:00pm	% Occ.	3:00pm - 5:00pm	% Occ.
5	A	On-street	on street	public	10	4	40%	4	40%	6	60%	5	50%
5	C	2 hr on-street	on street	public	10	1	10%	3	30%	4	40%	2	20%
6	A	Rail Station Lot A	off	private	68	61	90%	44	65%	50	74%	54	79%
6	A	on street	public	4	2	50%	0	0%	3	75%	3	75%	
7	A	On-street	on street	public	10	10	100%	10	100%	9	90%	8	80%
7	A	Whalin Truck Lot A	off	private	18	8	44%	11	61%	11	61%	13	72%
7	at 24th	Patron Parking Lot	off	private	39	19	49%	31	79%	31	79%	27	69%
7	C	2 hr on-street	on street	public	4	0	0%	3	75%	1	25%	4	100%
8	D	2 hr on-street	on street	public	9	0	0%	2	22%	2	22%	2	22%
9	D	on-street unmarked	on street	public	10	0	0%	8	80%	7	70%	7	70%
10	B	on-street unmarked	on street	public	11	0	0%	13	118%	7	64%	10	91%
12	12	On-street	on street	public	15	17	113%	11	73%	10	67%	9	60%
12	B	on-street unmarked	on street	public	19	10	53%	10	53%	10	53%	8	42%
13	A	on-street unmarked	on street	public	11	8	73%	8	73%	9	82%	12	109%
13	B	A,B, and Fenk	off	private	122	107	88%	92	75%	98	80%	106	87%
13	B	on-street unmarked	on street	public	8	8	100%	7	88%	6	75%	5	63%
13	C	on-street unmarked	on street	public	12	14	117%	14	117%	12	100%	0	0%
13	D	On-street	on street	public	17	1	6%	2	12%	1	6%	0	0%
14	A	on-street unmarked	on street	public	9	5	56%	5	56%	5	56%	4	44%
14	B	on-street unmarked	on street	public	12	10	83%	6	50%	8	67%	8	67%
14	C	on-street	on street	public	7	0	0%	1	14%	1	14%	0	0%
15	A	on-street unmarked	on street	public	9	10	111%	11	122%	9	100%	9	100%
15	B	Lot	off	public	13	3	23%	1	8%	2	15%	8	62%
15	B	on-street unmarked	on street	public	15	16	107%	14	93%	15	100%	16	107%
15	C	on-street	on street	public	4	2	2%	2	2%	3	3%	1	%
15	D	On-street	on street	public	4	7	175%	0	0%	0	0%	0	0%
16	A	On-street	on street	public	10	1	10%	1	10%	2	20%	0	0%
16	A	Patron Parking Lot	off	private	52	54	104%	53	102%	52	100%	53	102%
16	C	2 hr on-street	on street	public	8	4	50%	7	88%	5	63%	7	88%
16	C	McKormic Lot C	off	private	21	4	19%	11	52%	10	48%	12	57%
16	D	On-street	on street	public	8	4	50%	7	88%	2	25%	3	38%
19	A	on-street	on street	public	9	9	100%	6	67%	8	89%	2	22%
19	A	Rail Station Lot A&B	off	private	86	60	70%	59	69%	61	71%	54	63%
19	A	on street	public	19	4	21%	13	68%	11	58%	8	42%	
19	C	on-street	on street	public	5	3	60%	5	100%	3	60%	3	60%
20	A	10 Min	on street	public	2	2	100%	1	50%	1	50%	1	50%
20	A	Alley Lot B	off	public	27	11	41%	2	7%	19	70%	23	85%
20	A	On-street	on street	public	5	3	60%	4	80%	5	100%	3	60%
20	B	10 Min	on street	public	2	0	0%	0	0%	0	0%	0	0%
20	C	2 hr on-street	on street	public	9	7	78%	8	89%	6	67%	5	56%
20	D	Lot A	off	public	20	16	80%	15	75%	16	80%	15	75%
20	D	On-street	on street	public	7	5	71%	5	71%	5	71%	3	43%
21	A	2 hr on-street	on street	public	11	5	45%	6	55%	3	27%	3	27%
21	B	10 hr on-street	on street	public	4	2	50%	3	75%	3	75%	3	75%
21	C	on-street	on street	public	3	0	0%	1	33%	1	33%	1	33%
21	D	2 hr on-street	on street	public	10	7	70%	10	100%	6	60%	0	0%
21	D	2 hr on-street	on street	public	10	9	90%	9	90%	6	60%	1	10%
22	C	on-street	on street	public	8	0	0%	1	13%	2	25%	0	0%
22	D	2 hr on-street	on street	public	2	2	100%	1	50%	2	100%	0	0%
22	D	2 hr on-street	on street	public	4	1	25%	1	25%	2	50%	2	50%
23	A	10 min LZ	on street	public	3	2	67%	2	67%	2	67%	1	33%
23	B	2 hr on-street	on street	public	7	2	29%	1	14%	1	14%	1	14%
23	D	2 hr on-street	on street	public	5	5	100%	5	100%	5	100%	5	100%
23	D	Diamond Lot C	off	private	120	64	53%	70	58%	56	47%	56	47%
24	B	2 hr on-street	on street	public	12	11	92%	8	67%	7	58%	8	67%
24	D	2 hr on-street	on street	public	8	6	75%	7	88%	7	88%	5	63%
24	D	Child Services Lot	off	private	109	93	85%	93	85%	83	76%	81	74%
24	D	On-street	on street	public	5	6	120%	3	60%	5	100%	5	100%
24	D	on street	on street	public	7	7	100%	6	86%	7	100%	7	100%
24	D	Unmarked	on street	public	5	5	100%	3	60%	5	100%	3	60%
25	B	2 hr on-street	on street	public	10	9	90%	9	90%	10	100%	5	50%
25	B	Denny's Lot B	off	private	75	24	32%	39	52%	21	28%	18	24%
25	B	Museum Lot C	off	private	50	20	40%	20	40%	23	46%	22	44%
25	B	Unmarked	on street	public	8	7	88%	6	75%	5	63%	4	50%
25	C	10 hr on-street	on street	public	5	4	80%	5	100%	5	100%	3	60%
26	C	Marshal Parking	off	private	4	3	75%	4	100%	2	50%	2	50%
27	A	2 hr on-street	on street	public	10	9	90%	7	70%	10	100%	5	50%
27	B	2 hr on-street	on street	public	6	6	100%	5	83%	5	83%	4	67%
27	B	Diamond Open Lot A	off	private	60	50	83%	42	70%	34	57%	44	73%
27	B	Diamond Res. Lot B	off	private	79	74	94%	70	89%	68	86%	66	84%
27	C	2 hr on-street	on street	public	7	5	71%	6	86%	5	71%	6	86%
28	A	on-street	on street	public	7	5	71%	7	100%	3	43%	6	86%
28	B	2 hr on-street	on street	public	7	4	57%	6	86%	4	57%	3	43%
28	B	P2 Hourly	off	public	156	101	65%	102	65%	129	83%	99	63%
28	B	P2 Monthly	off	public	455	335	74%	381	84%	340	75%	358	79%
28	B	P2 Roof	off	public	149	74	50%	75	50%	74	50%	76	51%
28	C	2 hr on-street	on street	public	4	3	75%	3	75%	3	75%	3	75%
29	A	on-street	on street	public	10	4	40%	4	40%	4	40%	4	40%
29	B	On-street	on street	public	11	5	45%	10	91%	6	55%	6	55%

Block/ Face	Block/ Face	Description	On/Off Street	Public/Privat e	# of Spaces	8:00am - 10:00am	% Occ.	10:00am - 12:00pm	% Occ.	1:00pm - 3:00pm	% Occ.	3:00pm - 5:00pm	% Occ.
30	A	Arcade Lot City Lot	off	public	92	15	16%	49	53%	37	40%	25	27%
30	A	S. 10th	on street	public	10	5	50%	4	40%	0	0%	1	10%
33	A	on-street	on street	public	9	2	22%	0	0%	3	33%	5	56%
34	C	on-street	on street	public	10	2	20%	2	20%	3	30%	3	30%
34	C	Res Lot	off	private	60	5	8%	5	8%	7	12%	7	12%
35	A	2 hr on-street	on street	public	9	4	44%	9	100%	8	89%	4	44%
35	C	2 hr on-street	on street	public	8	6	75%	9	113%	6	75%	7	88%
35	D	2 hr on-street	on street	public	5	0	0%	5	100%	4	80%	4	80%
36	A	2 hr on-street	on street	public	8	6	75%	7	88%	4	50%	7	88%
36	C	2 hr on-street	on street	public	7	4	57%	7	100%	4	57%	6	86%
36	D	2 hr on-street	on street	public	7	4	57%	7	100%	7	100%	5	71%
37	A	2 hr on-street	on street	public	7	6	86%	5	71%	5	71%	5	71%
37	B	P3 Hourly	off	public	90	73	81%	72	80%	71	79%	67	74%
37	B	P3 Monthly	off	public	122	93	76%	93	76%	84	69%	89	73%
37	B	P3 Roof	off	public	61	52	85%	51	84%	49	80%	42	69%
37	C	2 hr on-street	on street	public	9	8	89%	8	89%	8	89%	8	89%
37	D	2 hr on-street	on street	public	18	15	83%	18	100%	16	89%	16	89%
38	A	2 hr on-street	on street	public	3	1	33%	0	0%	1	33%	2	67%
38	D	2 hr on-street	on street	public	5	5	100%	5	100%	2	40%	4	80%
39	C	10 hr on-street	on street	public	9	9	100%	8	89%	8	89%	7	78%
39	D	2 hr on-street	on street	public	11	0	0%	3	27%	3	27%	6	55%
40	B	2 hr on-street	on street	public	25	0	0%	0	0%	0	0%	4	16%
40	C	10 hr on-street	on street	public	6	5	83%	6	100%	3	50%	3	50%
40	D	2 hr on-street	on street	public	14	3	21%	4	29%	5	36%	2	14%
40	D	Library Employee	off	private	28	39	139%	39	139%	40	143%	35	125%
40	D	Library Hourly	off	private	52	40	77%	52	100%	54	104%	57	110%
41	A	2 hr on-street	on street	public	5	2	40%	5	100%	0	0%	1	20%
41	B	2 hr on-street	on street	public	5	4	80%	5	100%	5	100%	2	40%
41	C	2 hr on-street	on street	public	4	0	0%	3	75%	3	75%	3	75%
41	C	3 Closed	on street	public	3	0	0%	0	0%	0	0%	0	0%
41	D	2 hr on-street	on street	public	9	5	56%	9	100%	7	78%	8	89%
42	A	2 hr on-street	on street	public	13	11	85%	12	92%	10	77%	12	92%
42	B	2 hr on-street	on street	public	6	6	100%	6	100%	6	100%	4	67%
42	C	2 hr on-street	on street	public	8	4	50%	8	100%	8	100%	7	88%
42	D	2 hr on-street	on street	public	8	4	50%	5	63%	8	100%	6	75%
43	A	2 hr on-street	on street	public	12	9	75%	12	100%	11	92%	11	92%
43	B	2 hr on-street	on street	public	17	7	41%	17	100%	16	94%	13	76%
43	C	2 hr on-street	on street	public	6	3	50%	6	100%	6	100%	2	33%
43	D	2 hr on-street	on street	public	9	1	11%	6	67%	9	100%	4	44%
44	A	2 hr on-street	on street	public	9	7	78%	9	100%	6	67%	9	100%
44	B	2 hr on-street	on street	public	5	1	20%	5	100%	2	40%	0	0%
44	C	2 hr on-street	on street	public	5	2	40%	2	40%	7	140%	6	120%
44	D	2 hr on-street	on street	public	10	2	20%	10	100%	8	80%	6	60%
45	C	on-street	on street	public	3	1	33%	1	33%	2	67%	2	67%
45	C	Rail Lot	off	private	75	4	5%	5	7%	7	9%	7	9%
46	A	on-street	on street	public	10	3	30%	4	40%	5	50%	7	70%
46	D	Private MRM Lot	off	private	18	7	39%	10	56%	8	44%	9	50%
47	D	on-street	on street	public	9	4	44%	5	56%	3	33%	7	78%
49	A	on-street	on street	public	10	2	20%	2	20%	3	30%	6	60%
49	B	on-street	on street	public	10	2	20%	6	60%	4	40%	6	60%
50	C	on-street	on street	public	10	1	10%	2	20%	5	50%	4	40%
51	A	2 hr on-street	on street	public	8	4	50%	8	100%	8	100%	7	88%
51	B	2 hr on-street	on street	public	9	2	22%	7	78%	9	100%	7	78%
51	C	on-street	on street	public	8	1	13%	8	100%	1	13%	4	50%
51	D	2 hr on-street	on street	public	4	0	0%	0	0%	3	75%	1	25%
52	A	2 hr on-street	on street	public	9	4	44%	9	100%	7	78%	8	89%
52	B	2 hr on-street	on street	public	17	1	6%	15	88%	13	76%	8	47%
52	C	2 hr on-street	on street	public	7	0	0%	6	86%	2	29%	7	100%
52	D	2 hr on-street	on street	public	6	1	17%	0	0%	2	33%	3	50%
53	A	2 hr on-street	on street	public	7	3	43%	4	57%	3	43%	0	0%
53	A	P1 Hourly	off	public	36	23	64%	28	78%	24	67%	21	58%
53	A	P1 Monthly	off	public	309	230	74%	226	73%	225	73%	207	67%
53	A	P1 Roof	off	public	110	77	70%	80	73%	75	68%	65	59%
53	B	2 hr on-street	on street	public	12	2	17%	7	58%	9	75%	4	33%
53	C	2 hr on-street	on street	public	12	9	75%	7	58%	7	58%	8	67%
53	D	2 hr on-street	on street	public	7	1	14%	3	43%	0	0%	2	29%
54	A	2 hr on-street	on street	public	8	6	75%	8	100%	3	38%	1	13%
54	B	2 hr on-street	on street	public	13	10	77%	13	100%	9	69%	9	69%
54	C	2 hr on-street	on street	public	13	2	15%	6	46%	4	31%	6	46%
54	D	2 hr on-street	on street	public	6	1	17%	2	33%	2	33%	3	50%
55	B	2 hr on-street	on street	public	8	0	0%	1	13%	0	0%	2	25%
55	B	4 hr on-street	on street	public	22	19	86%	22	100%	19	86%	13	59%
55	B	Lincoln Employees	off	private	32	7	22%	7	22%	8	25%	10	31%
55	D	2 hr on-street	on street	public	5	1	20%	1	20%	1	20%	1	20%
55	D	4 hr on-street	on street	public	24	2	8%	7	29%	2	8%	2	8%
56	B	2 hr on-street	on street	public	19	1	5%	6	32%	4	21%	3	16%
56	D	P4 Hourly	off	public	75	17	23%	23	31%	16	21%	19	25%
56	D	P4 Hourly	off	public	160	71	44%	73	46%	65	41%	66	41%
56	D	P4 Hourly	off	public	152	0	0%	66	43%	65	43%	64	42%
56	D	P4 Res	off	public	373	270	72%	278	75%	254	68%	260	70%
57	B	2 hr on-street	on street	public	12	2	17%	2	17%	7	58%	3	25%

Block/ Face	Block/ Face	Description	On/Off Street	Public/Privat e	# of Spaces	8:00am - 10:00am	% Occ.	10:00am - 12:00pm	% Occ.	1:00pm - 3:00pm	% Occ.	3:00pm - 5:00pm	% Occ.
57	D	one side only	on	pub	10	12	120%	12	120%	12	120%	7	70%
58	B	2 hr on-street	on street	public	8	0	0%	1	13%	0	0%	0	0%
58	D	one side only	on	pub	9	8	89%	8	89%	7	78%	6	67%
59	B	2 hr on-street	on street	public	13	4	31%	5	38%	5	38%	1	8%
60	B	2 hr on-street	on street	public	7	0	0%	1	14%	3	43%	0	0%
64	A	one side only	on	pub	8	8	100%	5	63%	1	13%	0	0%
65	D	YMCA Lot ©	off	prv	193	162	84%	173	90%	155	80%	134	69%
66	D	one side only	on	pub	19	8	42%	7	37%	9	47%	8	42%
67	D	one side only	on	pub	5	5	100%	5	100%	6	120%	5	100%
68	D	one side only	on	pub	10	7	70%	6	60%	5	50%	7	70%
69	D	one side only	on	pub	9	6	67%	9	100%	7	78%	9	100%
70	D	includes opposite side	on	pub	13	13	100%	7	54%	7	54%	6	46%
7/16	7/16	both sides (3+3)	on street	public	6	0	0%	3	50%	2	33%	1	17%
56/65	D/B	both sides	on	pub	52	5	10%	25	48%	12	23%	23	44%
59/62	D/B	both sides	on	pub	21	10	48%	4	19%	11	52%	4	19%
60/61	D/B	both sides	on	pub	14	6	43%	11	79%	7	50%	8	57%
61/62	A/C	both sides	on	pub	17	9	53%	10	59%	9	53%	10	59%
61/70	D/B	both sides	on	pub	11	1	9%	2	18%	1	9%	0	0%
62/63	A/C	both sides	on	pub	13	6	46%	11	85%	8	62%	9	69%
62/69	D/B	both sides	on	pub	13	2	15%	1	8%	3	23%	2	15%
63/64	A/C	both sides	on	pub	15	10	67%	13	87%	10	67%	8	53%
63/68	D/B	both sides	on	pub	12	2	17%	4	33%	5	42%	5	42%
64/67	D/B	both sides	on	pub	11	1	9%	0	0%	0	0%	0	0%
65/66	D/B	both sides	on	pub	35	3	9%	10	29%	3	9%	12	34%
66/67	A/C	both sides	on	pub	20	3	15%	1	5%	1	5%	0	0%
68/67	A/C	both sides	on	pub	17	1	6%	0	0%	0	0%	0	0%
69/68	A/C	both sides	on	pub	3	3	100%	3	100%	4	133%	1	33%
70/69	A/C	both sides	on	pub	12	0	0%	1	8%	1	8%	0	0%
Totals					5235	3040	58%	3431	66%	3205	61%	3075	59%

**City of Billings, Montana**  
**Turnover / Occupancy Thursday, October 1, 2009**

Block	Block/ Face	Description	On/Off Street	long/short	Public/Private	# of Spaces	9:00am	% Occ.	11:00am	% Occ.	1:00pm	% Occ.	3:00pm	% Occ.
5	A	On-street	on	long	public	10	5	50%	5	50%	7	70%	5	50%
5	C	2 hr on-street	on	short	public	10	3	30%	4	40%	5	50%	5	50%
6	A	Rail Station Lot A	off	long	private	68	59	87%	42	62%	54	79%	57	84%
6	A	2 hr on-street	on	short	public	15	7	47%	11	73%	6	40%	8	53%
6	A	2 hr on-street east	on	short	public	4	3	75%	2	50%	1	25%	1	25%
6	A	2 hr on-street west	on	short	public	4	2	50%	4	100%	1	25%	2	50%
6	A	LZ	on	short	public	1	0	0%	0	0%	0	0%	0	0%
7	A	Whalin Truck Lot A	off	long	private	18	8	44%	9	50%	10	56%	8	44%
7	A	On-street	on	long	public	10	10	100%	10	100%	8	80%	8	80%
7	C	2 hr on-street	on	short	public	6	2	33%	4	67%	4	67%	2	33%
7	D	Patron Parking Lot	off	long	private	39	22	56%	26	67%	29	74%	22	56%
10	A	2 hr on-street	on	short	public	6	0	0%	2	33%	2	33%	2	33%
10	C	on-street unmarked	on	long	public	11	11	100%	8	73%	8	73%	8	73%
12	B	on-street unmarked	on	long	public	19	11	58%	10	53%	9	47%	7	37%
12	D	On-street	on	long	public	14	11	79%	13	93%	13	93%	13	93%
13	A	on-street unmarked	on	long	public	11	10	91%	8	73%	9	82%	7	64%
13	B	A.B. and Fenk Medical Office	off	long	private	122	92	75%	90	74%	91	75%	98	80%
13	B	on-street unmarked	on	long	public	8	8	100%	8	100%	8	100%	6	75%
13	C	on-street unmarked	on	long	public	12	12	100%	12	100%	12	100%	11	92%
13	D	On-street	on	short	public	17	1	6%	2	12%	0	0%	1	6%
14	A	on-street unmarked	on	long	public	9	6	67%	5	56%	5	56%	5	56%
14	B	on-street unmarked	on	long	public	12	11	92%	11	92%	12	100%	10	83%
14	D	on-street	on	short	public	7	6	86%	6	86%	6	86%	5	71%
15	A	on-street unmarked	on	long	public	9	9	100%	9	100%	9	100%	9	100%
15	B	Lot	off	long	public	13	4	31%	1	8%	4	31%	3	23%
15	B	on-street unmarked	on	long	public	15	15	100%	15	100%	14	93%	14	93%
15	C	on-street	on	short	public	4	0	2%	0	2%	3	3%	2	0%
15	D	On-street	on	short	public	2	0	0%	0	0%	0	0%	0	0%
16	A	Patron Parking Lot	off	long	private	52	56	108%	54	104%	54	104%	52	100%
16	A	On-street	on	short	public	10	0	0%	0	0%	1	10%	3	30%
16	C	McKormic Lot C	off	long	private	21	9	43%	20	95%	10	48%	9	43%
16	C	2 hr on-street	on	short	public	10	6	60%	7	70%	9	90%	6	60%
16	C	one side only	on	long	public	10	6	60%	7	70%	9	90%	6	60%
16	D	On-street	on	short	public	8	1	13%	1	13%	7	88%	1	13%
19	A	Rail Station Lot A	off	long	private	25	0	0%	3	12%	5	20%	3	12%
19	A	Rail Station Lot B	off	long	private	74	58	78%	56	76%	64	86%	58	78%
19	C	10 hr on-street	on	long	public	5	0	0%	1	20%	0	0%	0	0%
19	C	permit/special use	on	long	public	4	1	25%	1	25%	1	25%	1	25%
20	A	Alley Lot B	off	long	public	27	15	56%	25	93%	27	100%	21	78%
20	A	On-street	on	short	public	7	5	71%	4	57%	7	100%	5	71%
20	B	10 Min	on	short	public	2	0	0%	0	0%	2	100%	2	100%
20	C	2 hr on-street	on	short	public	9	2	22%	5	56%	7	78%	5	56%
20	D	Lot A	off	long	private	20	15	75%	17	85%	16	80%	15	75%
20	D	10 hr on-street	on	long	public	2	2	100%	2	100%	2	100%	1	50%
20	D	2 hr on-street	on	short	public	4	1	25%	3	75%	4	100%	3	75%
20	D	On-street	on	short	public	6	4	67%	5	83%	5	83%	4	67%
21	A	2 hr on-street	on	short	public	11	4	36%	7	64%	3	27%	6	55%
21	B	10 hr on-street	on	long	public	4	1	25%	2	50%	2	50%	3	75%
21	C	10 min	on	short	public	1	1	100%	0	0%	0	0%	0	0%
21	C	LZ	on	short	public	2	0	0%	0	0%	0	0%	0	0%
21	D	2 hr on-street	on	short	public	10	10	100%	9	90%	0	0%	3	30%
22	A	Sheriff	on	long	private	3	3	100%	1	33%	2	67%	3	100%
22	D	Sheriff	on	long	private	2	1	50%	2	100%	2	100%	2	100%
23	A	10 min LZ	on	short	public	3	0	0%	0	0%	0	0%	0	0%
23	A	2 hr on-street	on	short	public	2	2	100%	1	50%	2	100%	2	100%
23	B	2 hr on-street	on	short	public	7	0	0%	1	14%	1	14%	0	0%
23	C	2 hr on-street	on	short	public	9	5	56%	5	56%	3	33%	6	67%
23	D	Diamond Lot C	off	long	private	96	71	74%	67	70%	69	72%	66	69%
23	D	2 hr on-street	on	short	public	5	3	60%	4	80%	4	80%	2	40%
23	D	2 hr on-street	on	short	public	5	4	80%	4	80%	3	60%	3	60%
24	B	2 hr on-street	on	short	public	6	2	33%	4	67%	4	67%	5	83%
24	B	Unmarked On-street	on	long	public	11	9	82%	8	73%	8	73%	6	55%
24	D	Child Services Lot	off	long	private	109	86	79%	81	74%	77	71%	79	72%
24	D	2 hr on-street	on	short	public	7	7	100%	7	100%	7	100%	6	86%
24	D	Unmarked	on	long	public	5	3	60%	3	60%	3	60%	3	60%
24	D	Unmarked On-street	on	long	public	3	3	100%	3	100%	4	133%	2	67%
25	B	Denny's Lot B	off	long	private	75	40	53%	39	52%	38	51%	21	28%
25	B	Museum Lot C	off	long	private	50	35	70%	36	72%	38	76%	32	64%
25	B	2 hr on-street	on	short	public	10	10	100%	10	100%	9	90%	9	90%
25	B	Unmarked	on	long	public	8	8	100%	8	100%	8	100%	7	88%
25	C	10 hr on-street	on	long	public	5	5	100%	5	100%	5	100%	1	20%
26	B	LZ	on	short	public	3	1	33%	0	0%	1	33%	0	0%
26	C	Marshal Parking	off	long	private	4	3	75%	3	75%	2	50%	2	50%
27	A	2 hr on-street	on	short	public	6	6	100%	6	100%	6	100%	5	83%
27	B	Diamond Lot A/B	off	long	private	147	62	42%	57	39%	70	48%	92	63%
27	B	2 hr on-street	on	short	public	6	4	67%	2	33%	4	67%	5	83%
27	C	2 hr on-street	on	short	public	7	2	29%	2	29%	2	29%	0	0%
28	A	on-street	on	short	public	7	6	86%	7	100%	6	86%	3	43%
28	B	P2 Hourly	off	short	public	156	124	79%	142	91%	127	81%	114	73%
28	B	P2 Monthly	off	long	public	455	261	57%	296	65%	304	67%	289	64%
28	B	P2 Roof	off	long	public	149	81	54%	87	58%	86	58%	82	55%
28	B	2 hr on-street	on	short	public	7	6	86%	6	86%	3	43%	4	57%
28	C	2 hr on-street	on	short	public	4	2	50%	2	50%	2	50%	3	75%
29	A	10 Min and 2 hr on-street	on	short	public	10	1	10%	5	50%	1	10%	3	30%
29	B	On-street	on	short	public	11	5	45%	10	91%	7	64%	5	45%
29	C	2 hr on-street	on	short	public	3	2	67%	3	100%	3	100%	3	100%
30	A	Arcade Lot City Lot	off	long	public	75	29	39%	29	39%	33	44%	26	35%
30	A	S. 10th	on	long	public	5	3	60%	4	80%	3	60%	2	40%
33	A	on-street	on	short	public	9	5	56%	2	22%	0	0%	2	22%

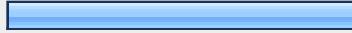
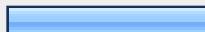
Block	Block/ Face	Description	On/Off Street	long/short	Public/Private	# of Spaces	9:00am	% Occ.	11:00am	% Occ.	1:00pm	% Occ.	3:00pm	% Occ.
34	C	Res Lot	off	long	private	44	14	32%	13	30%	16	36%	19	43%
34	C	on-street	on	long	public	8	6	75%	5	63%	5	63%	5	63%
35	A	2 hr on-street	on	short	public	9	7	78%	9	100%	7	78%	9	100%
35	C	2 hr on-street	on	short	public	8	4	50%	5	63%	7	88%	8	100%
35	D	2 hr on-street	on	short	public	5	1	20%	2	40%	3	60%	4	80%
36	A	2 hr on-street	on	short	public	8	6	75%	8	100%	6	75%	6	75%
36	C	2 hr on-street	on	short	public	7	5	71%	7	100%	6	86%	7	100%
36	D	2 hr on-street	on	short	public	7	5	71%	5	71%	7	100%	7	100%
37	A	2 hr on-street	on	short	public	6	5	83%	6	100%	5	83%	6	100%
37	C	2 hr on-street	on	short	public	9	7	78%	9	100%	7	78%	9	100%
37	D	2 hr on-street	on	short	public	18	11	61%	9	50%	16	89%	14	78%
37	P3	Hourly	off	short	public	90	22	24%	24	27%	24	27%	23	26%
37	P3	Monthly	off	long	public	122	205	168%	185	152%	186	152%	178	146%
37	P3	Roof	off	long	public	61	66	108%	62	102%	62	102%	52	85%
38	A	2 hr on-street	on	short	public	3	0	0%	1	33%	0	0%	1	33%
38	C	2 hr on-street	on	short	public	7	3	43%	3	43%	2	29%	4	57%
38	D	2 hr on-street	on	short	public	5	3	60%	3	60%	2	40%	4	80%
39	C	10 hr on-street	on	long	public	9	9	100%	9	100%	9	100%	5	56%
39	D	2 hr on-street	on	short	public	14	8	57%	8	57%	2	14%	1	7%
40	B	McBride Lot 4th & 28N	off	long	private	21	10	48%	11	52%	8	38%	7	33%
40	B	2 hr on-street	on	short	public	25	13	52%	13	52%	2	8%	2	8%
40	C	10 hr on-street	on	long	public	6	5	83%	5	83%	6	100%	1	17%
40	D	2 hr on-street	on	short	public	14	2	14%	4	29%	2	14%	4	29%
40	Library Employee		off	long	private	28	35	125%	28	100%	37	132%	32	114%
40	Library Hourly		off	long	private	52	73	140%	54	104%	44	85%	47	90%
41	A	2 hr on-street	on	short	public	5	2	40%	5	100%	1	20%	1	20%
41	B	2 hr on-street	on	short	public	9	1	11%	4	44%	2	22%	2	22%
41	C	2 hr on-street	on	short	public	8	4	50%	2	25%	4	50%	5	63%
41	D	2 hr on-street	on	short	public	9	6	67%	5	56%	7	78%	3	33%
41	US Bank Lot		off	long	private	55	22	40%	21	38%	32	58%	31	56%
42	A	2 hr on-street	on	short	public	13	10	77%	10	77%	11	85%	10	77%
42	B	2 hr on-street	on	short	public	6	4	67%	5	83%	6	100%	5	83%
42	C	2 hr on-street	on	short	public	9	0	0%	8	89%	5	56%	7	78%
42	D	Hart Garage	off	long	private	229	147	64%	124	54%	145	63%	133	58%
42	D	2 hr on-street	on	short	public	9	4	44%	2	22%	4	44%	7	78%
43	A	2 hr on-street	on	short	public	12	9	75%	12	100%	11	92%	8	67%
43	B	2 hr on-street	on	short	public	17	14	82%	17	100%	17	100%	16	94%
43	C	2 hr on-street	on	short	public	6	2	33%	6	100%	3	50%	4	67%
43	D	2 hr on-street	on	short	public	9	0	0%	4	44%	8	89%	4	44%
43	Western Bank Lot		off	long	private	57	41	72%	37	65%	38	67%	35	61%
44	A	2 hr on-street	on	short	public	9	1	11%	8	89%	5	56%	7	78%
44	B	2 hr on-street	on	short	public	5	2	40%	3	60%	2	40%	3	60%
44	C	2 hr on-street	on	short	public	5	4	80%	5	100%	4	80%	5	100%
44	D	2 hr on-street	on	short	public	10	2	20%	3	30%	10	100%	5	50%
45	C	Rail Lot	off	long	private	65	35	54%	31	48%	33	51%	30	46%
45	C	on-street	on	long	public	3	2	67%	1	33%	3	100%	1	33%
46	A	on-street	on	short	public	10	3	30%	6	60%	4	40%	4	40%
49	A	on-street	on	short	public	9	0	0%	2	22%	1	11%	2	22%
50	C	on-street	on	long	public	6	4	67%	2	33%	2	33%	3	50%
51	A	2 hr on-street	on	short	public	8	0	0%	8	100%	3	38%	4	50%
51	B	2 hr on-street	on	short	public	9	2	22%	1	11%	8	89%	4	44%
51	C	on-street	on	short	public	8	5	63%	7	88%	4	50%	5	63%
51	D	2 hr on-street	on	short	public	4	0	0%	1	25%	3	75%	1	25%
52	A	2 hr on-street	on	short	public	9	5	56%	8	89%	5	56%	6	67%
52	B	2 hr on-street	on	short	public	17	2	12%	10	59%	15	88%	8	47%
52	C	2 hr on-street	on	short	public	7	0	0%	6	86%	3	43%	1	14%
52	D	2 hr on-street	on	short	public	9	3	33%	6	67%	3	33%	3	33%
53	A	2 hr on-street	on	short	public	7	1	14%	2	29%	2	29%	1	14%
53	B	2 hr on-street	on	short	public	12	0	0%	1	8%	8	67%	9	75%
53	C	2 hr on-street	on	short	public	12	6	50%	9	75%	9	75%	7	58%
53	D	2 hr on-street	on	short	public	7	1	14%	2	29%	2	29%	3	43%
53	P1	Hourly	off	short	public	36	22	61%	24	67%	24	67%	23	64%
53	P1	Monthly	off	long	public	309	205	66%	185	60%	186	60%	178	58%
53	P1	Roof	off	long	public	110	66	60%	62	56%	62	56%	52	47%
54	A	2 hr on-street	on	short	public	8	5	63%	3	38%	7	88%	0	0%
54	B	2 hr on-street	on	short	public	13	7	54%	8	62%	11	85%	9	69%
54	C	2 hr on-street	on	short	public	13	3	23%	6	46%	5	38%	1	8%
54	D	2 hr on-street	on	short	public	6	4	67%	3	50%	2	33%	0	0%
55	B	2 hr on-street	on	short	public	8	0	0%	1	13%	1	13%	1	13%
55	B	4 hr on-street	on	long	public	22	20	91%	16	73%	19	86%	13	59%
55	D	2 hr on-street	on	short	public	5	3	60%	3	60%	2	40%	2	40%
55	D	4 hr on-street	on	long	public	24	13	54%	7	29%	11	46%	7	29%
55	Lincoln Employees		off	long	private	32	12	38%	13	41%	37	116%	8	25%
55	Lincoln School		off	long	private	110	106	96%	116	105%	114	104%	67	61%
56	B	2 hr on-street	on	short	public	20	1	5%	1	5%	4	20%	2	10%
56	D	P4 Hourly	off	short	public	75	13	17%	12	16%	16	21%	12	16%
56	D	P4 Hourly (basement)	off	short	public	152	65	43%	59	39%	57	38%	54	36%
56	D	P4 Hourly (roof)	off	short	public	160	66	41%	75	47%	65	41%	64	40%
56	D	P4 Res	off	long	public	373	318	85%	300	80%	291	78%	297	80%
56	D	2 hr on-street	on	short	public	23	6	26%	4	17%	3	13%	2	9%
57	B	10 hr on-street	on	long	public	5	5	100%	5	100%	5	100%	4	80%
57	B	2 hr on-street	on	short	public	7	0	0%	0	0%	4	57%	1	14%
57	D	one side only	on	long	public	13	13	100%	13	100%	13	100%	11	85%
58	B	2 hr on-street	on	short	public	8	1	13%	1	13%	2	25%	0	0%
58	D	one side only	on	long	public	9	7	78%	7	78%	7	78%	7	78%
59	B	2 hr on-street	on	short	public	14	3	21%	5	36%	8	57%	6	43%
59	D	one side only	on	short	public	7	7	100%	1	14%	6	86%	4	57%
60	B	2 hr on-street	on	short	public	7	0	0%	0	0%	2	29%	0	0%
60	D	2 hr on-street	on	short	public	8	5	63%	3	38%	5	63%	6	75%
60	D	one side only	on	short	public	8	5	63%	3	38%	5	63%	6	75%
61	A	one side only	on	long	public	6	4	67%	4	67%	1	17%	1	17%

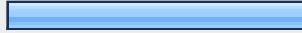
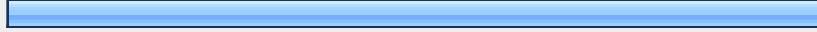
Block	Block/ Face	Description	On/Off Street	long/short	Public/Private	# of Spaces	9:00am	% Occ.	11:00am	% Occ.	1:00pm	% Occ.	3:00pm	% Occ.
61	B	one side only	on	short	public	6	4	67%	2	33%	3	50%	1	17%
61	C	one side only	on	short	public	6	0	0%	3	50%	4	67%	3	50%
62	A	one side only	on	long	public	4	3	75%	4	100%	4	100%	2	50%
62	B	one side only	on	short	public	15	2	13%	4	27%	7	47%	5	33%
62	C	one side only	on	mix	public	10	2	20%	5	50%	4	40%	4	40%
62	D	one side only	on	long	public	9	0	0%	0	0%	0	0%	1	11%
63	A	one side only	on	long	public	9	1	11%	1	11%	8	89%	8	89%
63	C	one side only	on	long	public	9	8	89%	9	100%	9	100%	7	78%
64	A	one side only	on	long	public	8	6	75%	4	50%	5	63%	4	50%
64	C	one side only	on	long	public	6	5	83%	1	17%	1	17%	4	67%
64	D	one side only	on	short	public	4	0	0%	4	100%	0	0%	0	0%
65	B	one side only	on	short	public	26	7	27%	14	54%	10	38%	8	31%
65	D	YMCA Lot ©	off	long	private	193	138	72%	159	82%	126	65%	109	56%
65	D	one side only	on	short	public	19	6	32%	5	26%	6	32%	0	0%
66	B	one side only	on	short	public	19	2	11%	5	26%	4	21%	2	11%
66	C	one side only	on	short	public	11	0	0%	0	0%	0	0%	0	0%
66	D	one side only	on	long	public	10	7	70%	8	80%	7	70%	8	80%
66	D	opposite side	on	long	public	5	3	60%	4	80%	3	60%	1	20%
67	A	one side only	on	long	public	9	1	11%	4	44%	5	56%	4	44%
67	B	one side only	on	short	public	7	0	0%	0	0%	0	0%	0	0%
67	C	one side only	on	mix	public	9	4	44%	1	11%	4	44%	1	11%
67	D	one side only	on	long	public	8	7	88%	6	75%	6	75%	7	88%
67	D	opposite side	on	long	public	10	5	50%	5	50%	6	60%	6	60%
68	A	one side only	on	mix	public	6	2	33%	4	67%	0	0%	1	17%
68	B	one side only	on	short	public	12	0	0%	1	8%	0	0%	0	0%
68	C	one side only	on	long	public	7	4	57%	1	14%	4	57%	4	57%
68	D	one side only	on	long	public	10	4	40%	4	40%	4	40%	3	30%
68	D	opposite side	on	long	public	10	1	10%	1	10%	1	10%	1	10%
69	A	one side only	on	mix	public	4	4	100%	4	100%	4	100%	3	75%
69	B	one side only	on	long	public	4	1	25%	1	25%	1	25%	0	0%
69	C	one side only	on	short	public	4	0	0%	1	25%	1	25%	0	0%
69	D	one side only	on	long	public	9	8	89%	8	89%	5	56%	6	67%
69	D	opposite side	on	long	public	7	6	86%	7	100%	6	86%	6	86%
70	A	one side only	on	short	public	8	5	63%	5	63%	5	63%	6	75%
70	B	one side only	on	mix	public	9	1	11%	0	0%	1	11%	2	22%
70	C	one side only	on	long	public	5	2	40%	0	0%	0	0%	0	0%
70	D	one side only	on	long	public	8	8	100%	7	88%	7	88%	5	63%
70	D	opposite side	on	long	public	9	9	100%	9	100%	8	89%	8	89%
Oct. 1, 2009						5670	3545	63%	3611	64%	3650	64%	3327	59%

## Billings Business Operator Survey

1. Business Name		Response Count
		22
	<i>answered question</i>	22
	<i>skipped question</i>	0

2. Business Address		Response Count
		22
	<i>answered question</i>	22
	<i>skipped question</i>	0

3. Type of business			
		Response Percent	Response Count
Office		31.8%	7
Restaurant		9.1%	2
Financial		4.5%	1
Service		18.2%	4
Bar Only		0.0%	0
Retail		22.7%	5
Restaurant/Bar		0.0%	0
Medical		0.0%	0
Government		0.0%	0
Hair Salon		0.0%	0
Other		27.3%	6
Other (please specify)			6
	<i>answered question</i>		22
	<i>skipped question</i>		0

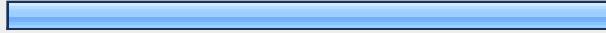
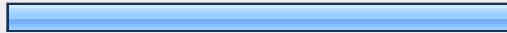
4. Is your building leased or owned?			Response Percent	Response Count
Leased			27.3%	6
Owned			72.7%	16
Other (please specify)				1
	<i>answered question</i>			22
	<i>skipped question</i>			0

5. Primary sales or office space in square feet?			Response Count
			20
	<i>answered question</i>		20
	<i>skipped question</i>		2

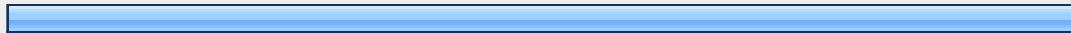
6. Storage space in square feet?		Response Count
		18
	<i>answered question</i>	18
	<i>skipped question</i>	4

7. Total space in square feet?		Response Count
		22
	<i>answered question</i>	22
	<i>skipped question</i>	0

**8. Do you have a policy that encourages/requires employees to reserve the most desirable parking for customers?**

			Response Percent	Response Count
Yes			54.5%	12
No			45.5%	10
If so, please tell us about it. Do your employees adhere to the policy?				11
	<i>answered question</i>			22
	<i>skipped question</i>			0

**9. Do you validate or reimburse parking for customers?**

			Response Percent	Response Count
Yes			4.5%	1
No			95.5%	21
If so, please tell us about it.				4
	<i>answered question</i>			22
	<i>skipped question</i>			0

**10. How many employees do you have?****Full Time (over 30 hours)**

	0	1	2	3	4	5	6	7	8	9	10	11
Number of employees?	18.2% (4)	9.1% (2)	9.1% (2)	4.5% (1)	0.0% (0)	0.0% (0)	13.6% (3)	0.0% (0)	0.0% (0)	0.0% (0)	9.1% (2)	4.5% (1)

**Part Time (under 30 hours)**

	0	1	2	3	4	5	6	7	8	9	10	11
Number of employees?	22.7% (5)	13.6% (3)	18.2% (4)	13.6% (3)	13.6% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	9.1% (2)	0.0% (0)	0.0% (0)

**11. How many customers do you typically have in a day?**

**Daytime (until 6 pm)**

		0	1	2	3	4	5	6	7	8	9	10	11	12
Summer		9.1% (2)	4.5% (1)	9.1% (2)	0.0% (0)	0.0% (0)	9.1% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	4.5% (1)	0.0% (0)	4.5% (1)
Winter		9.1% (2)	4.5% (1)	9.1% (2)	0.0% (0)	0.0% (0)	9.1% (2)	0.0% (0)	0.0% (0)	4.5% (1)	0.0% (0)	4.5% (1)	0.0% (0)	0.0% (0)

**Evening (after 6 pm)**

		0	1	2	3	4	5	6	7	8	9	10	11	12
Summer		68.2% (15)	0.0% (0)	4.5% (1)	4.5% (1)	0.0% (0)								
Winter		68.2% (15)	0.0% (0)	4.5% (1)	4.5% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	4.5% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

12. In your estimation, what percentage of your customers or visitors are people already downtown for another purpose?											
Percent											
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	
Choose the best answer.	22.7% (5)	<b>27.3% (6)</b>	9.1% (2)	9.1% (2)	0.0% (0)	18.2% (4)	0.0% (0)	9.1% (2)	4.5% (1)	0.0% (0)	0.0% (0)
	answered										
	skipped										

## Billings Business Operator Survey - Part 2

1. Business Name		Response Count
		18
	<i>answered question</i>	18
	<i>skipped question</i>	1

2. Business Address		Response Count
		19
	<i>answered question</i>	19
	<i>skipped question</i>	0

3. There are an adequate number of parking spaces for downtown customers/visitors.												
	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count	
Do you agree?	21.1% (4)	15.8% (3)	15.8% (3)	10.5% (2)	15.8% (3)	5.3% (1)	15.8% (3)	0.0% (0)	0.0% (0)	3.63	19	
	<i>answered question</i>											
	<i>skipped question</i>											

4. The customer parking downtown is reasonably close to my place of business.												
	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count	
Do you agree?	10.5% (2)	10.5% (2)	10.5% (2)	0.0% (0)	21.1% (4)	5.3% (1)	10.5% (2)	10.5% (2)	21.1% (4)	5.47	19	
	<i>answered question</i>											
	<i>skipped question</i>											

5. I encourage my employees to use the parking structures.				Response Percent	Response Count
Yes				37.5%	6
No				62.5%	10
					<i>answered question</i>
					<i>skipped question</i>
					3

	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count
Do you agree?	31.6% (6)	15.8% (3)	0.0% (0)	5.3% (1)	15.8% (3)	5.3% (1)	10.5% (2)	5.3% (1)	10.5% (2)	4.05	19
										<i>answered question</i>	19
										<i>skipped question</i>	0

7. I believe that the on-street parking should be metered to help improve turnover of vehicles.												
	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count	
Do you agree?	10.5% (2)	0.0% (0)	5.3% (1)	0.0% (0)	15.8% (3)	10.5% (2)	21.1% (4)	10.5% (2)	26.3% (5)	6.37	19	
	<i>answered question</i>											
	<i>skipped question</i>											

8. The fine for overtime parking should be?								
Fine amount								
	<\$5	\$10	\$15	\$20	\$25	\$30	> \$30	Response Count
Per ticket -	38.9% (7)	33.3% (6)	5.6% (1)	16.7% (3)	0.0% (0)	0.0% (0)	5.6% (1)	18
	<i>answered question</i>							
	<i>skipped question</i>							

**9. How far would your employees be willing to walk to a parking structure?**

In feet

	0	100	200	300	400	500	600	700	800	900	1000
Walking Distance -	11.8% (2)	11.8% (2)	<b>17.6% (3)</b>	<b>17.6% (3)</b>	5.9% (1)	0.0% (0)	11.8% (2)	0.0% (0)	0.0% (0)	0.0% (0)	11.8% (2)

**10. Are there certain days or times of the week or year that parking is better or worse? Please explain -**

	Response Count
	12
	<i>answered question</i>
	<i>skipped question</i>

**11. If you experience a lack of parking, what factors do you feel attribute to the circumstance? -**

	Response Count
	11
	<i>answered question</i>
	<i>skipped question</i>

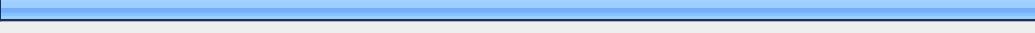
12. What else can be done to help the parking situation in downtown Billings? -

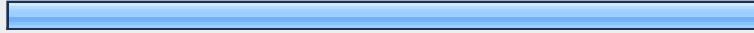
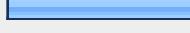
		Response Count
		13
	<i>answered question</i>	13
	<i>skipped question</i>	6

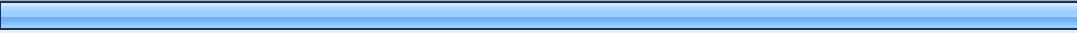
13. Please feel free to make additional comments regarding parking -

		Response Count
		7
	<i>answered question</i>	7
	<i>skipped question</i>	12

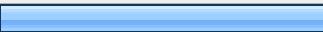
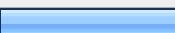
# Billings Employee Survey

1. Work Address		Response Count
		83
	<i>answered question</i>	83
	<i>skipped question</i>	0
2. Employment Status		
		Response Percent
Full-time (more than 30 hours per week)		92.8%
Part-time (less than 30 hours per week)		8.4%
		83
		0

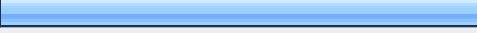
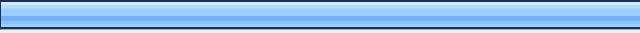
3. Employment Classification			
		Response Percent	Response Count
Office		67.5%	56
Service		3.6%	3
Restaurant		1.2%	1
Retail Sales		6.0%	5
Bar		0.0%	0
Financial		2.4%	2
Medical		2.4%	2
Government		4.8%	4
Restaurant/Bar		0.0%	0
Other		16.9%	14
	Other (please specify)		17
	<i>answered question</i>		83
	<i>skipped question</i>		0

4. How do you generally come to work downtown?			
		Response Percent	Response Count
Drive and park		96.4%	80
Ride with friend or relative		1.2%	1
Bus		1.2%	1
Ride bicycle		3.6%	3
Dropped off		1.2%	1
Walk		2.4%	2
Other (please specify)			4
		<i>answered question</i>	83
		<i>skipped question</i>	0

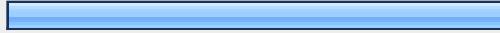
5. If you drive when you come downtown to work where do you usually park?

		Response Percent	Response Count
Public Lot		8.4%	7
Privately Owned Lot		45.8%	38
On-Street Meter		28.9%	24
Residential Area On-Street		7.2%	6
Parking Garage		15.7%	13
Other		4.8%	4
	<i>answered question</i>		83
	<i>skipped question</i>		0

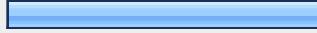
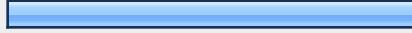
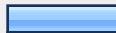
6. Does your employer provide you with a parking stall downtown?

		Response Percent	Response Count
Yes		42.7%	35
No		57.3%	47
	<i>answered question</i>		82
	<i>skipped question</i>		1

7. Does your employer have a policy regarding where you park?

			Response Percent	Response Count
Yes			44.6%	37
No			55.4%	46
	<i>answered question</i>			83
	<i>skipped question</i>			0

8. How far do you generally walk from your parking location to your workplace?

			Response Percent	Response Count
50 feet or less			27.7%	23
more than 50 feet, less than one block			28.9%	24
1 - 2 blocks			36.1%	30
more than 2 blocks			9.6%	8
	<i>answered question</i>			83
	<i>skipped question</i>			0

**9. There are an adequate number of parking spaces for downtown employees.**

	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count
Do you agree?	31.7% (26)	18.3% (15)	18.3% (15)	7.3% (6)	15.9% (13)	3.7% (3)	4.9% (4)	0.0% (0)	0.0% (0)	2.88	82
	<i>answered question</i>										82
	<i>skipped question</i>										1

**10. There are an adequate number of parking spaces for downtown customers/visitors.**

	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count
Do you agree?	20.5% (17)	18.1% (15)	15.7% (13)	13.3% (11)	16.9% (14)	6.0% (5)	7.2% (6)	1.2% (1)	1.2% (1)	3.48	83
	<i>answered question</i>										83
	<i>skipped question</i>										0

11. The parking downtown is reasonably close to my work place.											
	Strongly Disagree 1	2	3	4	Neutral 5	6	7	8	Strongly Agree 9	Rating Average	Response Count
Do you agree?	6.0% (5)	2.4% (2)	14.5% (12)	4.8% (4)	<b>20.5% (17)</b>	14.5% (12)	14.5% (12)	7.2% (6)	15.7% (13)	5.63	83
	<i>answered question</i>										83
	<i>skipped question</i>										0

12. The fine for overtime parking should be?									
Fine Amount									
	<\$5	\$10	\$15	\$20	\$25	\$30	> \$30	Response Count	
Per ticket -	<b>74.1% (60)</b>	17.3% (14)	2.5% (2)	2.5% (2)	2.5% (2)	0.0% (0)	1.2% (1)	81	
	<i>answered question</i>								81
	<i>skipped question</i>								2

13. How many of the downtown shops or services do you typically visit a week while in the downtown for work?

Number of Shops

	1	2	3	4	5	> 5	Response Count
Pick the best answer -	26.8% (22)	17.1% (14)	26.8% (22)	7.3% (6)	8.5% (7)	13.4% (11)	82
	<i>answered question</i>						
	<i>skipped question</i>						

14. Please feel free to make additional comments regarding parking -

		Response Count
		38
	<i>answered question</i>	
	<i>skipped question</i>	

### Parking Benchmark Comparison

City		Billings, MT	Missoula, MT	Great Falls, MT	Helena, MT	Casper, WY
1. Does the city have a parking committee?		Yes	Yes	Yes	Yes	No
2. Number of municipal parking spaces?		4,318	2187	2,143	waiting on numbers	N/A
	Off-Street?	2,443 spaces, 2 lots and 4 structures	2 structures - 450 spaces and 13 lots - 787 spaces and 41 short term	2 structures and 6 lots totaling 1,143 spaces	waiting on numbers	449 structure and 55 lot
	On-Street?	1,875	925 short term, 150 long term	1,000	waiting on numbers	unknown
3. Fines:	Overtime Parking?	Courtesy, \$5, \$10, \$20 (Graded, 1 through 4+ within 180 days)	\$5.00	\$10.00	\$20.00	\$15/1st ticket, \$20/2nd ticket within 24 hrs
	Illegal Parking?	\$10 through \$100 (most fines are \$25, including meter feeding)	\$15.00	\$10.00	\$5.00	\$5/1st ticket, \$10 2nd ticket, \$20 3rd ticket within 24 hrs.
	Handicap Parking?	\$100.00	\$100.00	\$100.00	\$100.00	
4. Parking Rates:	Parking structures?	\$0.25/hr, \$5 max per day, \$25/m(roof), \$50/m(covered), \$85/m(assigned)	\$0.25/hr, - resident \$44 - permit \$55-\$65	\$0.50/hr, \$3 all day, \$40/monthly	\$42-\$52/month	\$37-\$32/monthly
	Parking lots?	\$0.50/hr, \$25/m	permit \$30-\$50, waiting on hourly	\$0.50/hr, \$3 all day, \$25-\$15/monthly	\$17-\$58/month	\$32/monthly, \$1/hr w/\$2 minimum
	On-street parking?	\$0.35/hr (2hr yellow), \$0.10/hr (10hr yellow), \$0.50/hr (2hr green), \$0.35/hr (4hr white)	\$0.50/hr	\$0.50/hr	permits \$25-\$33/month	waiting on numbers
City		Sioux Falls, SD	Fargo, ND	Bozeman, MT	Olympia, WA	Boise, ID
1. Does the city have a parking committee?		Yes	Yes	Yes	Yes	Yes
2. Number of municipal parking spaces?		3,980	3,500	835	N/A	2,619
	Off-Street?	2,865 spaces, 15 lots and 5 structures	2,200 spaces, 4 structures and 7 lots	435 structured spaces and 4 lots	3 lots	1,340 structured spaces and 160 commercial lot spaces
	On-Street?	1,115	1,300	400	unknown	1,279
3. Fines:	Overtime Parking?	\$2.00	\$10.00	\$15.00	\$15.00, 2nd ticket w/in same day \$30.00	\$10.00
	Illegal Parking?	\$2.00	\$60.00	\$15.00	\$75.00	\$36.00
	Handicap Parking?	\$25.00	\$100.00	\$100.00	\$75.00	\$100.00
4. Parking Rates:	Parking structures?	\$0.60-\$3/hr, \$37-\$64/month	\$1/hr, \$5 max, \$54/month	\$0.25/hr, \$5 max, \$35-\$45/month	N/A	\$0.75/hr, \$48-\$58/month, special events \$5
	Parking lots?	\$3 for 1 hr. up to 8 hr, \$5 over 8 hrs, \$45-\$90/month	\$0.50-\$1/hr, \$2-\$5 max, \$54/month	waiting on numbers	\$0.50/hr, \$12.50/month	waiting on numbers
	On-street parking?	\$0.60-\$0.75/hr	free	free	\$0.35/hr	\$1/hr

### Parking Structure Overview

City \_\_\_ Billings, Montana

Date \_\_\_ 12/18/2008

Name of Park 1

Floor #	Lighting	Striping	Surface Type and Conditions	Condition of Elevator, Stairs, Lobby	Structural Cracking, Broken Concrete, Leaking	Signage	Pedestrian Pathways	Bicycle Provisions	PARC Equipment	Landscaping	Graphics	Comments
1	Low Lighting levels at Entry/exit lanes Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Columns and Beams stained White on inside	Good Condition - Glassback Elevator and Glass in Stairs, Stairs are slippery	Cracking on floors and some beams - has had repairs	Good	NA	None	Federal APD - Good Condition	Retail at Ground Level	Good- Walls, Beams and Columns stained white	Entry/Exit Lanes: North - 1 Entry, 2 Exits West - 1 Entry
2	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Columns and Beams stained White on inside	Good Condition - Glassback Elevator and Glass in Stairs, Stairs are slippery	Cracking on floors and some beams - has had repairs	Good	Refer to General Notes	None	NA	NA	Good- Walls, Beams and Columns stained white Level Color - Pink	
3	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Columns and Beams stained White on inside	Good Condition - Glassback Elevator and Glass in Stairs, Stairs are slippery	Cracking on floors and some beams - has had repairs	Good	NA	None	NA	NA	Good- Walls, Beams and Columns stained white Level Color - Orange	
4	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Columns and Beams stained White on inside	Good Condition - Glassback Elevator and Glass in Stairs, Stairs are slippery	Cracking on floors and some beams - has had repairs, Leak on ceiling at drains	Good	NA	None	NA	NA	Good- Walls, Beams and Columns stained white Level Color - Yellow	
5	Low Lighting levels at Entrance to towers	Double Strip Good	Traffic Coating Good Condition Columns and Beams stained White on inside	Good Condition - Glassback Elevator and Glass in Stairs, Stairs are slippery	Cracking on floors and some beams - has had repairs	Good	NA	None	NA	NA	Good- Walls, Beams and Columns stained white Level Color - Blue	No Snow Dump, Large piles of snow

General Notes:

C.I.P Long span construction

Pedestrian Bridge has visible rusting and cosmetic issues

Security cameras throughout garage

Some signs are front lit with Florescent fixtures

Stairs do not have nosing

### Parking Structure Overview

City \_\_\_ Billings, Montana

Date \_\_\_ 12/18/2008

Name of Park 2

Floor #	Lighting	Striping	Surface Type and Conditions	Condition of Elevator, Stairs, Lobby	Structural Cracking, Broken Concrete, Leaking	Signage	Pedestrian Pathways	Bicycle Provisions	PARC Equipment	Landscaping	Graphics	Comments
1	Good Lighting at Entry / Exits, Low Lighting levels at Entrance to towers and Drive Aisles	Double Strip Good	Good Condition	Good Condition - Dark Stair interior, Glassback Elevator and Glass in Stairs	No visible issues	Neon signs at entry/exit, Good condition	NA	Bike Racks at West Plaza	Federal APD - Good Condition	Minimal on Southside, West has Plaza and covered courtyard	Good- Walls, Beams and Columns stained white at Entry/Exit, Level Color - Yellow	Entry/Exit Lanes: South - 1 Entry, 2 Exits North - 2 Exits West - 1 Entry Lots of Bollards
2	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Good Condition	Good Condition - Dark Stair interior, Glassback Elevator and Glass in Stairs	No visible issues	Good	Refer to General Notes	None	NA	NA	Good, Level Color - Orange	
3	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Good Condition	Good Condition - Dark Stair interior, Glassback Elevator and Glass in Stairs	No visible issues	Good	NA	None	NA	NA	Good, Level Color - Blue	
4	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Good Condition	Good Condition - Dark Stair interior, Glassback Elevator and Glass in Stairs	No visible issues	Good	NA	None	NA	NA	Good, Level Color - Green	
5	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Good Condition	Good Condition - Dark Stair interior, Glassback Elevator and Glass in Stairs	No visible issues	Good	NA	None	NA	NA	Good, Level Color - Orange	
6	Low Lighting levels at Entrance to towers	Double Strip Good	Good Condition	Good Condition - Dark Stair interior, Glassback Elevator and Glass in Stairs	No visible issues	Good	NA	None	NA	NA	Good, Level Color - Purple	No Snow Dump, Large piles of snow

General Notes:

C.I.P Long span construction

Both Pedestrian Bridges in good condition

Security cameras throughout garage

### Parking Structure Overview

City \_\_\_ Billings, Montana

Date \_\_\_ 12/18/2008

Name of Park 3

Floor #	Lighting	Striping	Surface Type and Conditions	Condition of Elevator, Stairs, Lobby	Structural Cracking, Broken Concrete, Leaking	Signage	Pedestrian Pathways	Bicycle Provisions	PARC Equipment	Landscaping	Graphics	Comments
1	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Garage stained White on inside	Good Condition - Painted White Glassback Elevator and Glass in Stairs	No visible issues	Adequate - Monochromatic Missing Clearance Bars	NA	None	Federal APD - Good Condition Entry/Exit Lanes: 1 Entry, 1 Exit, 1 Reversible	None	Level Color - Yellow Monochromatic Signs	EFIS on exterior has some cracks and holes.
2	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Garage stained White on inside	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Some Cracking on Floor at Cross Ramps	Adequate - Monochromatic Large Signs	Refer to General Notes	None	NA	NA	Level Color - Orange Monochromatic Signs	
3	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Garage stained White on inside	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Some Cracking on Floor at Cross Ramps	Adequate - Monochromatic Large Signs	NA	None	NA	NA	Level Color - Blue Monochromatic Signs	
4	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Traffic Coating Good Condition Garage stained White on inside	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Some Cracking on Floor at Cross Ramps	Adequate - Monochromatic Large Signs	NA	None	NA	NA	Level Color - Green Monochromatic Signs	
5	Low Lighting levels at Entrance to towers	Double Strip Good	Traffic Coating Good Condition Garage stained White on inside	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Some Cracking on Floor at Cross Ramps	Adequate - Monochromatic Large Signs	NA	None	NA	NA	Level Color - Red Monochromatic Signs	Piled snow on roof, no snow dump area

General Notes:

No lit signs inside deck

C.I.P Long span construction

Block Upturns for spandrels along Perimeter are CMU with EFIS

Bridge to Valley Building has minimal signage, Good Condition

Bridge to City Court is in good condition

City \_\_\_ Billings, Montana

Date \_\_\_ 12/18/2008

Name of Park 4

## Parking Structure Overview

Floor #	Lighting	Striping	Surface Type and Conditions	Condition of Elevator, Stairs, Lobby	Structural Cracking, Broken Concrete, Leaking	Signage	Pedestrian Pathways	Bicycle Provisions	PARC Equipment	Landscaping	Graphics	Comments
1	Low Lighting levels at Entry/exit lanes Entrance to towers and along Drive Aisles	Double Strip with some Fading	Exposed Concrete No Coating Adequate Condition	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Cracking on floors and some beams - has had repairs	Adequate - Monochromatic	NA	None	Federal APD - Good Condition	Big Pines on North Covering Sign, Park to South, Security Screen	Level Color - Green Monochromatic Signs	Entry/Exit Lanes: West- 2 IN, 2 OUT North- 1 IN East- 1 OUT
2	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip with some Fading	Exposed Concrete No Coating Some Slab Cracking	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Cracking on floors and some beams - has had repairs	Adequate - Monochromatic	NA	None	NA	NA	Level Color - Yellow Monochromatic Signs	
3	Low Lighting levels at Entrance to towers and along Drive Aisles	Double Strip Good	Exposed Concrete No Coating Adequate Condition	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Cracking on floors and some beams - has had repairs	Adequate - Monochromatic	NA	None	NA	NA	Level Color - Blue Monochromatic Signs	
4	Low Lighting levels at Entrance to towers	Double Strip Good	Exposed Concrete No Coating Adequate Condition	Good Condition - Painted White Glassback Elevator and Glass in Stairs	Cracking on floors and some beams - has had repairs	Adequate - Monochromatic	NA	None	NA	NA	Level Color - White Monochromatic Signs	

General Notes:

No lit signs inside deck

Could not access lower level - Separately controlled by card reader

Inside of Parking Deck not Stained

C.I.P Long span construction